



Dowdens Station, LMA G-957, Preliminary Forest Conservation Plan and Preliminary Water Quality Plan

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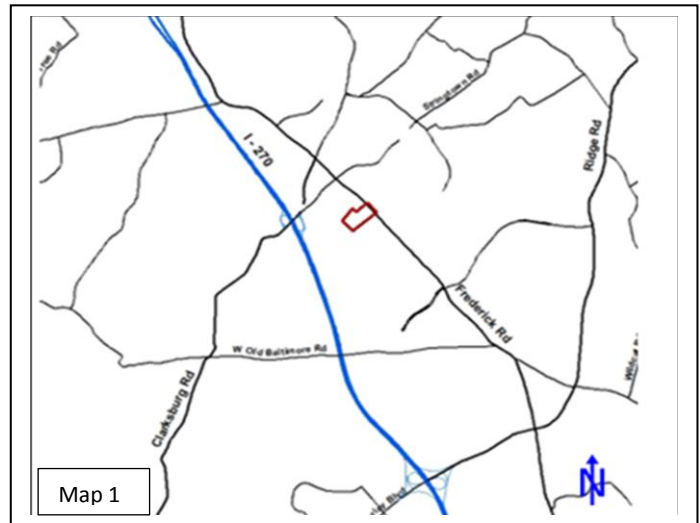
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Kipling Reynolds, Chief, Area 3 Division, Kipling.Reynolds@montgomeryplanning.org

Staff Report Date: 6/26/2015

Dowdens Station Local Map Amendment: G-957
B. Preliminary Water Quality Plan
C. Preliminary Forest Conservation Plan

Request for a Local Map Amendment for reclassification of a 24.37-acre property from R-200 Zone to PD-4 Zone, for the development of up to 105 detached and attached single-family dwelling units, located on the west side of Frederick Road (MD 355), 1,300 feet north of its intersection with Shawnee Lane, known as Garnkirk Farms Parcel N760, part of Lot 21 and Parcel N888 Lot 22 tax map EW31, Clarksburg, 1994 Clarksburg Master Plan and Hyattstown Special Study Area.

Staff Recommendation: Approval with Conditions
Applicant: Clarksburg Mews, LLC



Summary

- There are three items for Planning Board review for the Dowdens Station project: the Local Map Amendment, the Preliminary Forest Conservation Plan and the Special Protection Area (SPA) Preliminary Water Quality Plan. This memorandum covers staff's review and recommendations on the Preliminary Water Quality Plan and the Preliminary Forest Conservation Plan.
- The Board's actions on the Preliminary Forest Conservation Plan and the Preliminary Water Quality Plan are regulatory and binding.
- The regulatory approvals covered by this staff report are only valid if the Local Map amendment is subsequently approved by the County Council.

STAFF RECOMMENDATIONS

- APPROVAL of the Clarksburg Special Protection Area Preliminary Water Quality Plan, subject to the following conditions:

- Conformance to the conditions as stated in Montgomery County Department of Permitting Services (MCDPS) Preliminary Water Quality Plan approval letter dated June 11, 2015 (Attachment A).
- The impervious surfaces on the property are limited to no more than 30 percent of the net tract area.
- If the stream crossing is permitted at preliminary plan, it must not disturb natural stream flow or wetlands.
- Minimize height of retaining walls separating sensitive areas from developed areas.
- Maintain a 175-foot stream buffer adjacent to the townhomes on the western side of the site.

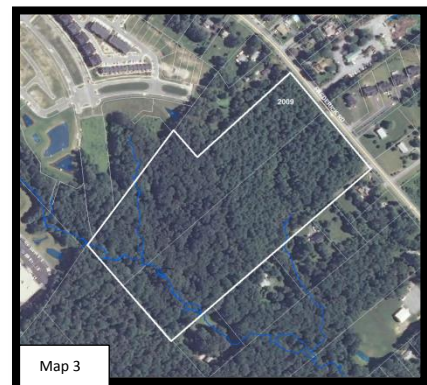


- APPROVAL of the Preliminary Forest Conservation Plan, subject to the following conditions:
 - Prior to any land disturbing activities, the Applicant must obtain approval of a Final Forest Conservation Plan consistent with the Preliminary Forest Conservation Plan and Planning Board conditions
 - The Applicant is required to record a Category I Conservation Easement over areas of forest retention as shown on the Forest Conservation Plan approved by the Planning Board. The easement must be approved by the M-NCPPC Office of General Counsel and recorded by deed in the Montgomery County Land Records after site plan approval and before any land disturbing activities.

DISCUSSION

SITE DESCRIPTION

The subject property is two un-platted parcels equaling 24.37 acres, in the R-200 Zone and located on the west side of Frederick Road (MD 355) and the future extension of Roberts Tavern Drive in the Clarksburg Master Plan area (“Property” or “Subject Property”). The Property is vacant and completely forested. The topography is rolling with moderate to extreme steep slopes and one area of level terrain. The Property includes a network of stream valleys, wetlands and drainage swales that direct runoff to the south into a tributary stream draining to the Little Seneca Creek. This stream valley has been protected by a conservation easement on off-site developments to the north and west of this site.



A Natural Resources Inventory/Forest Stand Delineation (NRI/FSD #420132130) was approved on April 21, 2014. The Property is located within the Clarksburg SPA and the Little Seneca Creek watershed, a Use Class IV-P watershed. The Property includes an unnamed tributary of Little Seneca Creek that begins on the west side of the Property. The Countywide Stream Protection Strategy rates that quality of streams in this watershed as “good”. Streams, floodplains, wetlands, and environmental buffers on site total approximately 9.22 acres or approximately 39 percent of the gross tract area. The Property has two different forested areas. The first, on the western side of the Property, is a mature, stable ecosystem with many specimen trees and rates as high priority for retention. The second forest on the eastern side of the Property is approximately 35-years old and contains many invasive species. The forest that is located outside of the streams and wetland buffer areas on the Property is considered a moderate priority for retention.



PROJECT DESCRIPTION

The applicant, Clarksburg Mews, (“Applicant”) is requesting to rezone the Property from the R-200 Zone to the PD-4 Zone. The Applicant proposes to construct a total of 105 residential units, including 21 single-family detached, and 84 single-family townhouse units. Fourteen of the townhome units are proposed for MPDUs. The Applicant proposes reservation of land for the Master Plan recommended future alignment of Frederick Road and Roberts Tavern Drive.

SPECIAL PROTECTION AREA REQUIREMENTS

The Property is within the Clarksburg SPA and is the subject of a Local Map Amendment application which requires a Development Plan. Therefore, the Applicant is required to obtain approval of a water quality plan under section 19-67 of the Montgomery County Code. This section of the code states:

19.67.01.01 Authority: In accordance with the procedures authorized in Chapter 19, Article V, entitled "Water Quality Review - Special Protection Areas," Section 19-67, the following Executive Regulation applies to an application for approval of, or significant amendment to, a development plan, diagrammatic plan schematic development plan, project plan, preliminary plan of subdivision, special exception, or site plan, in designated special protection areas.

19.67.01.03 Applicability: A. Privately owned property: Except as exempted under Section 4, all persons proposing to disturb land within a SPA must also submit a preliminary water quality plan and a final water quality plan if they are:

(i) required by law to obtain approval of a development plan, diagrammatic plan, schematic development plan, project plan, special exception, preliminary plan of subdivision, or site plan; or

(ii) seeking approval of an amendment to an approved development plan, diagrammatic plan, schematic development plan, project plan, special exception, preliminary plan of subdivision, or site plan; or

(iii) specifically required to submit a water quality plan in a land use plan, watershed plan, comprehensive water supply and sewer system plan amendment, or by resolution of the County Council.

Under the requirements of the Special Protection Area law, an SPA water quality plan must be reviewed in conjunction with the Local Map Amendment. Under the provision of the law, the Montgomery County Department of Permitting Services and the Planning Board have different responsibilities in the review of a water quality plan. The Planning Board's responsibility is to determine if requirements for environmental buffer protection and SPA forest conservation have been satisfied. In addition, the Board must review the appropriateness of the proposed impervious level of the new development.

MCDPS Special Protection Area Review Elements

In a letter dated June 11, 2015, MCDPS conditionally approved the elements of the SPA Preliminary Water Quality Plan under its purview including: a) stormwater management facilities, b) sediment control measure, and c) Best Management Practices (BMP) monitoring. A synopsis is provided below. (see also Attachment A).

The conditions may impact the Planning Board's part of the review of the water quality plan. For example, the fourth condition, "Provide safe non-erosive outfalls into the proposed green/HOA areas. It appears that the outfall located in the area near the pedestrian access to the future transit station may need to be moved further down slope." Compliance with this condition will result in more priority forest removal and wetland impact.

a) Stormwater Management

MCDPS will require that full Environmental Site Design (ESD) be achieved to meet the DPS performance goals. The Applicant's current plan relies heavily on a combination of micro-bioretenion cells and planter box micro-bioretenion to meet requirements.

b) Sediment and Erosion Control

Redundant sediment control structures will also be required, such as oversized traps, super silt fences for small drainage areas and phasing to promote quick stabilization. The MCDPS conditions for this element may impact the Planning Board's part of the review of the water quality plan. For example, the fourth condition, "Provide safe non-erosive outfalls into the proposed green/HOA areas. It appears that the outfall located in the area near the pedestrian access to the future transit station may need to be moved further down slope." Compliance with this condition will require additional priority forest removal and wetland impacts.

c) Monitoring of Best Management Practices

Required stream and BMP monitoring will be conducted by the Montgomery County Department of Environmental Protection with the Applicant required to pay a fee for this monitoring.

Planning Board Special Protection Area Review Elements

Area 3 Planning Staff has reviewed and recommends Planning Board approval of the elements of the SPA Preliminary Water Quality Plan with conditions:

1. Approved stormwater management plan and sediment control plan must conform to the limits of disturbance of the preliminary forest conservation plan.
2. Impervious levels must not exceed 30 percent of the net tract area.
3. The arch culvert stream crossing must not impact wetlands or their buffers and must minimize impacts to the natural flow of the stream.
4. Minimize height of retaining walls separating sensitive areas from developed areas.

Environmental Guidelines

The unnamed tributary to Little Seneca Creek has two branches that flow from the north with the confluence on the Property. This confluence area forms a much larger wide and braided stream that receives a large amount of flow. This area of the stream channel is between 20 feet and 100 feet wide below the confluence and interlaced with seeps, springs and wetlands. In addition, steep slopes with erodible soils lead down to the stream channel area.

Sewer Service Analysis

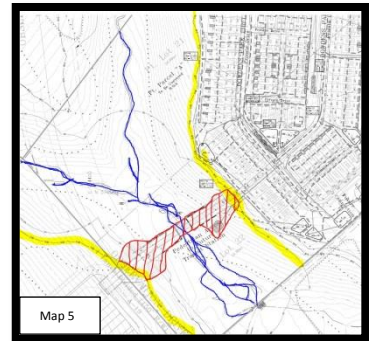
This Application proposes significant impacts to the Stream Valley Buffer (SVB). The main impact is the arch culvert proposal that will carry a gravity sewer (and pedestrian path) over the stream on the east side of the Property. (See Attachment B and C for background.) The 1994 Clarksburg Master Plan intended that the area, north of Shawnee Lane, west of MD 355, east of future Observation Drive and south of future Roberts Tavern Drive ("Subwatershed") be served by public sewer service. While not specifically determined or otherwise specified in the Master Plan, one can assume that public sewer service to this Subwatershed was to be extended from the south, up the small tributary, through the Clarksburg High School site, under Shawnee Lane and thence serving the Subwatershed with gravity sewer service. However, prior developments within this Subwatershed commenced at the far upstream (north) side of the Subwatershed well ahead of any such gravity sewer extension from the south. Two such developments each found ways to construct gravity sewer carefully built along the final contours of their respective developments which directed sewage flows by gravity into sewers within neighboring watersheds, thus circumnavigating the downstream properties (including the Subject Property) that might have benefitted from a comprehensive gravity sewer solution. The subject development now proposes to do the same as the developments to the north, however, with a rather unique means of maintaining gravity flow.

The WSSC strongly prefers gravity sewer service that is provided under conventional means of trenching pipe designed to convey sewage without mechanical assistance (pumping). Gravity sewer service has proven to be the most efficient and cost effective means of providing comprehensive sewer service to large populations. Hence, in order to determine the tract area for forest impacts and water quality impacts that are required to make the findings for this Development Plan application, it became necessary to determine how sewer infrastructure *might be* extended to the Property. In meetings with WSSC, they stated a preference for the gravity sewer described above, that would convey flows by gravity to a manhole located near the Clarksburg High School, more than 2,000 feet to the south. (Attachment B) This extension was problematic for both the Applicant and Staff since the Applicant did not control much of the properties that would be crossed by such an extension and Staff was concerned with the environmental impact to a large wetland/forest complex across the entire east and north side

of the High School property in the direct path of the potential gravity sewer. This sensitive area is protected by a forest conservation easement on the School property. (See page 3 of Attachment B)

Staff analyzed a modified version of the above solution which would be to extend gravity service from the Subject Property, south to Shawnee Lane, where a pumping station could be built (by the developer) on off-site properties. The pump station would then pump sewage to the closest available gravity sewer likely to the west along Shawnee Lane near the Garnkirk (Eastside) and Gallery Park developments. This pumping station at Shawnee Lane would be capable of serving the entire remaining Subwatershed. However, the Applicant does not have control or permission to cross downstream properties with the sewer or pump station. WSSC, while non-comital to the pump station alternative, remains in favor of a standard gravity option.

Given the impediments to the two options discussed above, the Applicant seeks to connect to the sewer infrastructure within the Garnkirk Farm subdivision west of the Property with a gravity sewer line “suspended” within a bridge that crosses the stream valley on the western side of the Property. Gravity flow is not possible if the pipe were to be buried through the stream valley buffer due to topography. By suspending, or enclosing, the sewer line within an elevated structure built across the stream valley, positive gravity flow can be maintained from the proposed development to the nearest existing gravity sewer located to the west in Observation Drive (currently under construction).



The proposal would be to bury the sewer line within a 35-foot wide, soil-filled arched span bridge using a bottomless culvert over the stream and wetlands. The length of the “bridge” would be 280 feet where an asphalt pedestrian path would be placed on top of the sewer pipe. The arched culvert would span 40 feet in an attempt to clear the stream and associated wetlands. , WSSC has agreed to study this option. The agency will make the decision about how to sewer this site at the time of preliminary plan.

The asphalt path will provide much needed pedestrian access to the proposed transit station located at the intersection of future Observation Drive and Shawnee Lane. The opening in the culvert is designed to allow the stream flow to pass through. However, the dynamic nature of the stream in this location and the adjacent wetlands make it impossible to avoid permanent impacts to this system with the proposed arch culvert design. The stream will have to be realigned, narrowed and channelized to insure that the stream is permanently flowing toward the culvert opening and not undermining the foundation of the culvert. The arch culvert spans the wetlands but does impact the wetland buffers located on each side of the wetland. This impact will initiate a wetland permit from appropriate agencies. A floodplain construction permit is also likely.

The arch culvert concept for the gravity sewer has the potential to be acceptable to WSSC and has many upsides especially for the pedestrian connection; however, its impact to this stream system will be permanent as with many road or asphalt pedestrian connections that place permanent features within the near stream area. Staff is particularly concerned with the amount of stream realignment that will be necessary to control the stream channel as it enters the culvert and as it flows through the culvert. A stream will naturally meander unless it is held in check by man-made structures. The attempt to span the stream and wetlands with the culvert may sound like a feasible way to avoid or minimize impacts, but Staff is convinced that the character of the stream, both upstream and downstream of the culvert, will be irreversibly altered. Direct impact to the stream buffer may also include multiple outfall

locations that cut channels through the forested slopes of the stream valleys. Should this be the sewer option that is ultimately chosen for this development, staff cannot stress the importance of the developer working with the County MCDEP to use available funds to restore to natural features of the stream to the maximum extent possible. The final water quality plan at the time of preliminary plan will show this information.

Other impacts to the environmental buffers are less direct. In order to build and engineer Dowdens Green Way around the second stream and an associated wetland on the site there will be a 10-20-foot grade change on three sides of the wetland and stream system, requiring retaining walls. However, the stream buffer will not be directly impacted. One of the purposes of the PD zone is to “minimize the amount of grading necessary for construction of a development.” Grading and the use of large retaining walls should be minimized.

Finally, the Clarksburg master plan recommends a 175-foot stream buffer, “The Master Plan strongly encourages landowners to allow stream buffer areas within 175 feet of the stream to remain undisturbed . . .” Given the steep slopes with highly erodible soils, particularly along the western tributary, the strong encouragement from the plan should be followed along the western tributary.

Imperviousness

A main goal for new development in all SPAs is to reduce the area of impervious surfaces. The Clarksburg SPA, which was created following approval of the Clarksburg Master Plan and subsequently amended, specifies no maximum imperviousness cap in this portion of the SPA.

The Impervious Area Exhibit (Attachment D) proposed a post-development condition of 5.6 acres of impervious surface. The percentage of impervious surface shown on the exhibit is incorrect since the area of highway dedication should be deducted from the net tract area as in the forest conservation plan (See Attachment D). This staff report reflects the correct calculation of the impervious percentage by using the same impervious acreage shown on the exhibit. The impervious percentage of the site is 26.0 percent of the 21.57-acre net tract area. The Applicant anticipates the need for additional impervious area as the site development process continues. A future impervious exhibit will include additional elements such as accel/decel lanes, a turn lane on MD 355, site amenities such as play areas and pedestrian connections, additional parking spaces, modified dwelling unit sizes and a wider pedestrian connection across the tributary to Little Seneca Creek. For these reasons, the Applicant has proposed that the final impervious acreage may increase from 5.6 acres to a total of approximately 7.8 acres. This will bring the impervious level to approximately 36 percent of the net tract area.

The Property is currently zoned R-200. Staff has calculated impervious surface levels for typical developments across the county in the R-200 zone with sewer service to be approximately 26 percent. Staff has also calculated impervious levels of the PD-4 zone to be approximately 30 percent.

Because there is no imperviousness cap within this portion of the Clarksburg SPA, the Staff and the Planning Board have historically used the general county range for the zone as a goal. At 36 percent, the proposed project is greater than the expected impervious level of both the R-200 zone and the PD-4 zone. The current impervious exhibit (Attachment D) has minimized imperviousness while attaining the maximum density of the PD-4 zone, resulting in a 26 percent impervious level. The goal of this Application should be to stay below 30 percent of the net tract area.

Forest Conservation

This project is subject to the Montgomery County Forest Conservation law (Chapter 22A of the County code) under section 22A-4(a), which states that the law applies to:

A person required by law to obtain development plan approval, diagrammatic plan approval, project plan approval, preliminary plan of subdivision approval, or site plan approval;

The proposed project is the subject of a Local Map Amendment application, a required element of which is a Development Plan. Therefore, the Montgomery County Forest Conservation Law is applicable to the Application at this stage. The Applicant submitted Forest Conservation Plan No. G-957 (see Attachment E) on February 27, 2015. The FCP uses a net tract area of 21.57 acres, which is equal to the total tract area of 24.37 acres minus the proposed right-of-way dedications of 2.8 acres.

The FCP shows 13.3 acres of forest clearing and 8.17 acres forest retention. No forest mitigation is required due to the high level of forest retention. However, it is possible that the construction of Observation Drive may require permanent or temporary easements because of the extreme slopes in this area. This may require additional forest clearing in areas proposed to be retained by the applicant.

Tree Variance

Section 22A-12(b)(3) of the Montgomery County Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. The law requires no impact to trees that: measure 30 inches or greater, DBH ("Protected Tree"); are part of a historic site or designated with an historic structure; are designated as a national, State, or County champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species. Any impact to a Protected Tree, including removal or disturbance within the Protected Tree's critical root zone (CRZ) requires a variance. An application for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law. In the written request for a variance, an applicant must demonstrate that strict adherence to Section 22A-12(b)(3), i.e. no disturbance to a Protected Tree, would result in an unwarranted hardship as part of the development of a property.

Variance Request

The Applicant submitted a variance request dated February 24, 2015 for the impacts of Variance Trees by the proposed activities (Attachment F). The Applicant has requested a tree variance to impact six Variance Trees and to remove nine Variance Trees.

Tree #	Species	D.B.H (inches)	CRZ Impact	Reason for disturbance
8	Tulip Poplar	30	100%/Remove	Parking and Micro-Bioretenion
10	Tulip Poplar	33	100%/Remove	Micro-Bioretenion
14	Black Cherry	31	100%/Remove	Grading For Town Houses
16	Black Oak	43	100%/Remove	Grading For Town Houses
23	White Oak	30	100%/Remove	Grading For Town Houses
24	Black Oak	36	100%/Remove	Grading For Town Houses
32	Black Oak	37	34%	Grading For Town Houses
36	Black Oak	31	100%/Remove	Grading For Town Houses
41	Red Oak	32	100%/Remove	Grading For Town Houses
45	Red Oak	34	29%	Grading For Town Houses
46	Red Oak	30	4%	Grading For Town Houses
92	White Pine	33	11%	Grading For Town Houses
94	White Ash	34	11%	Grading For Town Houses
115	Tulip Poplar	37	100%/Remove	Sewer Connection/Pedestrian Bridge
116	White Oak	37	17%	Sewer Connection/Pedestrian Bridge

Justification of Unwarranted Hardship

Under Section 22A-21, a variance may only be considered if the Planning Board finds that leaving the Variance Trees in an undisturbed state would result in an unwarranted hardship.

This variance request is to allow development of a completely forested site, part of which is an older forest with a significant number of protected trees. The Property is highly constrained with slopes, streams and wetlands and the developable area is relatively limited. In addition, the Applicant proposes to connect to sewer service across a wide stream valley which contains many variance trees. It is not possible to avoid impact to these trees if the Property is to be developed. Not granting a variance would eliminate much of the developable area of the site and create an unwarranted hardship.

Variance Findings

Section 22A-21 of the County Forest Conservation Law sets forth the findings that must be made by the Planning Board in order for a variance to be granted.

Staff has made the following determination based on the required findings that granting of the requested variance:

1. Will not confer on the applicant a special privilege that would be denied to other applicants.

The Property is limited by road dedications, slopes, streams and wetlands, and the number of protected trees within the forest. These constrictions limit the developable area of the site. In order to develop

this Property, it is impossible not to impact Protected Trees. Therefore, this is not a special privilege to be conferred on the Applicant.

- 2. Is not based on conditions or circumstances which are the result of the actions by the applicant.*

The requested variance is based on the constrained site conditions, the need for a sewer connection and the zoning density as proposed by the Applicant. This is not a result any action undertaken by the Applicant.

- 3. Is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.*

The variance is a result of the proposed site design and layout. The surrounding land uses do not have any inherent characteristics or conditions that have created or contributed to the need for a variance.

- 4. Will not violate State water quality standards or cause measurable degradation in water quality.*

The granting of this variance will not adversely affect water quality beyond the proposed forest removal. Water quality will be impacted in particular by forest removal in the stream channel and within the stream buffer. Appropriate erosion and sediment controls will be installed, as specified in the Erosion and Sediment Control Plan for this Application.

Mitigation for Trees Subject to the Variance Provision

Mitigation for Protected Tree impact and removal is calculated by forest conservation worksheet, since all of the Protected Trees are located within forested areas. In this case, sufficient forest is being retained and additional mitigation is not required.

County Arborist's Recommendation on the Variance

In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. The request was forwarded to the County Arborist on May 22, 2015 and is currently under review

Variance Recommendation

Staff recommends that the variance be granted.

The submitted Preliminary Forest Conservation Plan meets all applicable requirements of the Chapter 22A of the County Code (Forest Conservation Law).

CONCLUSION

The Special Protection Area Preliminary Water Quality Plan G-957 with conditions meets all applicable sections of Chapter 19 of the Montgomery County Code; therefore, Staff recommends approval, subject to the conditions cited on page 2.

The Preliminary Forest Conservation Plan No. G-957 with conditions meets all applicable section of Chapter 22A of the Montgomery County Code; therefore, Staff recommends approval, subject to conditions on page 2.

Attachments:

Attachment A: MCDPS Preliminary Water Quality Plan Approval Letter 6/15/2015

Attachment B: Sewer Alignment Agency Meeting Summary (DEP, WSSC, MCPD)

Attachment C: Proposed Area Sewer Alignments

Attachment D: Impervious Area Exhibit, 3/11/15

Attachment E: Preliminary Forest Conservation Plan 2/27/2015

Attachment F: Variance Request 2/14/2015

Attachment G: Preliminary Water Quality Plan 5/29/15



DEPARTMENT OF PERMITTING SERVICES

Isiah Leggett
County Executive

Diane R. Schwartz Jones
Director

June 11, 2015

Mr. Pearce Wroe
Macris, Hendricks and Glascock, P.A.
9220 Wightman Road, Suite 120
Montgomery Village, Maryland 20886

Re: **Preliminary Water Quality Plan** Request for
Dowden's Station
SM File #: 270835
Tract Size/Zone: 24.4 acres/Proposed PD-5
Total Concept Area: 24.4 acres
Parcel(s): 780 and 888
Watershed: Little Seneca Creek/Clarksburg
Special Protection Area

Dear Mr. Wroe:

Based on a review by the Department of Permitting Services Review Staff, the Preliminary Water Quality Plan (PWQP) for the above mentioned site is **acceptable**. The Preliminary Water Quality Plan proposes to meet required stormwater management goals via a combination of micro-bioretenion and planter box micro-bioretenion to provide full ESD for the proposed development. This approval is for the elements of the Preliminary Water Quality Plan of which DPS has lead agency responsibility, and does not include limits on imperviousness or stream buffer encroachments.

The following **conditions** will need to be addressed **during** the Final Water Quality Plan (FWQP) review or the detailed sediment control/stormwater management plan stage as noted below:

1. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
2. Provide documentation that the ESD features in the public Right-of-Way have been approved by MCDOT at the FWQP stage.
3. Provide safe outfalls from all planter boxes that outfall to public areas at the FWQP stage.
4. Provide safe non-erosive outfalls into the proposed green/HOA areas. It appears that the outfall located in the area near the pedestrian access to the future transit station may need to be moved further down slope.
5. Landscaping shown on the approved Landscape Plan as part of the future approved Site Plan are for illustrative purpose only and may be changed at the time of detailed plan review of the Sediment Control/Storm Water Management plans by the Mont. Co. Department of Permitting Services, Water Resources Section.

This list may not be all-inclusive and may change based on available information at the time.

Mr. Pearce Wroe
June 11, 2015
Page 2 of 2

The performance goals that were established at the pre-application meeting are to be met through the implementation of 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 nutrient loading.
10. Control insecticides, pesticides and toxic substances.

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 **is not required**. A stream monitoring fee for the site area in the Piney Branch Special Protection Area (SPA) and a BMP monitoring fee for the disturbed area in the SPA is required.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. 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 stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

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

Sincerely,



Mark C. Etheridge, Manager
Water Resources Section
Division of Land Development Services

MCE: lmg

cc: C. Conlon
L. Galanko
SM File # 270835

ESD Acres: 24.4 acres
STRUCTURAL Acres: 0.0
WAIVED Acres: 0.0



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Montgomery County Long Range Sewer Service Technical Advisory Committee

Dowden's Station/Garnkirk Farms

Local Map Amendment G-957

Friday December 6, 2013 Meeting Minutes

Attendees: Kenneth Dixon, WSSC
Mary Dolan, MCPD
Katherine Nelson, MCPD
Alan Soukup, MCDEP
Elsabett Tesfaye, MCPD
Rich Weaver, MCPD

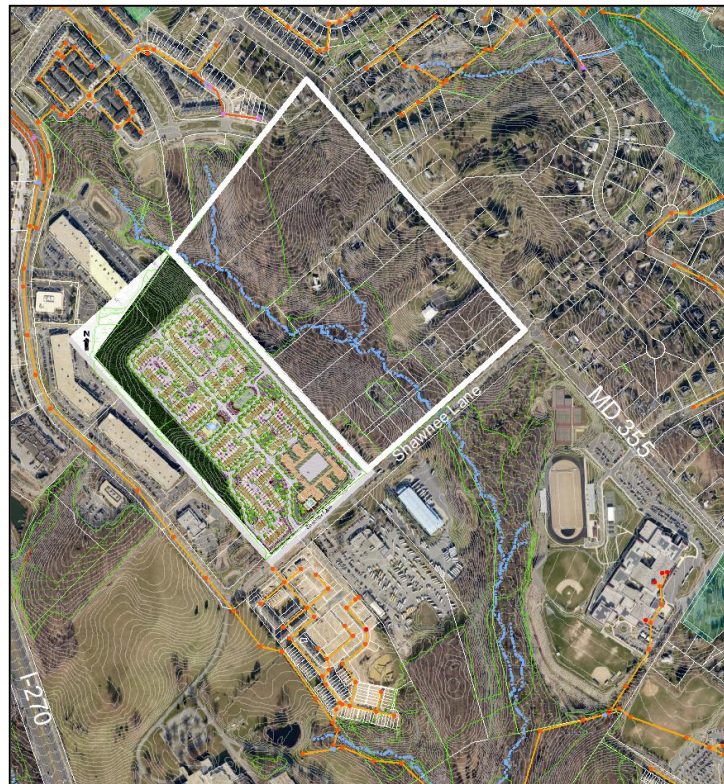
SUBJECT AREA

The group discussed a number of scenarios for providing sewer service to the area of Clarksburg bounded by MD 355, Shawnee Lane, and the Garnkirk Farm subdivision. This area is bisected by a significant stream valley. This area is outlined in white on the air photo.

BACKGROUND

The 1994 Clarksburg Master Plan intended that this area be served by public sewer service. However, there are a number of challenges to the extension of sewer infrastructure to the subject area:

1. The most logical sewer outfall alignment according to WSSC policy, would be to extend infrastructure by gravity across the Clarksburg High School property, south of Shawnee Lane. This is problematic since the School buildings are concentrated on the south side of the property with only a minimal sewer extension from the south. This means that the nearest gravity sewer extension is over 2000' feet downstream of the subject area. In addition, there is a large wetland/forest complex across the entire east and north side



of the school property. This sensitive area is protected by a conservation easement.

2. In order to access the sewer infrastructure within the Garnkirk Farm subdivision (superimposed on the air photo) to the east of the subject area, the landscape would need to be restructured to create the necessary grade. In addition, the steep stream valley between the Garnkirk Farm subdivision and the subject area would have to be filled in order to achieve a gravity connection. This solution would only end up serving the north side of the subject area by gravity. The southern part of the subject property would require other sewer service solutions.
3. The sewer infrastructure to the north of this area (see orange lines and manholes on the air photo) is uphill from this property and is only accessible by pumping.
4. Access to sewer infrastructure on the east side of MD-355 is distant and would also require pumping.

DISCUSSION

The group discussed the various options for providing sewer service to the subject area. This discussion included the proposal from the developer of Dowden's Station Local Map Amendment G-957 described in #2 above.

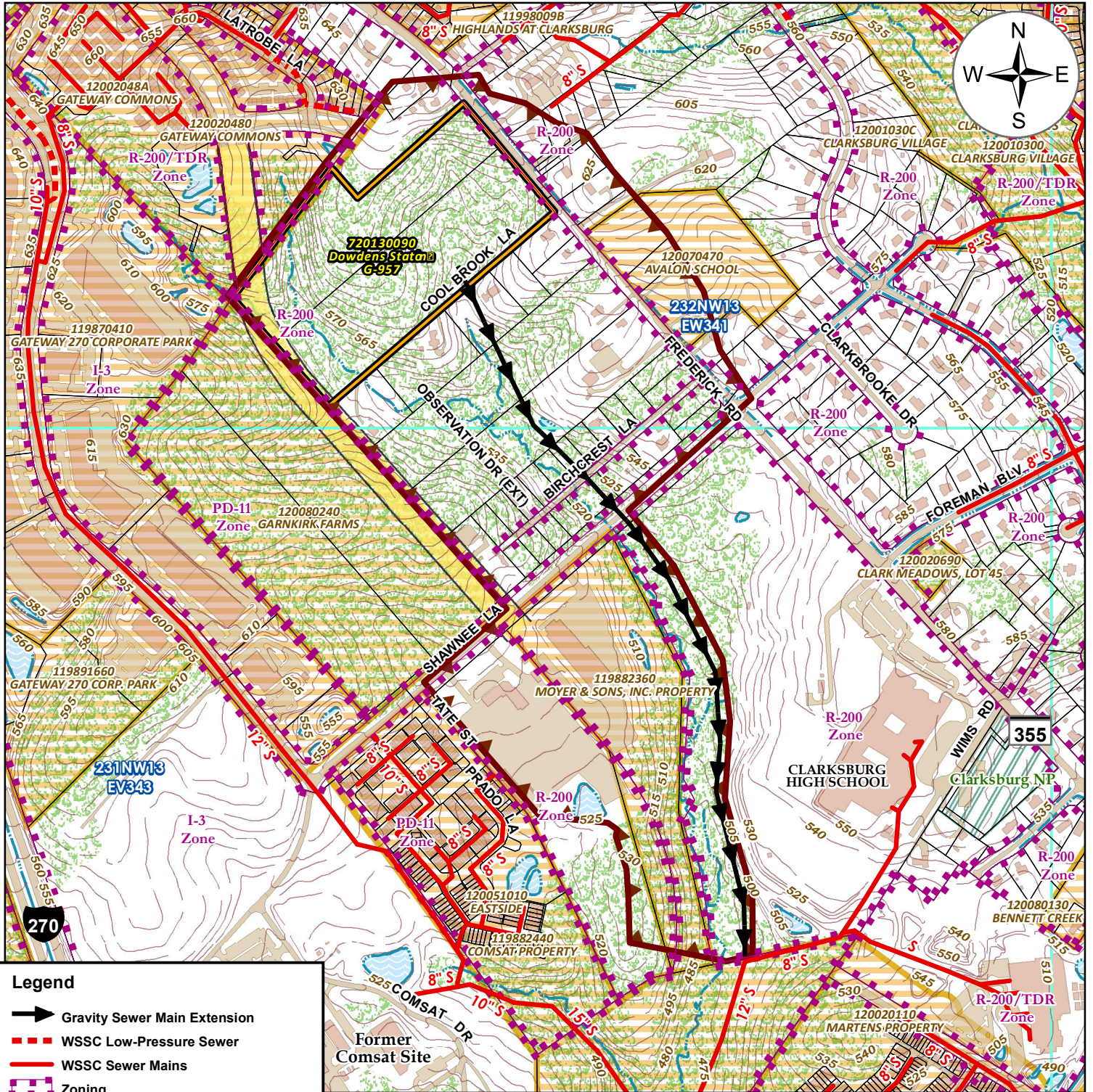
The general agreement included the following:

1. The subject area must be served comprehensively. Partial solutions for specific areas will make it unlikely that remaining areas will ever receive public sewer service as planned.
2. Service by gravity is the preferred method.
3. The preferred sewer alignment is an extension of the outfall located on the Clarksburg High School site. The alignment should be extended on the north east side of the stream and outside the easement area wherever possible. This avoids stream crossings and is accessible to the majority of the subject area's development potential.

Although not ideal, a modified version of the above solution would be to follow this alignment across the subject area only as far as Shawnee Lane. A pumping station in this location would then pump west over to the outfall in the Eastside subdivision. This modified solution would be subject to WSSC approval.

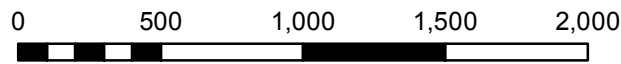
The attached graphic shows the preferred sewer outfall alignment.

Water and Sewer Plan Map: Development Review Inquiries/Research Sewer Service Alignments - Dowdens Station Project



Legend

- Gravity Sewer Main Extension
- WSSC Low-Pressure Sewer
- WSSC Sewer Mains
- Zoning
- Gravity Outfall - Potential Service Area
- Subdivision Sites
- Topography (5 ft. c.i.)
- WSSC Tile Grid
- Observation Dr. Extension
- Existing Parkland
- Woodlands
- M-NCPPC Subdivision Plans



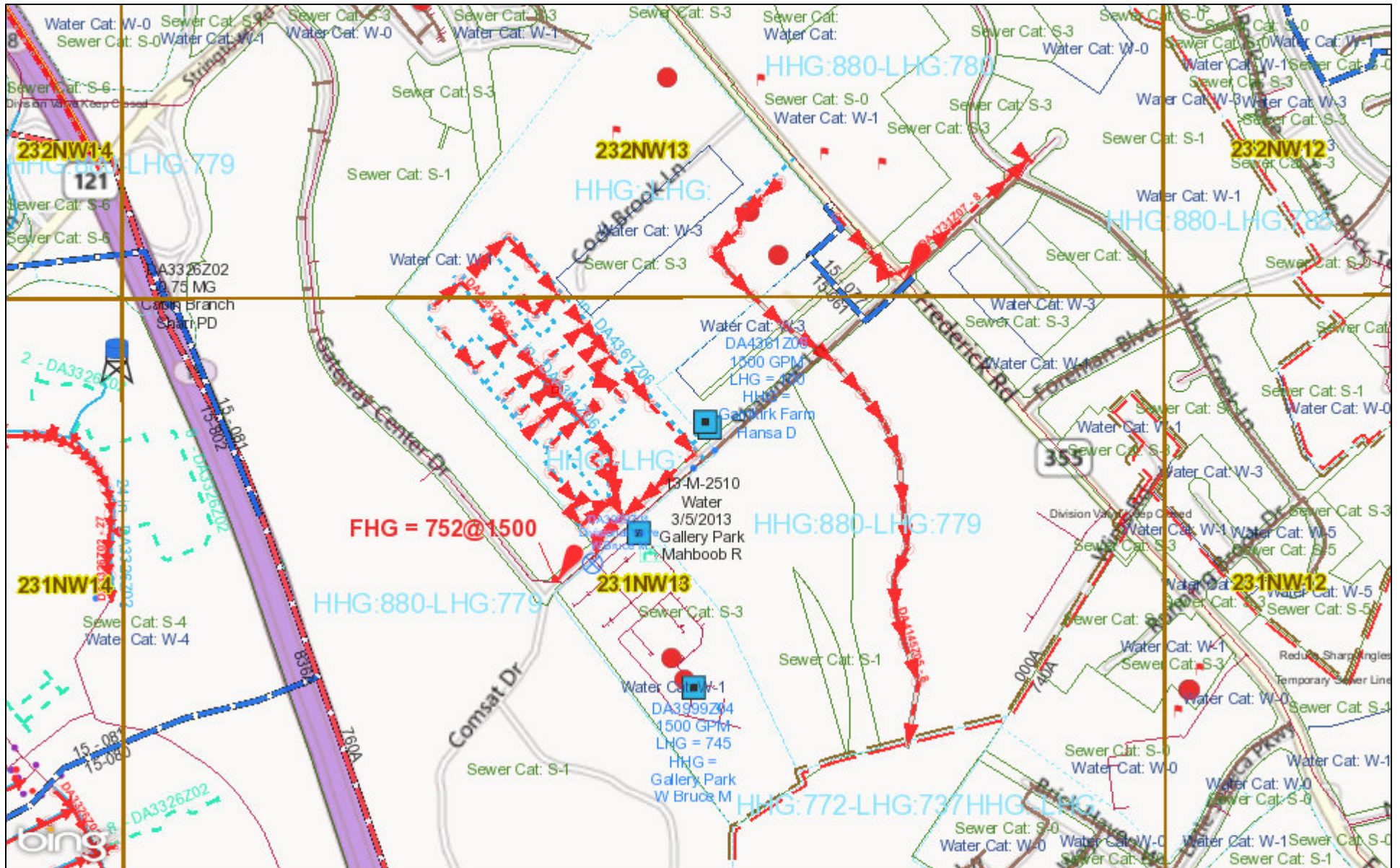
SCALE (Feet)

Montgomery County, Maryland
Draft 2013 Comprehensive Water Supply
and Sewerage Systems Plan





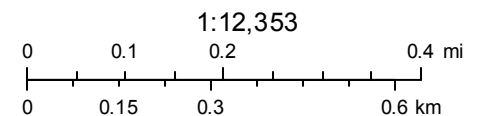
DEP
Water and Wastewater
Policy Group
10/21/13

Clarksburg Proposals in DSG Planned Assets Layer



November 19, 2013

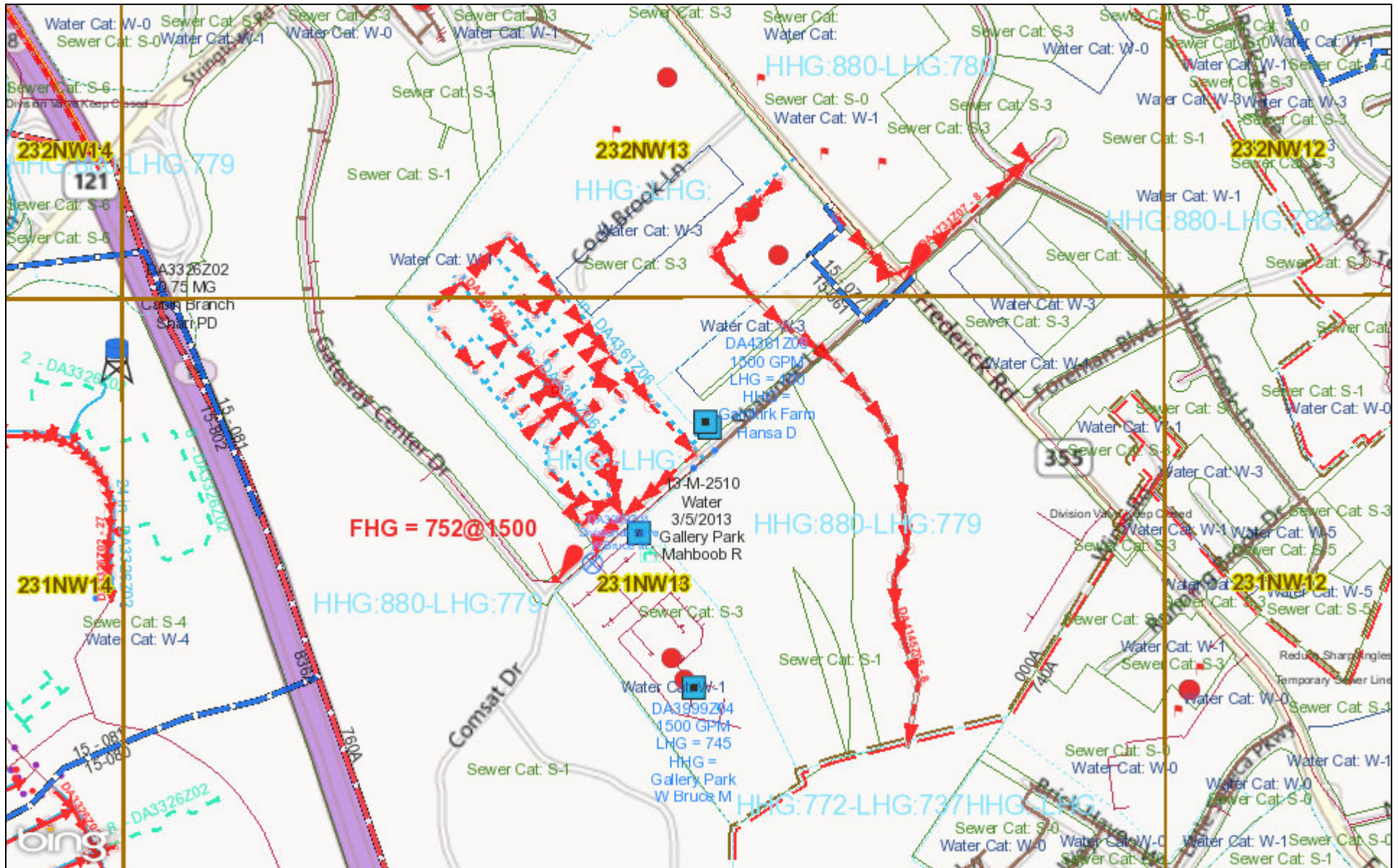
-  WSSC Parcels
-  Grid WSSC
-  County Boundaries






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Clarksburg Proposals in DSG Planned Assets Layer

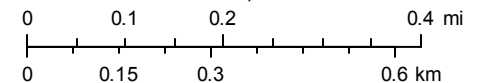
ATTACHMENT C

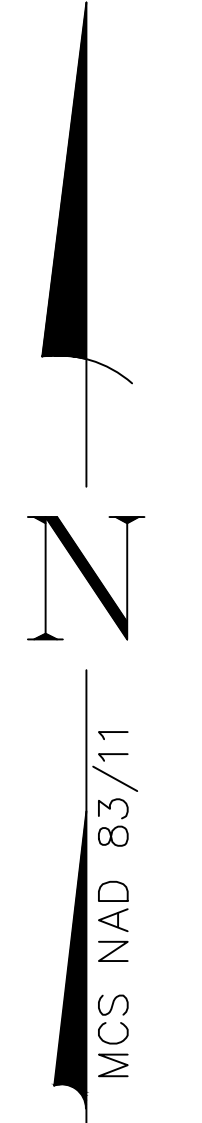
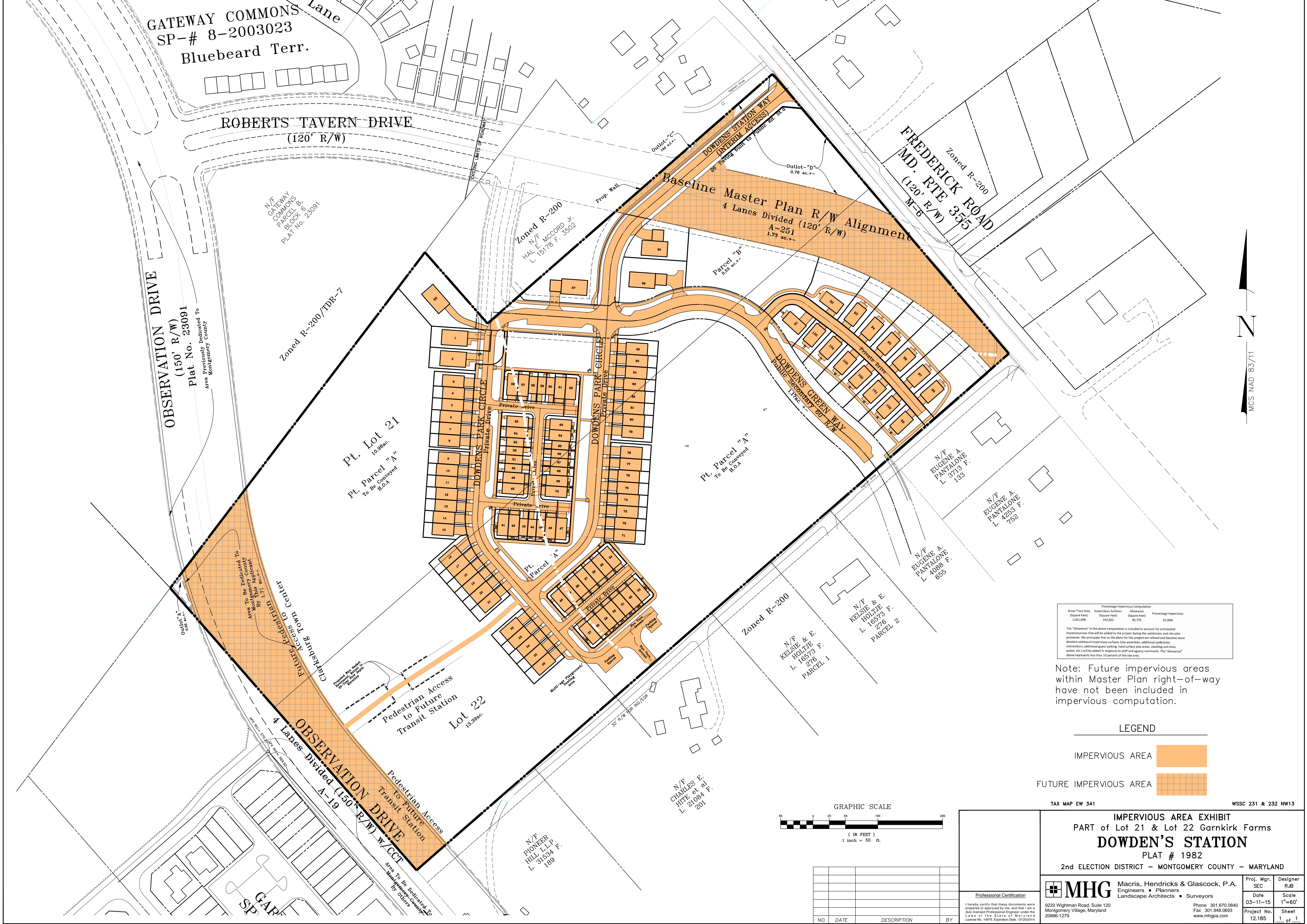


November 19, 2013

-  WSSC Parcels
-  Grid WSSC
-  County Boundaries

1:12,353





Percentage Impervious Computation			
Gross Tract Area	Impervious Surfaces	Allowance	Percentage Impervious
(Square Feet)	(Square Feet)	(Square Feet)	
1,061,888	243,912	95,775	32.00%

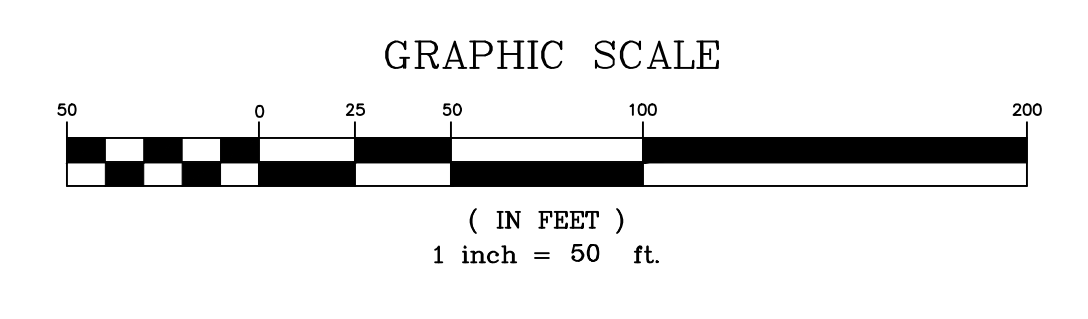
The "Allowance" in the above computation is included to account for anticipated imperviousness that will be added to the project during the subdivision and site plan process. We anticipate that as the plans for the project are refined and become more detailed additional impervious surfaces (site amenities, additional pedestrian connections, additional guest parking, hard surface play areas, swimming area, etc.) will be added in response to staff and agency comments. The "allowance" above represents less than 10 percent of the site area.

Note: Future impervious areas within Master Plan right-of-way have not been included in impervious computation.

LEGEND

- IMPERVIOUS AREA
- FUTURE IMPERVIOUS AREA

TAX MAP EW 341 WSSC 231 & 232 NW13

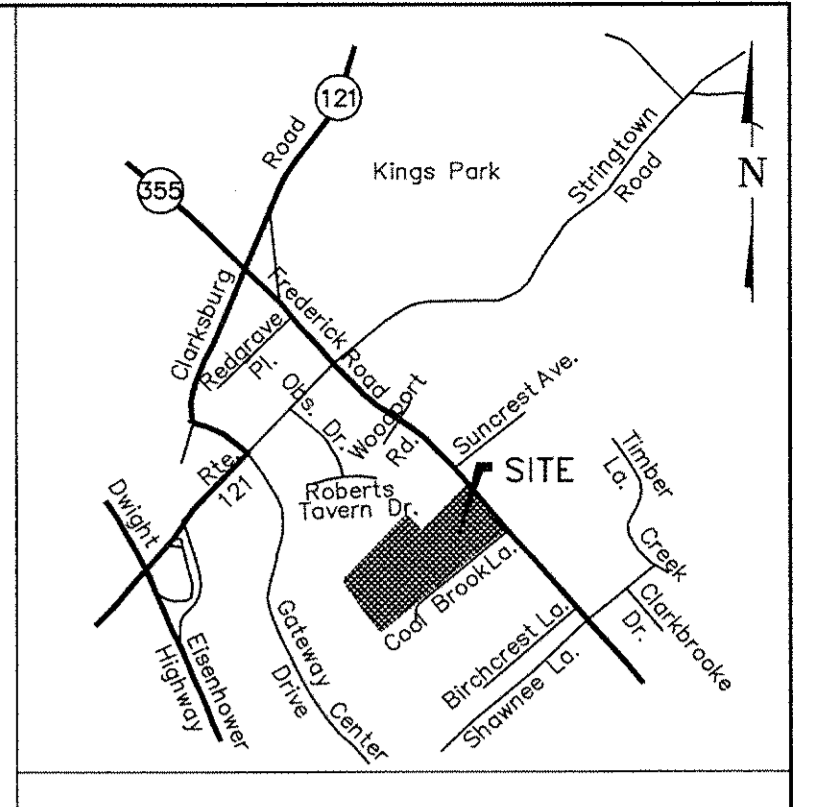
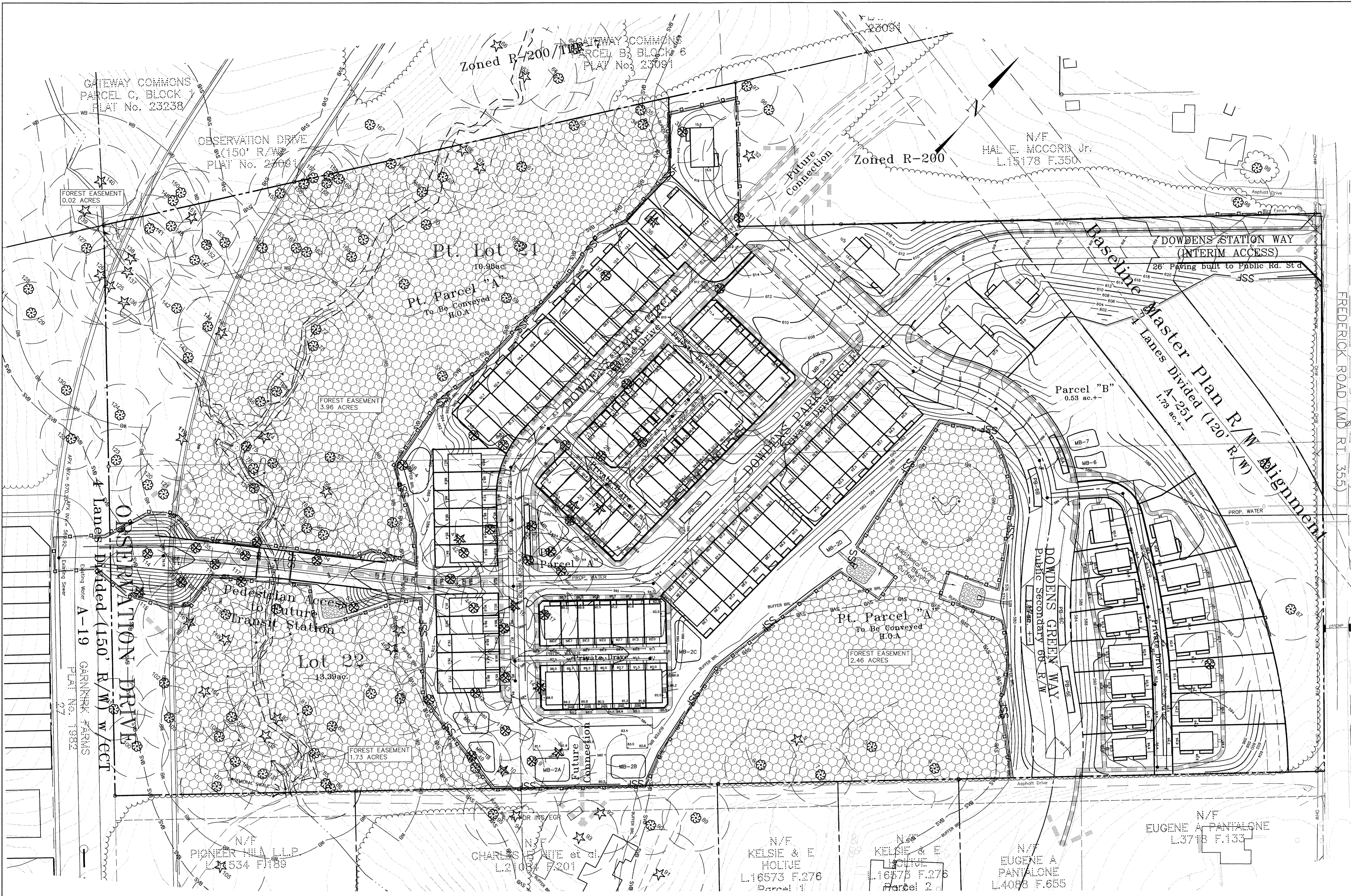


IMPERVIOUS AREA EXHIBIT
PART of Lot 21 & Lot 22 Garnkirk Farms
DOWDEN'S STATION
PLAT # 1982
2nd ELECTION DISTRICT - MONTGOMERY COUNTY - MARYLAND

Macris, Hendricks & Glascock, P.A. Engineers • Planners Landscape Architects • Surveyors	Proj. Mgr. SEC	Designer RuB
	Date 03-11-15	Scale 1"=60'
	Project No. 12,185	Sheet 1 of 1
	9220 Wightman Road, Suite 120 Montgomery Village, Maryland 20886-1279 Phone 301.670.0840 Fax 301.948.0893 www.mhga.com	

NO.	DATE	DESCRIPTION	BY

Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the Laws of the State of Maryland License No. 14079, Expiration Date: 07/20/2014



VICINITY MAP
SCALE 1" = 2,000'

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

A. Total tract area	24.37
B. Land dedication for roads, parking, etc.	0.00
C. Land dedication for roads or utilities (not being constructed by this plan)	2.80
D. Area to remain in commercial agricultural production	0.00
E. Other deductions (specify)	0.00
F. Net Tract Area	21.57

LAND USE CATEGORY: (from Trees Technical Manual)
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	0	1	0

G. Afforestation Threshold ... 15% x F = 3.24
H. Conservation Threshold ... 20% x F = 4.31

EXISTING FOREST COVER:

I. Existing forest cover	21.47
J. Area of forest above afforestation threshold	18.23
K. Area of forest above conservation threshold	17.16

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation	7.75
M. Clearing permitted without mitigation	13.72

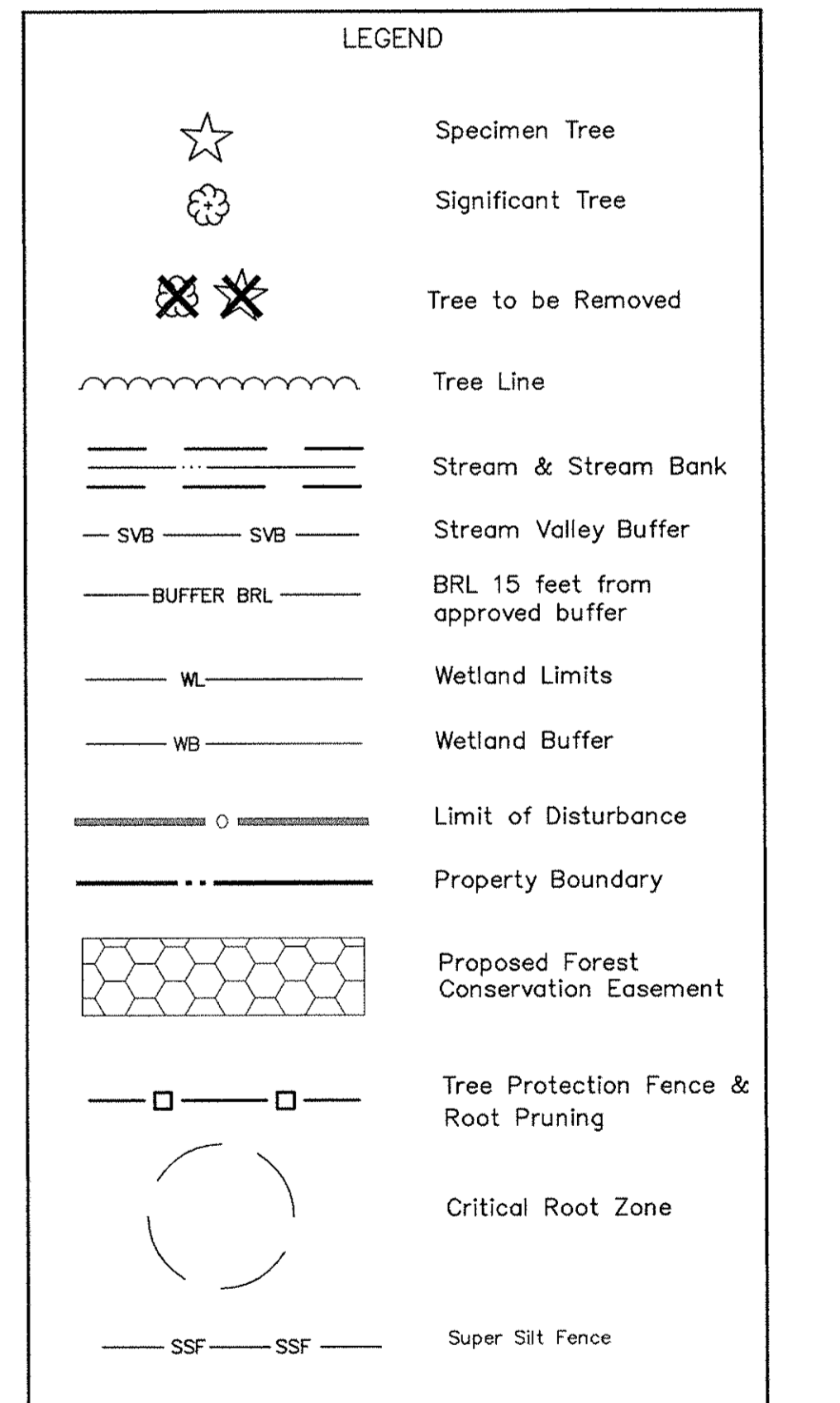
PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared	13.30
O. Total area of forest to be retained	8.17

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold	3.33
Q. Reforestation for clearing below conservation threshold	0.00
R. Credit for retention above conservation threshold	3.86
S. Total reforestation required	0.00
T. Total afforestation required	0.00
U. Credit for landscaping (may not exceed 20% of "S")	0.00
V. Total reforestation and afforestation required	0.00

Worksheet updated 8/5/2002



Tree Variance Detail Table

Tree ID #	Species	DBH	Impact/Remove	% Impacted	Condition	Mitigation
8	Tulip Poplar	30	Remove	100%	Good	Mitigated per FC worksheet
10	Tulip Poplar	33	Remove	100%	Good	Mitigated per FC worksheet
14	Black Cherry	31	Remove	100%	Poor	Mitigated per FC worksheet
16	Black Oak	43	Remove	100%	Good	Mitigated per FC worksheet
23	White Oak	30	Remove	100%	Good	Mitigated per FC worksheet
24	Black Oak	36	Remove	100%	Fair	Mitigated per FC worksheet
32	Black Oak	37	Impact Only	34%	Good	stress reduction measures
36	Black Oak	31	Remove	100%	Fair	Mitigated per FC worksheet
41	Red Oak	32	Remove	100%	Good	Mitigated per FC worksheet
45	Red Oak	34	Impact Only	29%	Fair/Good	stress reduction measures
46	Red Oak	30	Impact Only	4%	Poor	stress reduction measures
115	Tulip Poplar	37	Remove	100%	Fair	Mitigated per FC worksheet
116	White Oak	37	Impact Only	17%	Good	stress reduction measures
92	White Pine	33	Impact Only	11%	Good	stress reduction measures
94	White Ash	34	Impact Only	11%	Good	stress reduction measures

FOREST CONSERVATION DATA TABLE

DESCRIPTION	SIZE
Total Tract Area	24.37 Acres
Tract remaining in Agricultural Use	0.00 Acres
Road & utility ROW (unimproved)	2.80 Acres
Net Tract Area	21.57 Acres
Existing Forest (reduced for forest in ROW that is deducted from tract area)	21.47 Acres
Total Forest Retention	8.17 Acres
Total Forest Cleared	13.30 Acres
Land Use Category	Mixed Use Dev.
Afforestation Threshold	15 %
Reforestation Threshold	20 %
Forest in Wetlands Retained	0.288 Acres
Cleared	0.002 Acres (69 s.f.)*
Planted	0.00 Acres
Forest in 100-year Floodplain Retained	0.00 Acres
Cleared	0.00 Acres
Planted	0.00 Acres
Forest in Stream Valley Buffer Retained	7.06 Acres
Cleared	0.48 Acres
Planted	0.00 Acres
Forest in other Priority Areas Retained	0.00 Acres
Cleared	0.00 Acres
Planted	0.00 Acres
Stream Valley Buffer Length	1000 Feet
Avg. Width	140 Feet

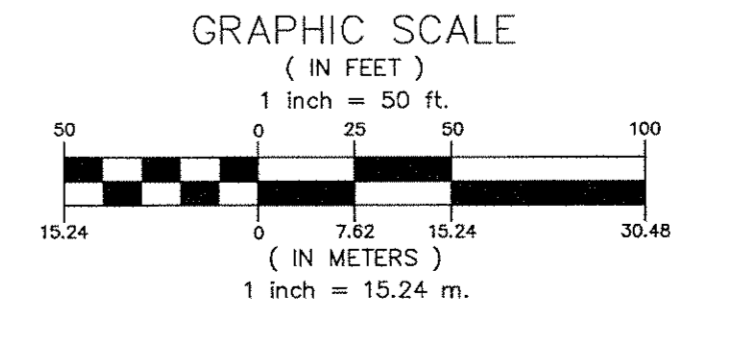
*wetland soil will not be disturbed and only necessary vegetation will be removed for clearance purposes.

PREPARED FOR:
Clarksburg Mews, LLC
c/o Mr. Michael D. Fisher
4938 Hampden Lane
Bethesda, Maryland 20814
PHONE: (301) 681-6400 Ext. 110

QUALIFIED PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS CORRECT AND THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF EXISTING STATE AND COUNTY FOREST CONSERVATION LEGISLATION.

DATE: 3/6/15
FRANK C. JOHNSON

RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD. DEPT. OF NATURAL RESOURCES COMAR 08.19.06.01



TAX MAP EW31 WSSC 232NW13

PRELIMINARY FOREST CONSERVATION PLAN

DOWDEN'S STATION
LOTS 21 and 22, PLAT No. 1982
2ND ELECTION DISTRICT - MONTGOMERY COUNTY - MARYLAND

MHG Macris, Hendricks & Glascock, P.A.
Engineers • Planners
Landscape Architects • Surveyors

8220 Wrightman Road, Suite 120
Montgomery Village, Maryland
20886-1279
Phone: 301.870.0840
Fax: 301.948.0693
www.mhgs.com

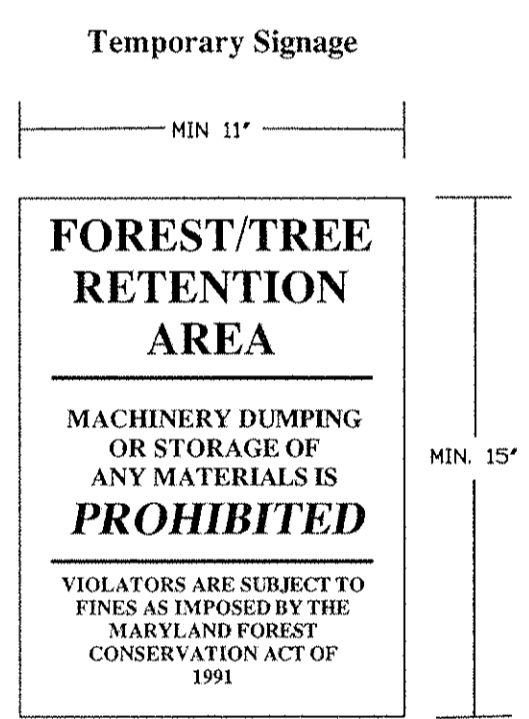
Proj. Mgr. Dec	2/27/2015	Designer FCJ	Scale 1"=50'
Date	2/27/2015	Project No.	2012.185.12
Sheet	1 of 2		

ID #	Common Name	Botanical Name	DBH	CRZ (ft.)	CRZ (radius)	Conditions/Remarks
1	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Fair; grapevine, canopy damage
2	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Fair; fungus, split to base, codominant at 5'
3	Black Cherry	Prunus serotina	24	4069	36	Fair; vines, codominant at 8'
4	Sycamore	Platanus occidentalis	27	24 5150	40.5	Fair/good (third trunk 20" and topped)
5	Tulip Poplar*	Liriodendron tulipifera	21	12663	63	Fair/poor; cavity from base - 3', some rot
6	Tulip Poplar	Liriodendron tulipifera	29	5942	43.5	Good
7	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Fair; Dead wood, vines, curved trunk
8	Tulip Poplar*	Liriodendron tulipifera	26	30 6359	45	Good; (third trunk 13")
9	Red Maple	Acer rubrum	26	4776	39	Good; cavity
10	Tulip Poplar*	Liriodendron tulipifera	33	7694	49.5	Good; poison ivy
11	Black Oak	Quercus alba	24	4069	36	Fair; die-back
12	Tulip Poplar	Liriodendron tulipifera	29	5942	43.5	Good
13	Red Maple	Acer rubrum	26	4776	39	Fair; leans
14	Black Cherry*	Prunus serotina	31	6789	46.5	Poor; rot, cavity
15	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good
16	Black Oak*	Quercus velutina	42	13063	64.5	Good; Dead wood, codominant at 5'
17	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good
18	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Very poor; cavity, base rot
19	White Oak	Quercus alba	25	4416	37.5	Fair; Dead wood, barbed wire
20	Chestnut Oak	Quercus prinus	27	5150	40.5	Good
21	White Oak	Quercus alba	25	4416	37.5	Fair/good; leans, codominant at 8'
22	Chestnut Oak	Quercus prinus	25	4416	37.5	Fair/good; leans, codominant at 8'
23	White Oak*	Quercus alba	30	6359	45	Good
24	Black Oak*	Quercus velutina	36	9156	54	Fair; Dead wood
25	Chestnut Oak	Quercus prinus	24	4069	36	Fair; Dead wood
26	Red Oak	Quercus rubra	24	4069	36	Good; Growth at base with insects
27	Chestnut Oak	Quercus prinus	27	28 5539	42	Good; (third trunk 20", fallen tree stand)
28	Chestnut Oak	Quercus prinus	24	23 4069	37.5	Fair/poor; base rot, Dead wood
29	Chestnut Oak	Quercus prinus	25	10 4416	37.5	Fair/poor; curved trunk (10" trunk is dead)
30	Chestnut Oak	Quercus prinus	25	4416	37.5	Good
31	Red Oak	Quercus rubra	29.5	6148	44.25	Dead
32	Black Oak*	Quercus velutina	37	9672	55.5	Good; Codominant at 5', Dead wood*
33	Red Oak	Quercus rubra	25	4416	37.5	Fair; Dead wood, base rot, tree stand
34	Chestnut Oak	Quercus prinus	24	4069	36	Fair; Dead leaves, dead wood, codominant at 5'
35	White Oak	Quercus alba	25	4416	37.5	Good; lopsided canopy
36	Black Oak*	Quercus velutina	31	6789	46.5	Fair; Codominant at 7', Dead wood
37	Red Oak	Quercus rubra	26	4776	39	Fair/good; Dead wood
38	White Oak	Quercus alba	26	4776	39	Good
39	Chestnut Oak	Quercus prinus	24	4069	36	Good
40	White Oak	Quercus alba	28	5539	42	Good
41	Red Oak*	Quercus rubra	32	7235	48	Good; Dead wood
42	Red Oak	Quercus rubra	27	5150	40.5	Good; leans
43	Red Oak	Quercus rubra	27	5150	40.5	Poor; rot, cavity
44	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good; dead wood
45	Red Oak*	Quercus rubra	28	8167	51.75	Fair/good; Dead wood, crack
46	Red Oak*	Quercus rubra	29	6359	45	Poor; cavity, rot, lightning strike
47	Black Oak	Quercus velutina	29.5	6148	44.25	Fair; Dead wood, crack/split at 5'
48	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good
49	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good
50	Tulip Poplar	Liriodendron tulipifera	29	5942	43.5	Fair; Canopy damage
51	Tulip Poplar	Liriodendron tulipifera	29	5942	43.5	Good
52	Red Oak	Quercus rubra	28	5539	42	Dead 50' height
53	Red Oak	Quercus rubra	28	5539	42	Poor; Codominant at 9', split/rot to base, 1 hole dead
54	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Good
55	White Oak	Quercus alba	26	4776	39	Poor; base rot, lightning strike
56	Red Oak*	Quercus rubra	32	7235	48	Fair; Canopy damage
57	Chestnut Oak	Quercus prinus	26	4776	39	Good
58	Chestnut Oak	Quercus prinus	25	4416	37.5	Fair; Crack at 10', Dead wood
59	Chestnut Oak	Quercus prinus	27	5150	40.5	Good; leans
60	Chestnut Oak	Quercus prinus	28.5	5739	42.75	Fair/good; codominant at 5'
61	Red Oak	Quercus rubra	25	4416	37.5	Good; leans, dead wood
62	Red Oak	Quercus rubra	27	5150	40.5	Good; Dead wood
63	Sycamore*	Platanus occidentalis	21	42 12663	63	Fair; codom at 5'; dead wood, cavity, (third stem is 18")
64	Tulip Poplar	Liriodendron tulipifera	28	5539	42	Good
65	Tulip Poplar	Liriodendron tulipifera	28	5539	42	Good
66	White Oak*	Quercus alba	52	19104	78	Good; Wound closure, dead wood
67	White Oak*	Quercus alba	34	8167	51	Poor; extreme base rot, dead wood
68	Tulip Poplar*	Liriodendron tulipifera	34.5	8409	51.75	Poor; cavity, base rot
69	Tulip Poplar	Liriodendron tulipifera	29.5	6148	44.25	Good
70	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good; codominant at 8', poison ivy
71	White Oak	Quercus alba	26	4776	39	Good
72	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good
73	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Fair/poor; base rot
74	Tulip Poplar*	Liriodendron tulipifera	39	10746	58.5	Good; codominant at 6', dead wood
75	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good
76	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good; dead wood
77	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good
78	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
79	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
80	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good; survey nail at base
81	Bitternut Hickory	Carya cordiformis	26	4776	39	Good
82	Tulip Poplar*	Liriodendron tulipifera	32	7235	48	Fair; die-back
83	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
84	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good
85	White Oak	Quercus alba	29	5942	43.5	Dead
86	Tulip Poplar	Liriodendron tulipifera	24	23 4069	36	Fair; leans, poison ivy
87	Bowlder	Acer negundo	25	4416	37.5	Fair/poor; dead wood, vines, crack
88	Red Oak	Quercus rubra	25	4416	37.5	Good
89	White Oak	Quercus alba	27	5150	40.5	Good
90	Red Maple	Acer rubrum	24	4069	36	Good
91	Red Maple*	Acer rubrum	36	9156	54	Good - vines
92	White Pine*	Pinus strobus	33	7694	49.5	Good
93	Red Maple*	Acer rubrum	31	28 6789	46.5	Fair - cavity at base
94	White Ash*	Fraxinus americana	34	8167	51	Good
95	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good
96	White Ash	Fraxinus americana	28	5539	42	Fair - leans, damage to trunk
97	Black Oak	Quercus velutina	25	4416	37.5	Poor - dieback
98	Red Maple	Acer rubrum	27	5150	40.5	Poor - rot, cavity
99	Red Maple	Acer rubrum	26	4776	39	Poor - rot, cavity
100	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good
101	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
102	White Oak	Quercus alba	26	4776	39	Good
103	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good
104	White Oak*	Quercus alba	34	8167	51	Good
105	White Oak*	Quercus alba	36	9156	54	Good
106	Tulip Poplar	Liriodendron tulipifera	29	5942	43.5	Good
107	Tulip Poplar	Liriodendron tulipifera	29	5942	43.5	Good
108	Tulip Poplar	Liriodendron tulipifera	28	5539	42	Good
109	Tulip Poplar	Liriodendron tulipifera	24	24 4069	36	Good
110	Tulip Poplar*	Liriodendron tulipifera	31	6789	46.5	Good
111	Red Oak	Quercus alba	29.5	6148	44.25	Poor; Large cavity @ base
112	Black Gum	Nyssa sylvatica	25	4416	37.5	Good; Tagged
113	White Oak	Quercus alba	26	4776	39	Fair; Deadwood
114	White Oak	Quercus alba	28	5539	42	Good
115	Tulip Poplar*	Liriodendron tulipifera	37	9672	55.5	Good; Codominant @ 5'
116	White Oak*	Quercus alba	37	9672	55.5	Good
117	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Good
118	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Fair/Poor; Cavity @ base, tree stand in trunk
119	Tulip Poplar*	Liriodendron tulipifera	34	8167	51	Good
120	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
121	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Fair; Cavity/rot @ base
122	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good; (Off-site)
123	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
124	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
125	Tulip Poplar*	Liriodendron tulipifera	31	6789	46.5	Poor; Large cavity, curved trunk
126	Tulip Poplar*	Liriodendron tulipifera	40	11304	60	Good; 3 boles: 40-25-34 (Off-site)
127	Sycamore	Platanus occidentalis	28	5539	42	Good; (Off-site)
128	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good; (Off-site)
129	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good; (Off-site)
130	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good; (Off-site)

131	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good
132	Red Maple*	Acer rubrum	34	8167	51	Good
133	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good
134	Tulip Poplar	Liriodendron tulipifera	28	5539	42	Good
135	White Oak	Quercus alba	26	4776	39	Dead
136	Tulip Poplar*	Liriodendron tulipifera	49	16063	73.5	Poor; Deadwood, large cavity
137	Tulip Poplar*	Liriodendron tulipifera	35	8655	52.5	Good
138	Tulip Poplar*	Liriodendron tulipifera	36	9156	54	Good; Multistem @ 5'
139	Tulip Poplar*	Liriodendron tulipifera	34	8167	51	Good; (Off-site)
140	Tulip Poplar*	Liriodendron tulipifera	30	6359	45	Good; (Off-site)
141	White Oak	Quercus alba	27	5150	40.5	Good
142	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Good; Deadwood
143	Tulip Poplar	Liriodendron tulipifera	25	23 4416	37.5	Good
144	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good
145	Tulip Poplar*	Liriodendron tulipifera	34	8167	51	Fair/Poor; Multistemmed @ 8', cavity/rot
146	Red Oak	Quercus rubra	24	4069	36	Good
147	Chestnut Oak	Quercus prinus	24	4069	36	Good; Deadwood
148	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
149	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good; (Off-site)
150	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good; (Off-site)
151	Tulip Poplar*	Liriodendron tulipifera	39	10746	58.5	Fair/Poor; Cavity, deadwood, codom @ 6', split
152	Chestnut Oak	Quercus prinus	27	5150	40.5	Good
153	Tulip Poplar	Liriodendron tulipifera	26	4776	39	Good; Deadwood
154	Tulip Poplar	Liriodendron tulipifera	29	5942	43.5	Good
155	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Fair/Poor; Cavity
156	Tulip Poplar	Liriodendron tulipifera	29	5942	43.5	Good
157	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
158	White Oak	Quercus alba	25	4416	37.5	Fair/Good; Deadwood, barbed wire
159	Tulip Poplar	Liriodendron tulipifera	25	4416	37.5	Good
160	Tulip Poplar	Liriodendron tulipifera	28	5539	42	Fair; Cavity, deadwood
161	Chestnut Oak	Quercus prinus	27	5150	40.5	Fair/Good; Growth/cavity issue
162	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Good
163	White Oak	Quercus alba	24	4069	36	Good; Deadwood
164	White Oak	Quercus alba	26	4776	39	Good; Deadwood
165	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Good; Deadwood
166	White Oak	Quercus alba	24	4069	36	Fair; Cavity, barbed wire, deadwood
167	Tulip Poplar	Liriodendron tulipifera	27	5150	40.5	Good
168	Tulip Poplar	Liriodendron tulipifera	24	4069	36	Good

Notes: Diameters are given for each trunk of multiple bole trees when division occurs below 4.5 feet. If major division occurs above 4.5 feet only the trunk diameter at 4.5 feet is given. Tree ID Numbers correspond to those assigned on the Natural Resource Inventory/Forest Stand Delineation Map.

* Specimen tree



- NOTE:
- Attachment of signs to trees is prohibited.
 - Signs should be properly maintained.
 - Avoid injury to roots when placing posts for the signs.
 - Signs should be posted to be visible to all construction personnel from all directions.

INSPECTIONS

All field inspections must be requested by the applicant

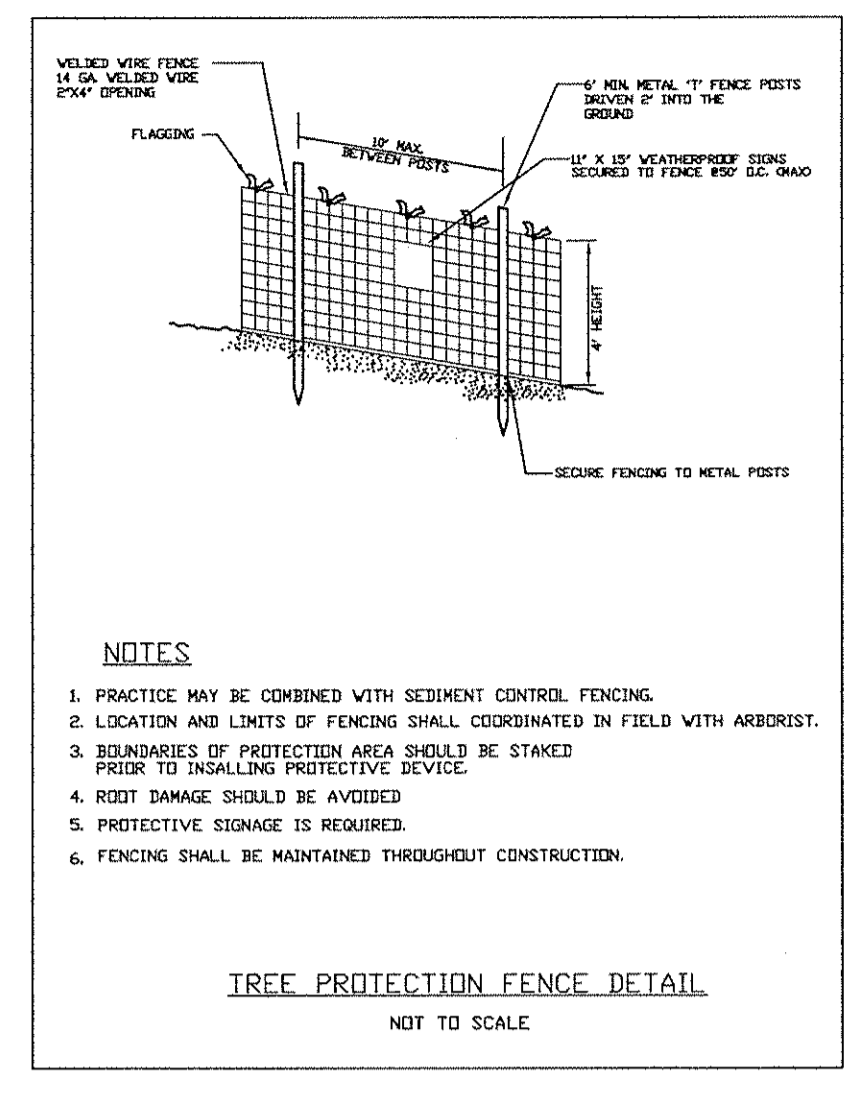
Field Inspections must be conducted as follows:

Tree Save Plans and Forest Conservation Plans without Planting Requirements

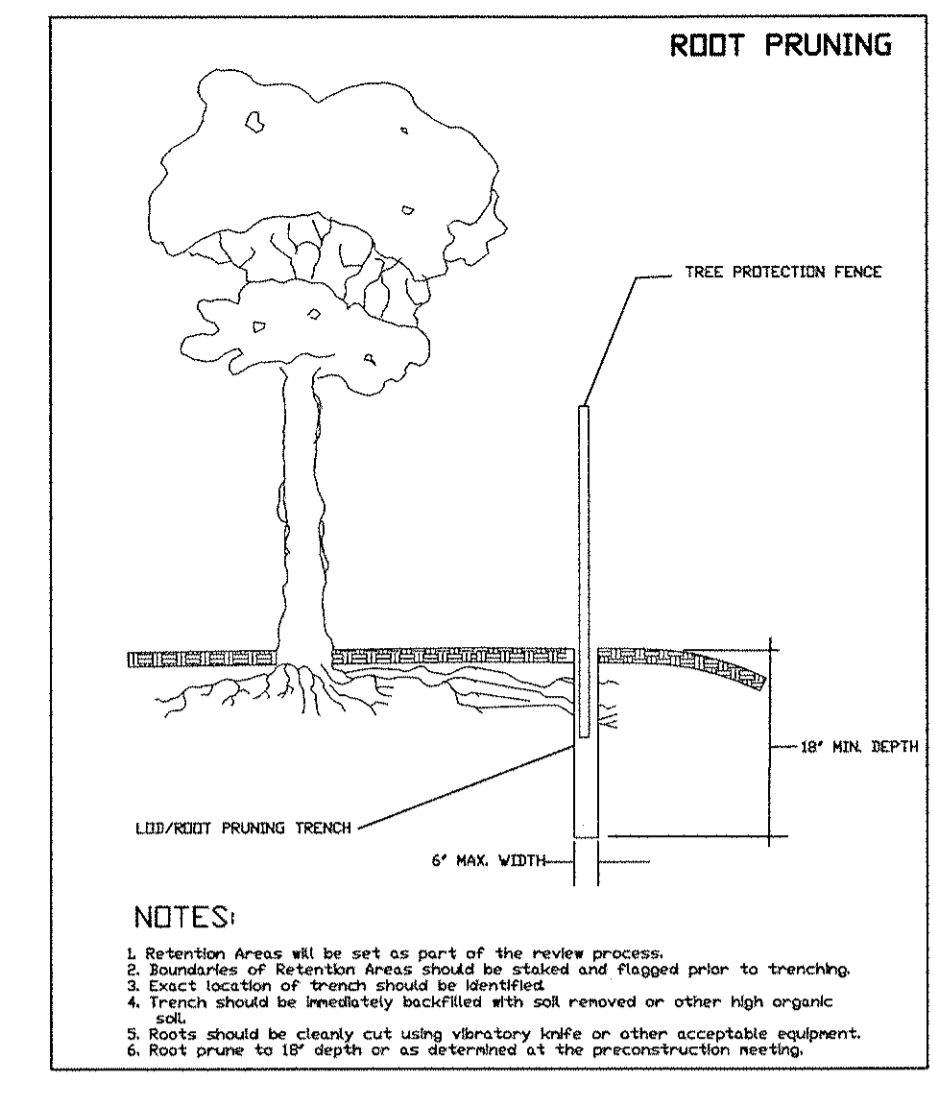
- After the limits of disturbance have been staked and flagged, but before any clearing or grading begins
- After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begins.
- After completion of all construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provision of the forest conservation.

Additional Requirements for Plans with Planting Requirements

- Before the start of any required reforestation and afforestation planting
- After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period.
- At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond.



NOTE: Tree Protection Fence shall be installed on top of the Limits of Disturbance. For purposes of legibility only, the Tree Protection Fence is graphically represented adjacent to the LOD.



Macris, Hendricks & Glascock, P.A.
Engineers • Planners • Surveyors • Landscape Architects

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Montgomery Village, Maryland
20886-1279

Phone 301.670.0840
Fax 301.948.0693



February 24, 2015

Maryland National Capital Park & Planning Commission
8787 Georgia Avenue
Silver Spring, MD 20910

Re: Dowden's Station
MHG Project No. 12.185.13

To Whom It May Concern:

On behalf of Clarksburg Mews, LLC c/o Mr. Michael D. Fisher, the applicant of the above referenced Forest Conservation Plan, we hereby request a variance for the removal of nine specimen trees and impact of six specimen trees, as required by the Maryland Natural Resources Article, Title 5, Subtitle 16, Forest Conservation, Section 5-1611, and in accordance with Chapter 22A-21(b) of the Montgomery County Code. In accordance with Chapter 22A-21(b) of the Montgomery County Code, the proposed removal/impact of fifteen trees over thirty inches in diameter would satisfy the variance requirements.

1. *Describe the special conditions peculiar to the property which would cause the unwarranted hardship;*

The subject property has a total tract area of 24.37 undeveloped acres with a net tract area of 21.57 acres, excluding 2.80 acres of unimproved road and utility right of way dedication. There are 24.19 acres of existing forest cover with 21.47 acres of forest after dedication. The applicant is proposing a residential subdivision on the site. Due to the site being almost completely forested, the site contains a number of significant and specimen trees. The property has two streams on the property, one crosses the property and the other, with the inclusion of a wetland, nearly bisects the property. A significant portion of the property is either part of a proposed dedication area or part of an environmental buffer, limiting the total developable area of the site making it impossible to avoid the subject trees. Eight of the specimen trees to be removed are in the center of the property outside of the buffer areas in the developable area of the property. The ninth tree to be removed is within the area dedicated to Observation Drive and is being impacted by utility connections. The six trees to be impacted have minimal impacts but cannot be avoided due to utility, grading, and/or stormwater management requirements.

More than the required forest conservation requirements are being met on-site via 8.47 acres of on-site forest to be put into a forest conservation easement. The site has been redesigned to minimize impacts to environmentally sensitive areas as much as possible. All necessary stress reduction measures will be applied to aid in the promotion of the impacted specimen trees' survivability. Because of these previously mentioned

aspects, disallowing the proposed removals and impacts would be a hardship that is not warranted in light of the special circumstances unique to Dowden Station.

2. *Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;*

The property is limited by the multiple road dedications, the streams, wetlands and the buffer areas. These areas constrict the development to the areas where the impacted trees are. The inability to impact and/or remove the subject trees would limit the development within the property. This creates a significant disadvantage for the applicant and deprives the applicant of the rights enjoyed by the neighboring and/or similar properties not subject to this approval process.

3. *Verify that State water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance;*

A Stormwater Management Concept will be submitted for the proposed improvements. Approval of this plan will confirm that the goals and objectives of the current state water quality standards are being met.

4. *Provide any other information appropriate to support the request.*

Pursuant to Section 22A 21(d) Minimum Criteria for Approval.

(1) The Applicant will receive no special privileges or benefits by the granting of the requested variance that would not be available by any other applicants.

The variance will not confer a special privilege because the removals and impacts are due to the development of the site. The site constraints are explained above. The constraints constrict the development area of the property whereby the critical root zones of the subject trees cannot be avoided as part of the development process.

(2) The variance request is not based on conditions or circumstances which result from the actions of the applicant.

The variance is based upon site conditions and development constraints that developed and existed before the enactment of the specimen tree legislation. The requested variance is not based on conditions or circumstances which are the result of the applicant outside the norm of a development application allowed under the applicable regulations. The variance is based on the proposed site layout that is utilizing the areas that are available for development.

(3) The variance is not based on a condition relating to the land or building use, either permitted or nonconforming on a neighboring property.

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

(4) Will not violate State water standards or cause measurable degradation in water quality. Full ESD stormwater management will be provided as part of the proposed development.

The variance will not violate State water quality standards or cause measurable degradation in water quality. We are confident that the Montgomery County Department of Permitting Services will find the storm water management concept for the proposed project to be acceptable even if conditionally approved.

A copy of the Forest Conservation Plan and a variance tree spreadsheet has been provided as part of this variance request. Please let us know if any other information is necessary to support this request.

Please contact me via email, at fjohnson@mhgpa.com, or by phone, at (301) 670-0840 should you have any additional comments or concerns.

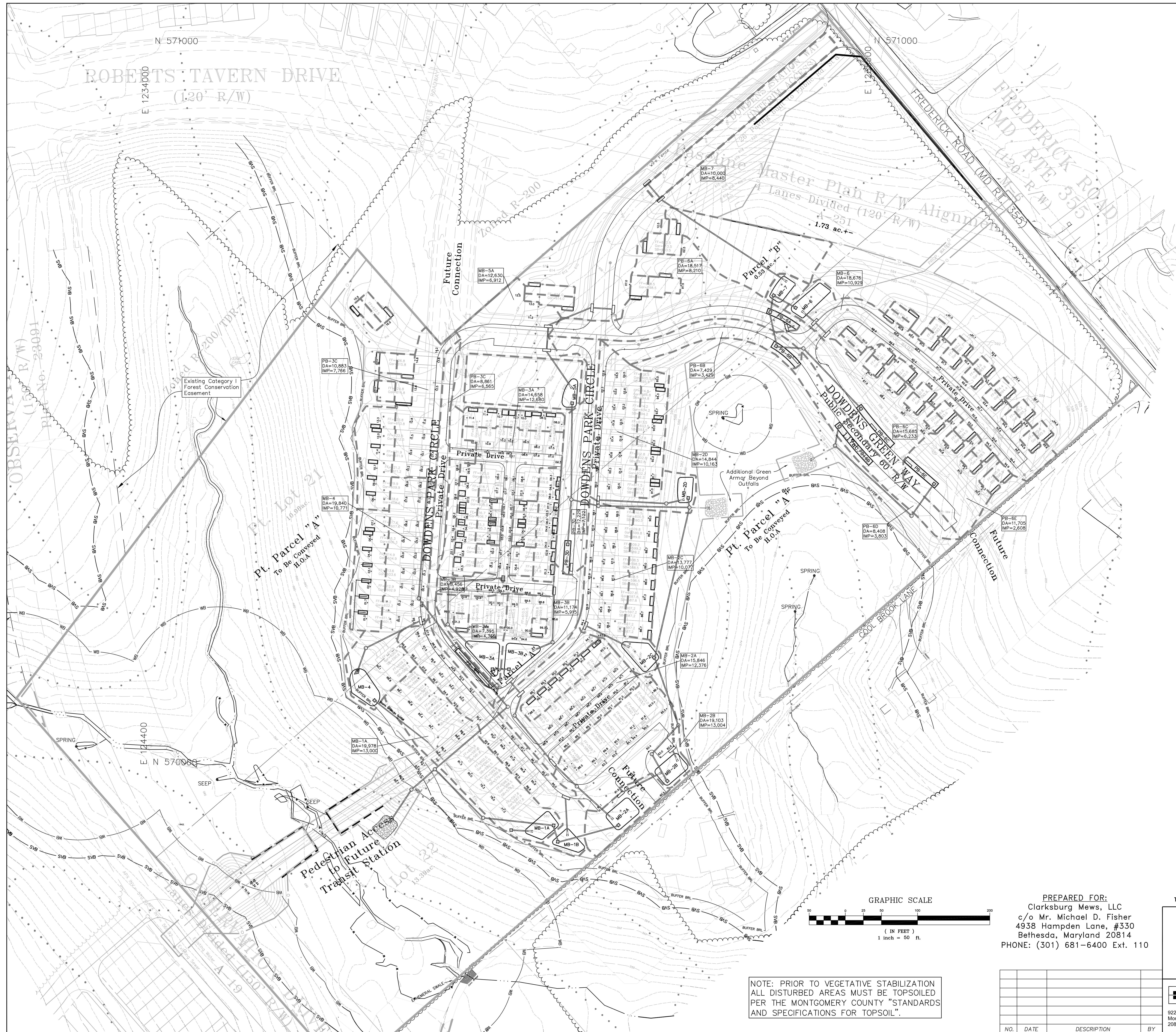
Thank you,



Frank Johnson

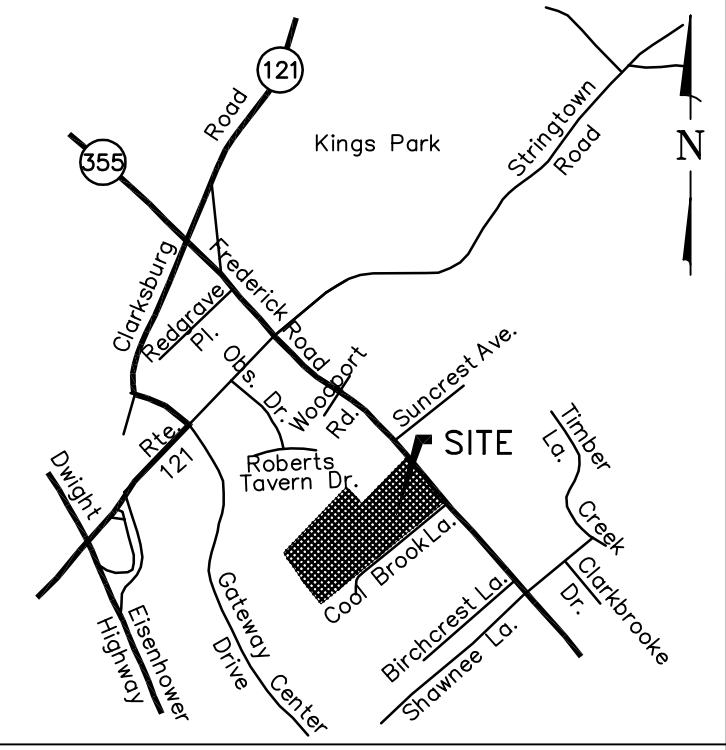
Tree Variance Detail Table

<u>Tree ID #</u>	<u>Species</u>	<u>DBH</u>	<u>Impact/ Remove</u>	<u>% Impacted</u>	<u>Condition</u>	<u>Mitigation</u>
8	Tulip Poplar	30	Remove	100%	Good	Mitigated per FC worksheet
10	Tulip Poplar	33	Remove	100%	Good	Mitigated per FC worksheet
14	Black Cherry	31	Remove	100%	Poor	Mitigated per FC worksheet
16	Black Oak	43	Remove	100%	Good	Mitigated per FC worksheet
23	White Oak	30	Remove	100%	Good	Mitigated per FC worksheet
24	Black Oak	36	Remove	100%	Fair	Mitigated per FC worksheet
32	Black Oak	37	Impact Only	34%	Good	stress reduction measures
36	Black Oak	31	Remove	100%	Fair	Mitigated per FC worksheet
41	Red Oak	32	Remove	100%	Good	Mitigated per FC worksheet
45	Red Oak	34	Impact Only	29%	Fair/Good	stress reduction measures
46	Red Oak	30	Impact Only	4%	Poor	stress reduction measures
115	Tulip Poplar	37	Remove	100%	Fair	Mitigated per FC worksheet
116	White Oak	37	Impact Only	17%	Good	stress reduction measures
92	White Pine	33	Impact Only	11%	Good	stress reduction measures
94	White Ash	34	Impact Only	11%	Good	stress reduction measures



SWM LEGEND

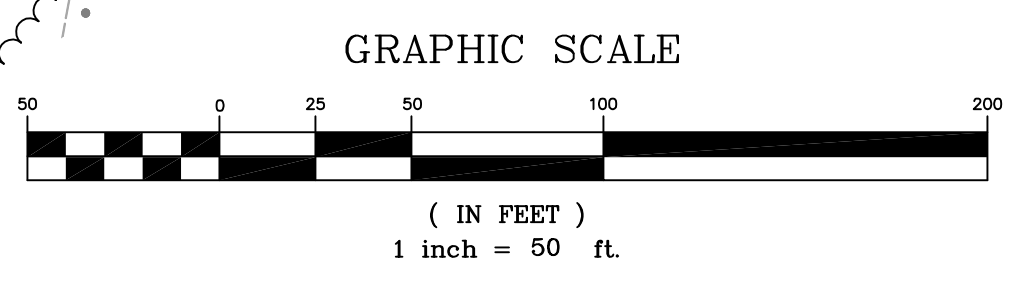
- Existing Contour
- Proposed Contour
- - - Limits of Disturbance
- - - Proposed Drainage Ditch
- 116E Soil Boundary
- 6A Soil Boundary
- Micro-Bioretentation
- Planter Box
- Micro-Bioretentation



VICINITY MAP
SCALE 1" = 2,000'

SOIL KEY

SB - Glauville silt loam, 3 to 8 percent slopes - not highly erodible (HSG "C")
 6A - Batic silt loam, 0 to 3 percent slopes - highly erodible (HSG "D")
 116E - Brooklow-Bucktown channely silt loam, 3 to 8 percent slopes - not highly erodible (HSG "B")
 16C - Brooklow-Bucktown channely silt loam, 8 to 15 percent slopes - not highly erodible (HSG "B")
 161A - Brooklow-Bucktown channely silt loam, 15 to 25 percent slopes - not highly erodible (HSG "B")
 17B - Occoan loam, 3 to 8 percent slopes - not highly erodible (HSG "B")
 116E - Brooklow channely silt loam, 25 to 45 percent slopes, very rocky - not highly erodible (HSG "C/D")



PREPARED FOR:
 Clarksburg Mews, LLC
 c/o Mr. Michael D. Fisher
 4938 Hampden Lane, #330
 Bethesda, Maryland 20814
 PHONE: (301) 681-6400 Ext. 110

NOTE: PRIOR TO VEGETATIVE STABILIZATION ALL DISTURBED AREAS MUST BE TOPSOILED PER THE MONTGOMERY COUNTY "STANDARDS AND SPECIFICATIONS FOR TOPSOIL".

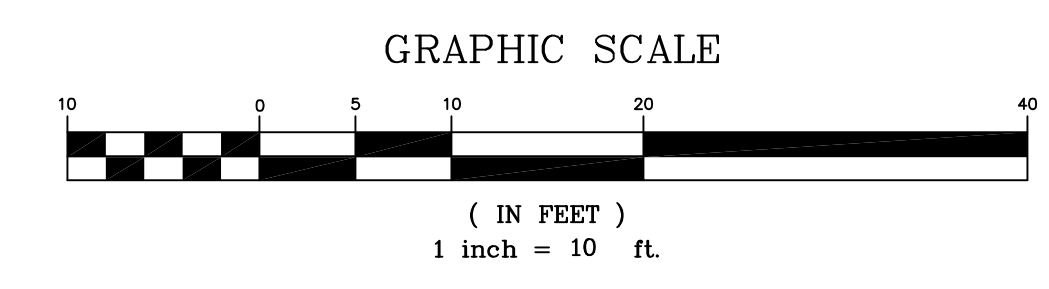
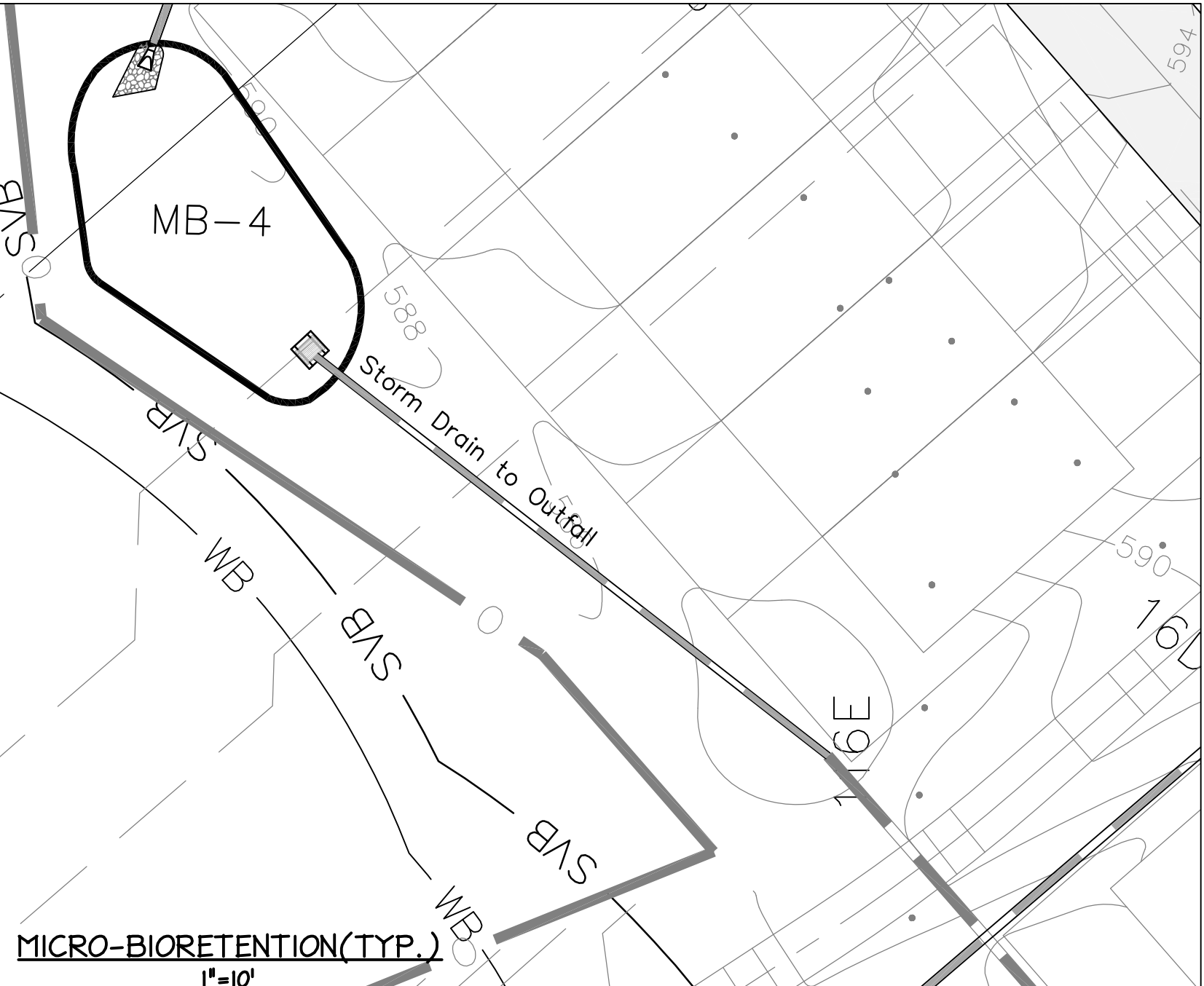
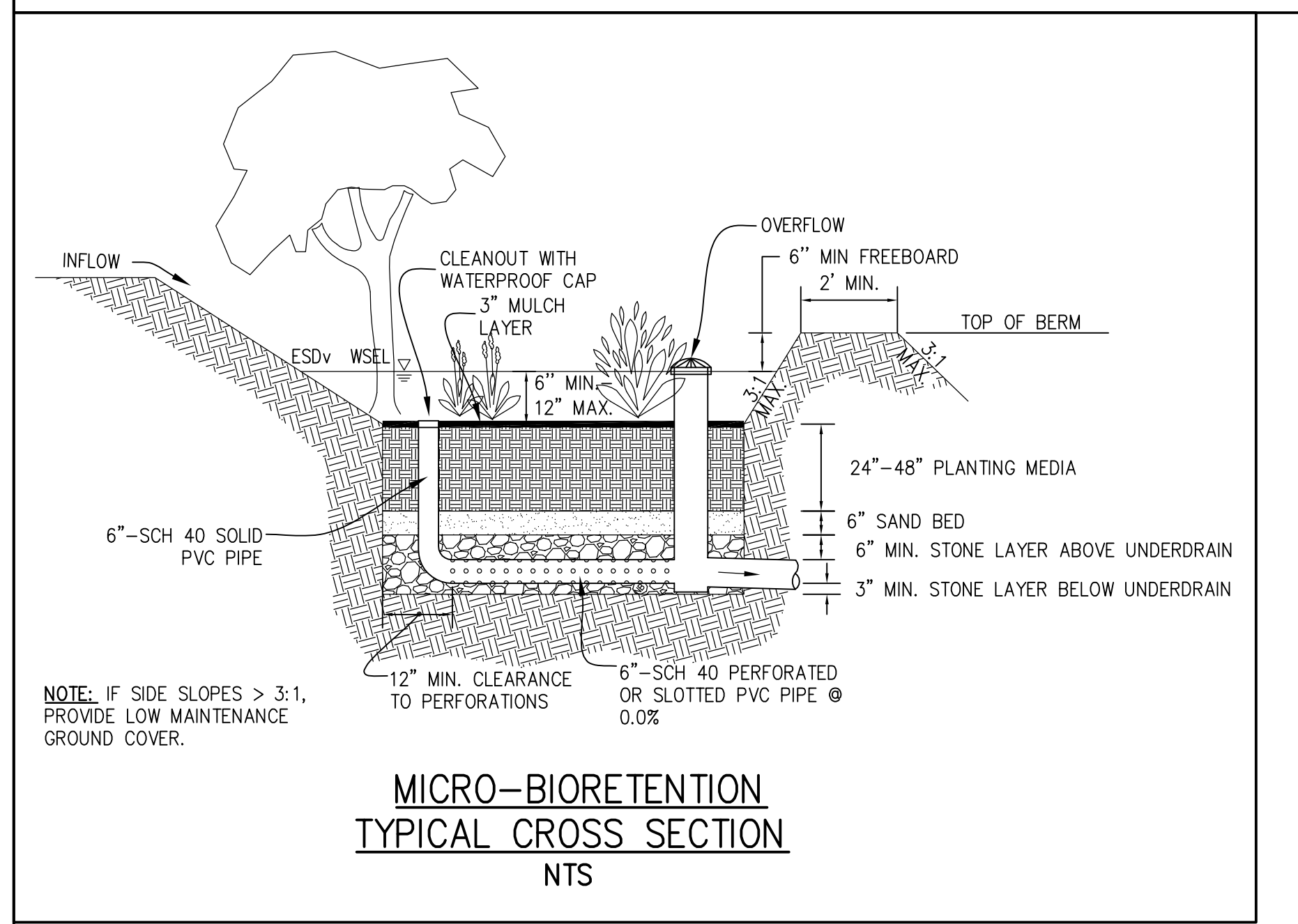
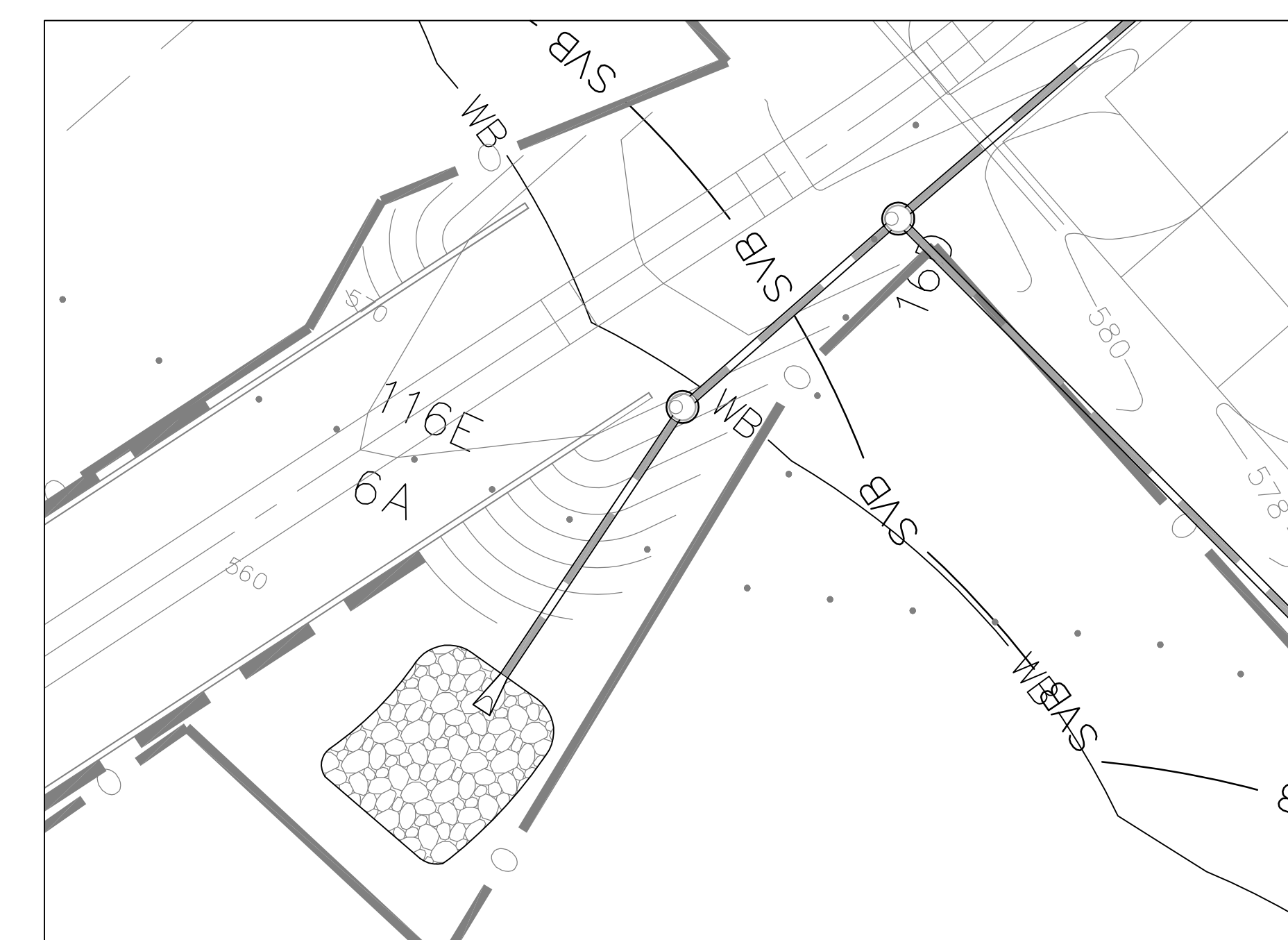
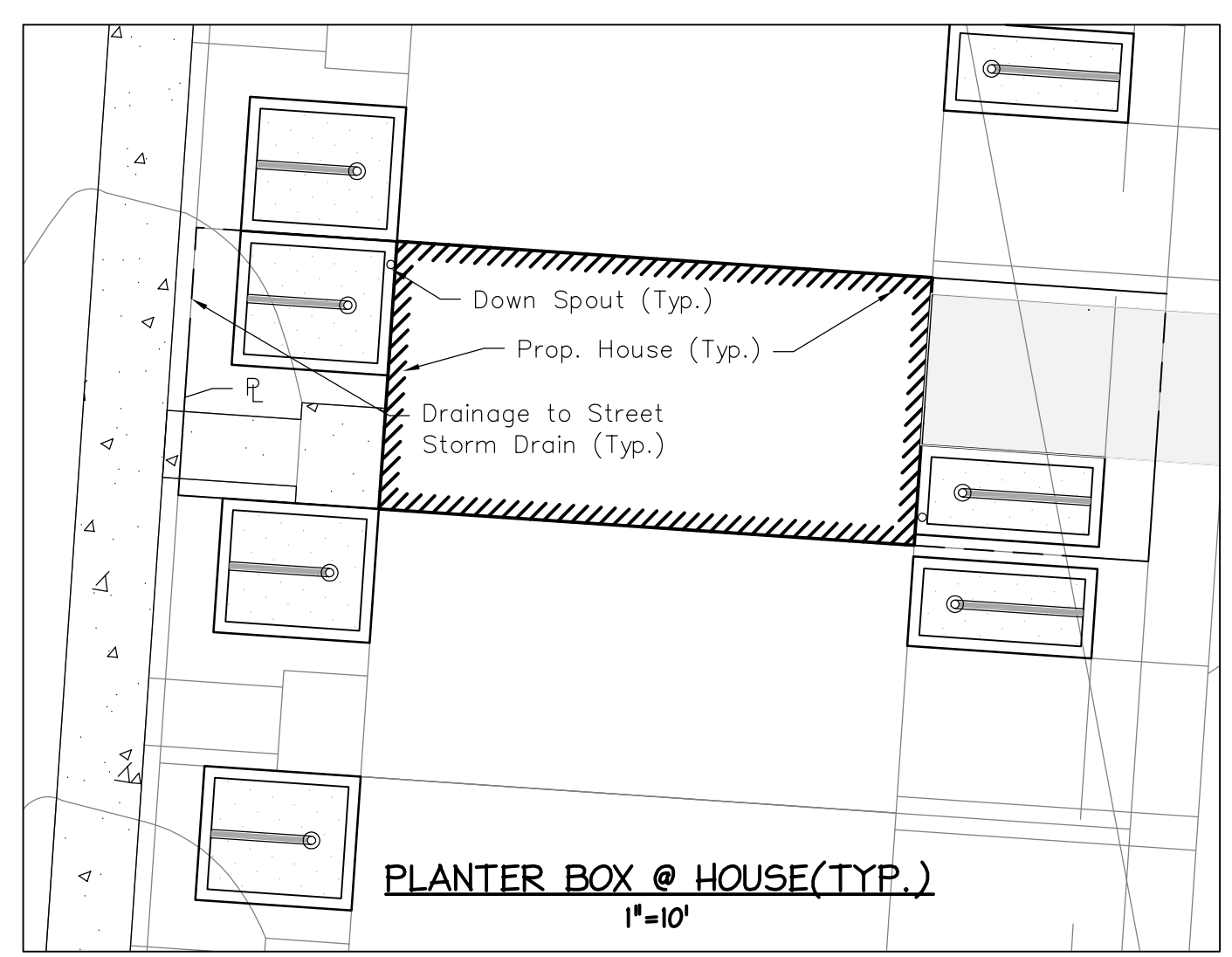
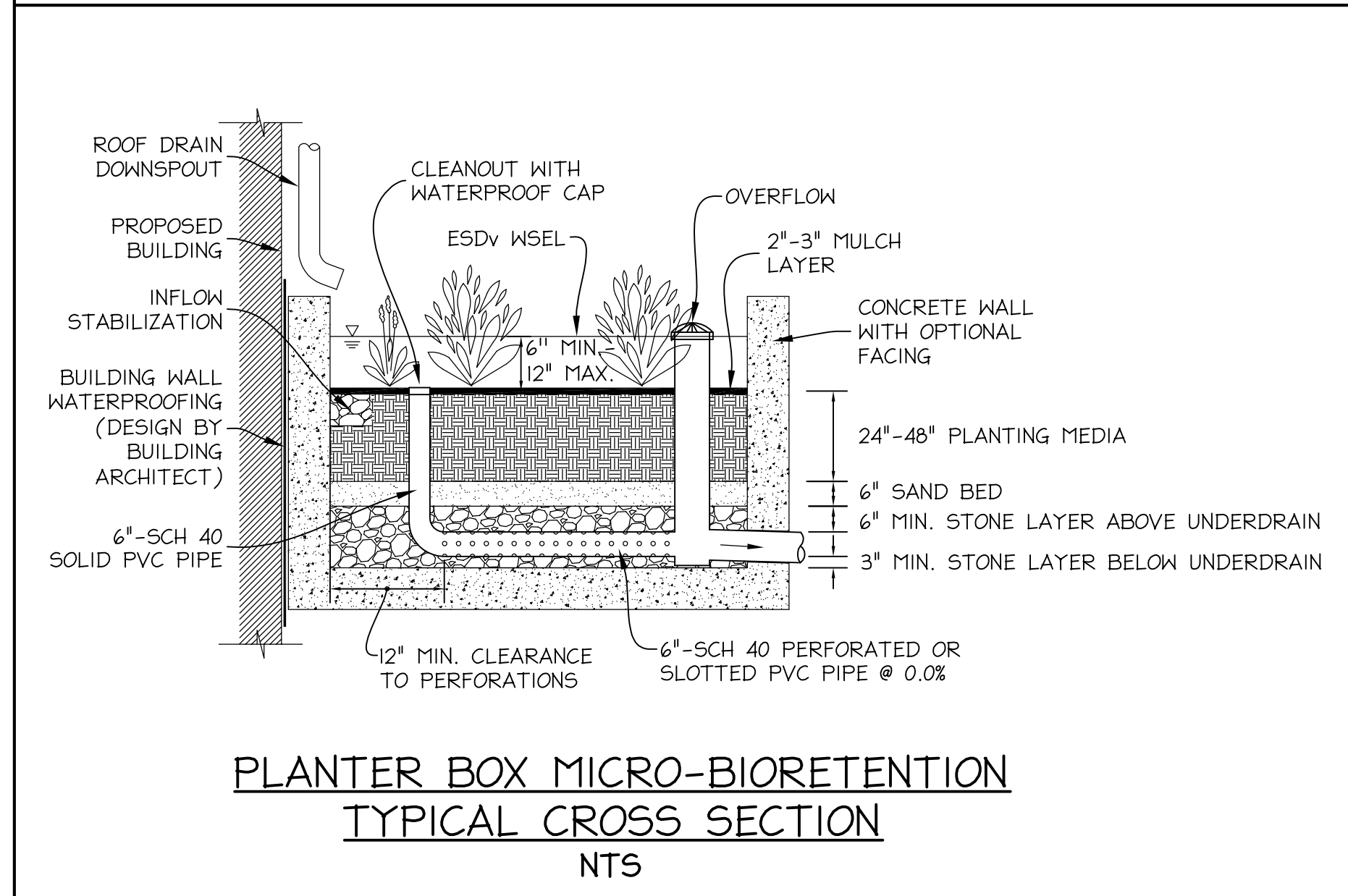
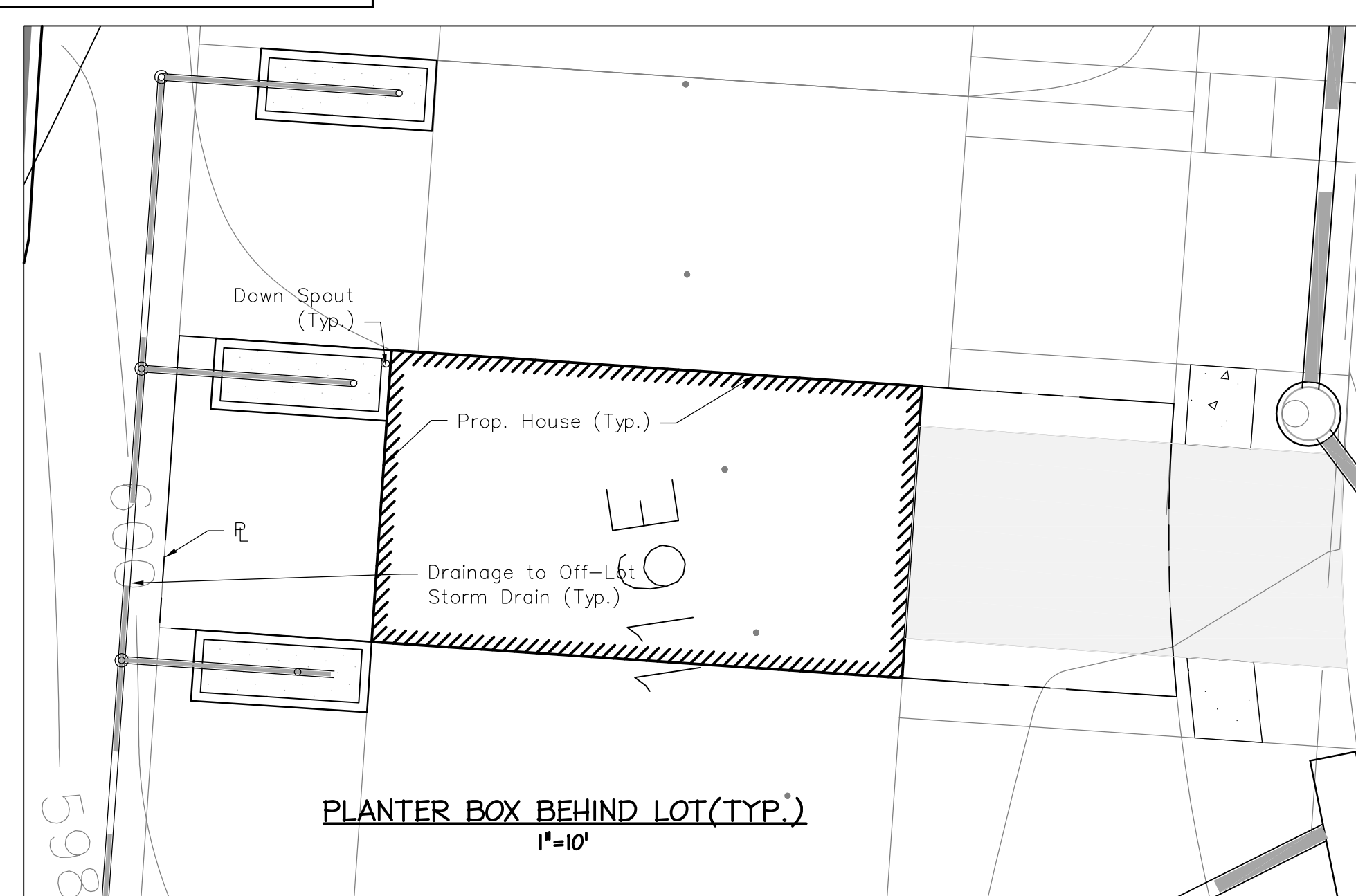
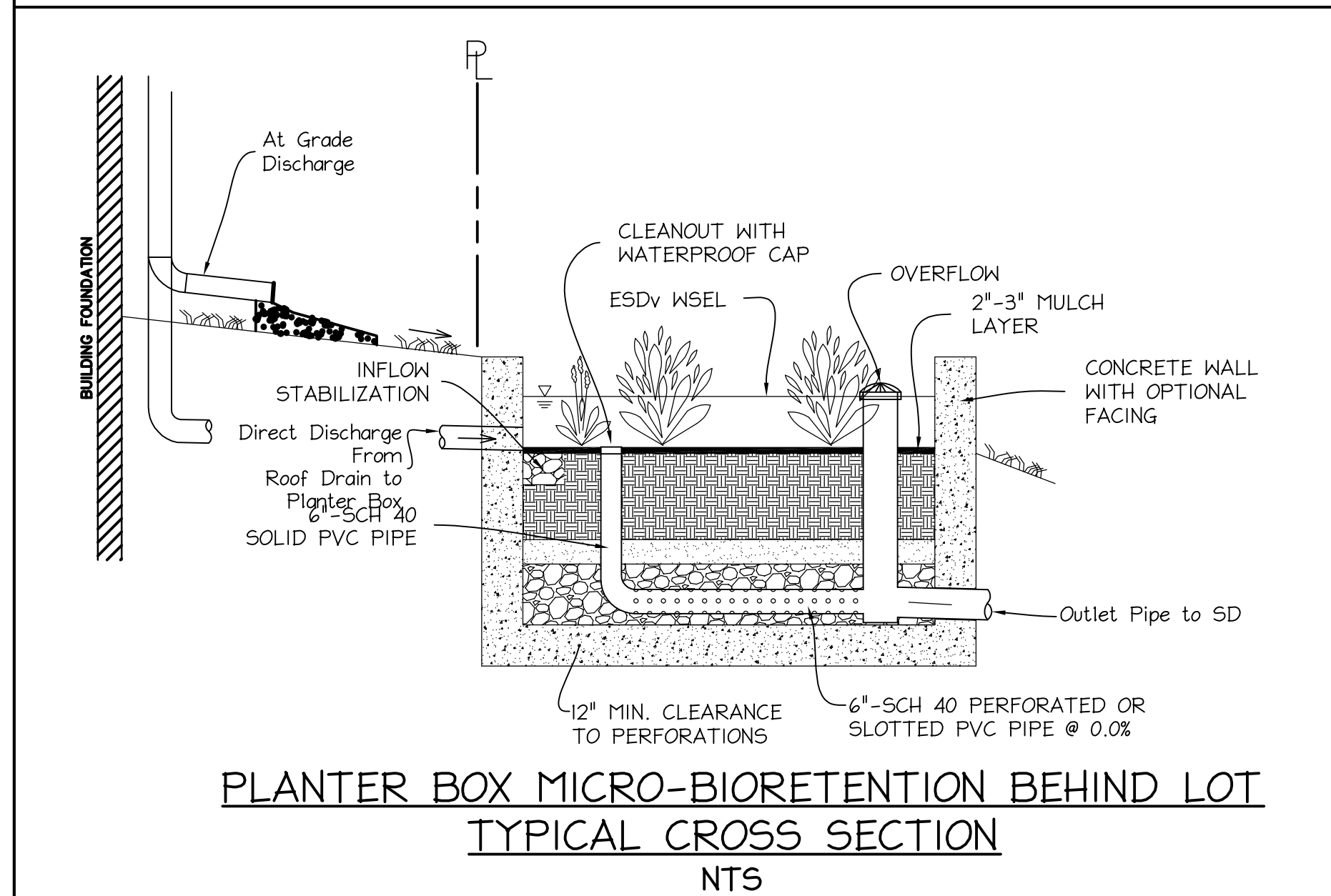
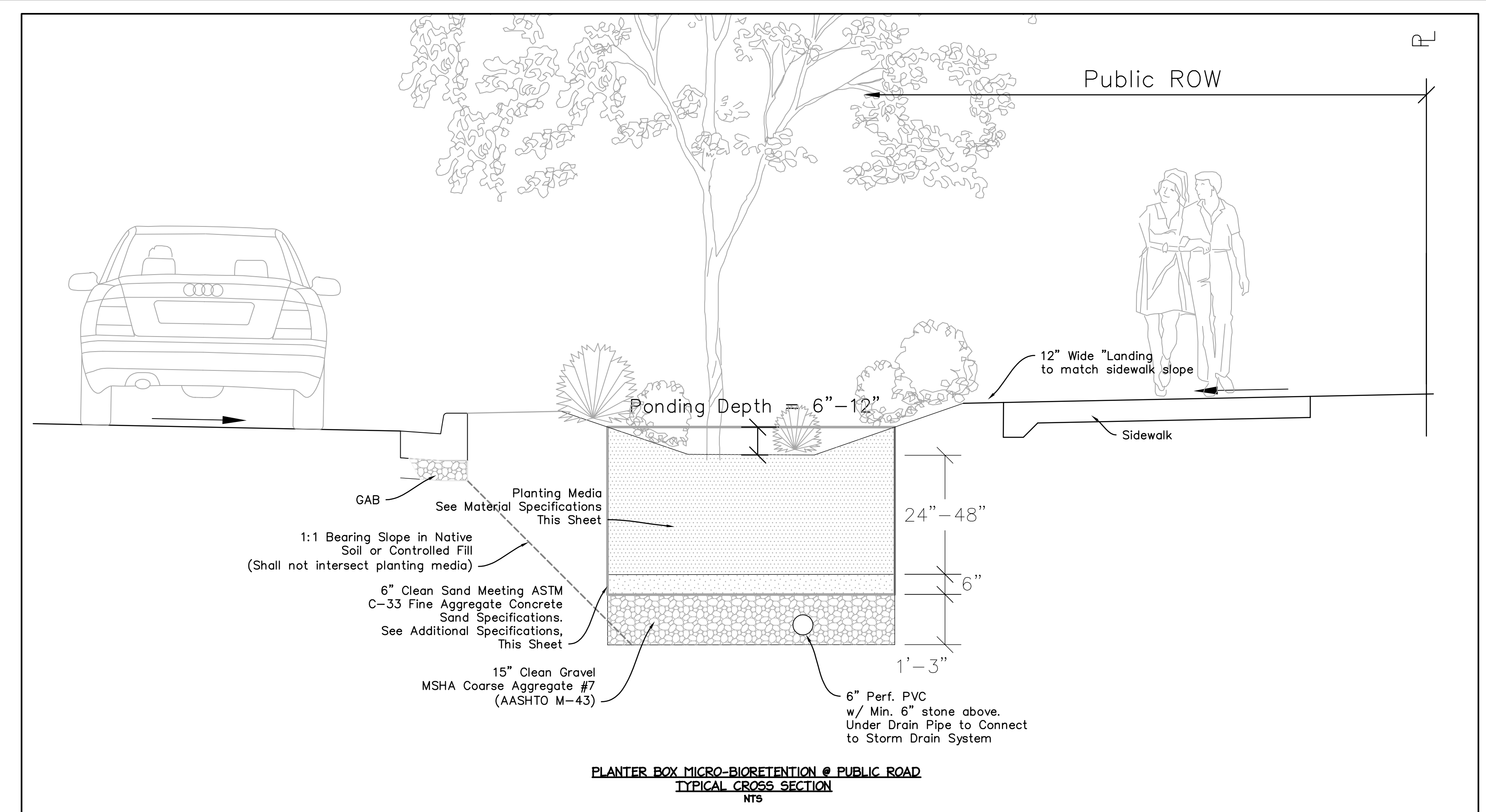
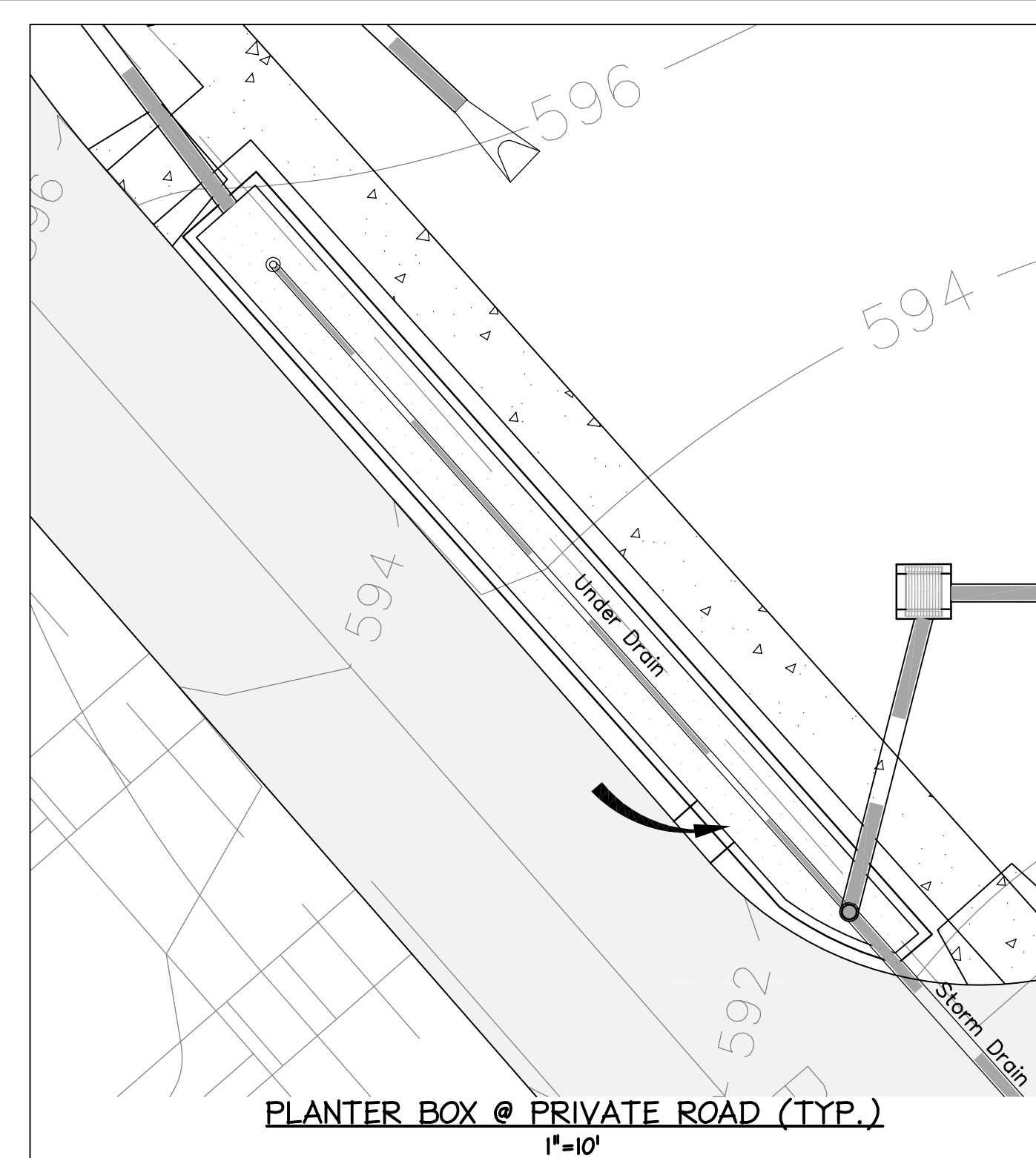
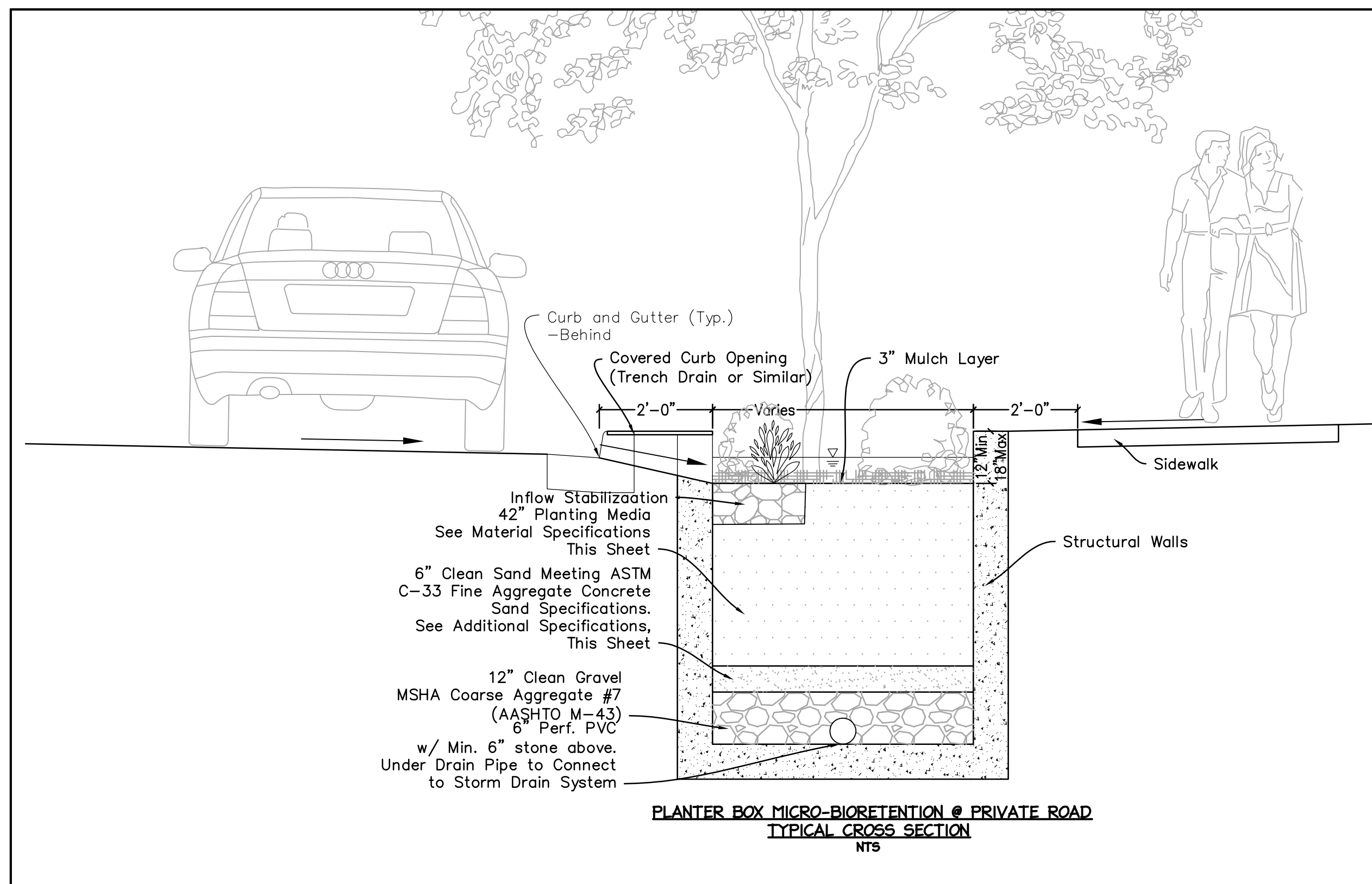
NO.	DATE	DESCRIPTION	BY

TAX MAP EW31 WSSC 232NW13

PRELIMINARY WATER QUALITY PLAN

DOWDEN'S STATION
 PART of LOT 21 and LOT 22, PLAT No. 1982
 2ND ELECTION DISTRICT - MONTGOMERY COUNTY - MARYLAND

MHG Macris, Hendricks & Glascock, P.A. Engineers • Planners Landscape Architects • Surveyors 9220 Wightman Road, Suite 120 Montgomery Village, Maryland 20886-1279	Proj. Mgr. DAC	Designer PCW
	Date 5/29/15	Scale 1"=50'
Phone 301.670.0840 Fax 301.948.0693 www.mhgpa.com	Project No. 2012.185.12	Sheet 1 of 1



PREPARED FOR:
Clarksburg Mews, LLC
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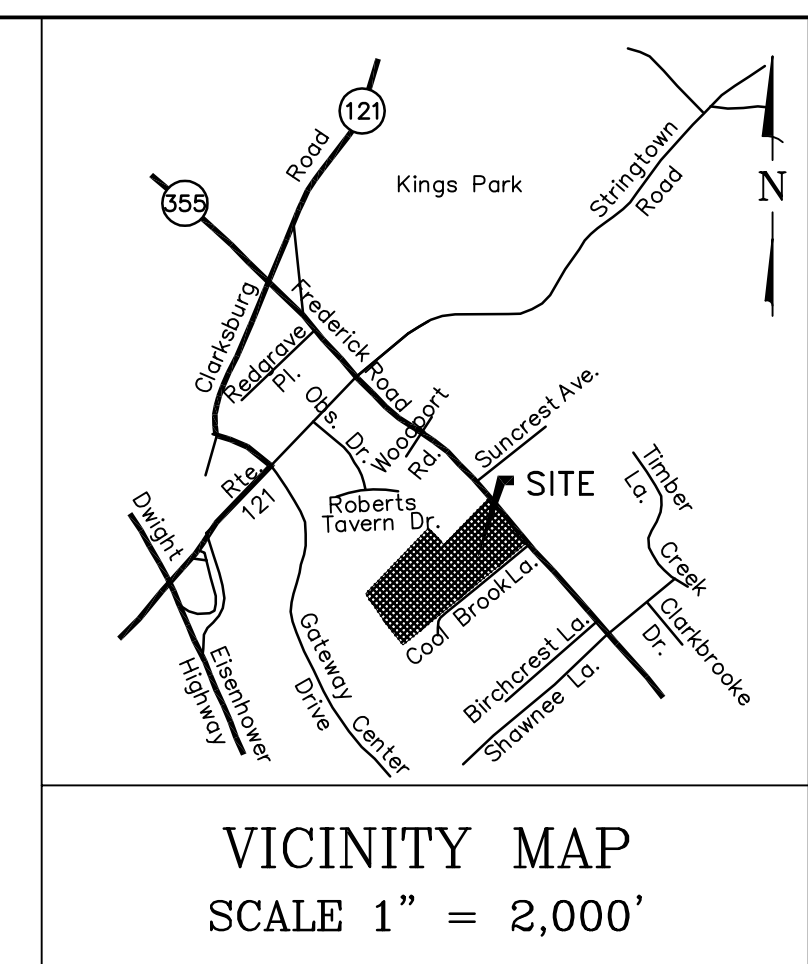
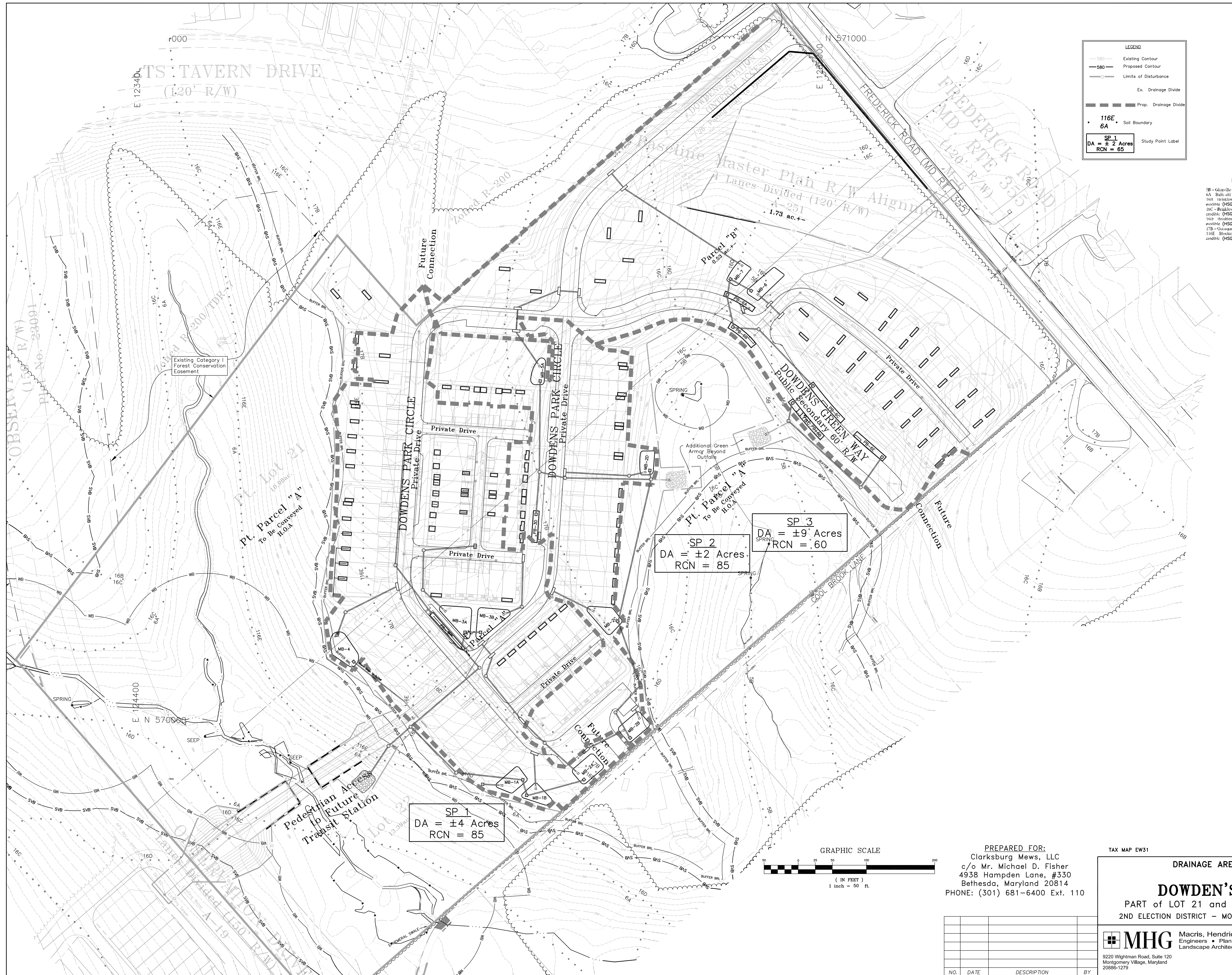
TAX MAP EW31 WSSC 232NW13

PRELIMINARY WATER QUALITY PLAN
DOWDEN'S STATION
PART of LOT 21 and LOT 22, PLAT No. 1982
2ND ELECTION DISTRICT - MONTGOMERY COUNTY - MARYLAND

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NO.	DATE	DESCRIPTION	BY



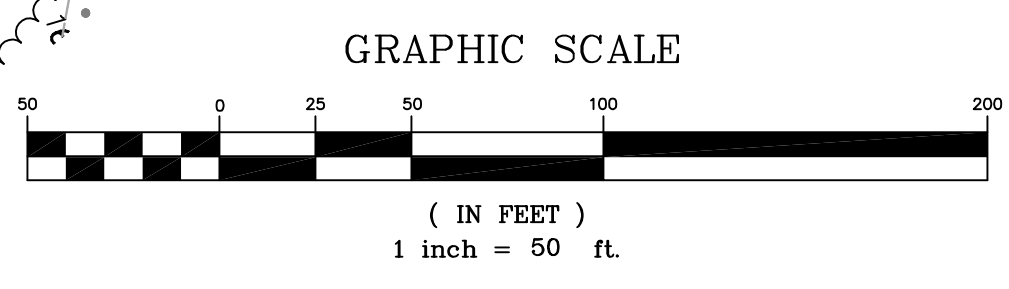
SOIL KEY

SB - Glauville silt loam, 3 to 8 percent slopes - not hydric & not highly erodible (HSG "C")
 6A - Batic silt loam, 0 to 3 percent slopes - hydric & not highly erodible (HSG "D")
 16B - Brooklow-Bucktown channely silt loam, 3 to 8 percent slopes - not hydric & not highly erodible (HSG "B")
 16C - Brooklow-Bucktown channely silt loam, 8 to 15 percent slopes - not hydric & not highly erodible (HSG "B")
 16D - Brooklow-Bucktown channely silt loam, 15 to 25 percent slopes - not hydric & highly erodible (HSG "B")
 17B - Occoquan loam, 3 to 8 percent slopes - not hydric & not highly erodible (HSG "B")
 116E - Blocktown channely silt loam, 25 to 45 percent slopes, very rocky - not hydric & highly erodible (HSG "C/D")

SP 2
 DA = ±2 Acres
 RCN = 85

SP 3
 DA = ±9 Acres
 RCN = 60

SP 1
 DA = ±4 Acres
 RCN = 85



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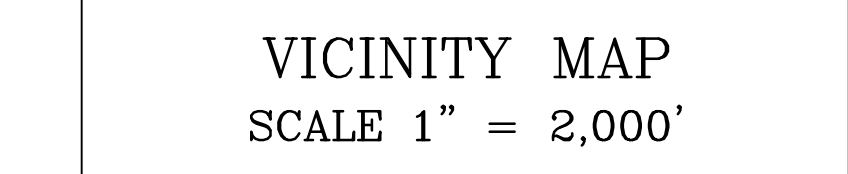
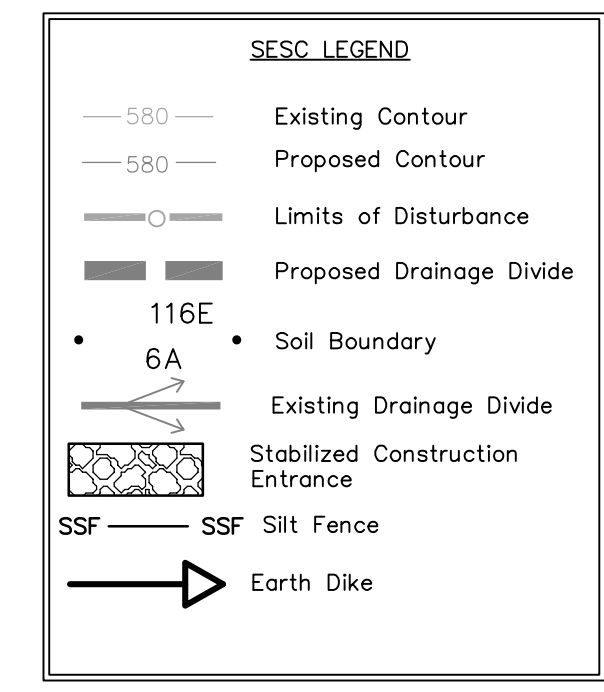
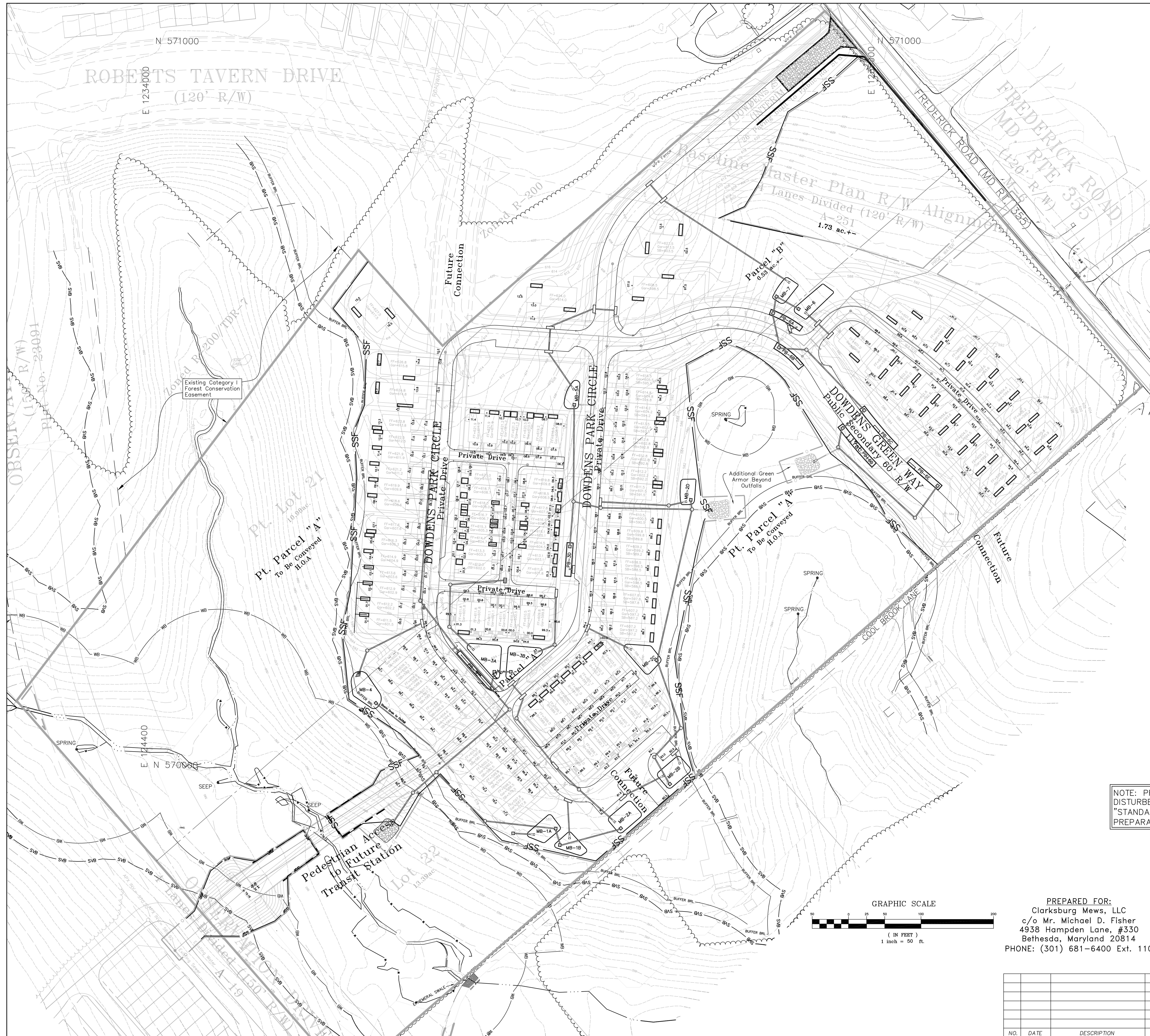
TAX MAP EW31 WSSC 232NW13

DRAINAGE AREA & SOILS MAP

DOWDEN'S STATION
 PART of LOT 21 and LOT 22, PLAT No. 1982
 2ND ELECTION DISTRICT - MONTGOMERY COUNTY - MARYLAND

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NO.	DATE	DESCRIPTION	BY



- SOIL KEY**
- SB - Glauville silt loam, 3 to 8 percent slopes - med loamy & med highly erodible (HSG "C")
 - 6A - Balfors silt loam, 0 to 3 percent slopes - hydric & med highly erodible (HSG "D")
 - 161 - Blackloam-Hickoxen channery silt loam, 3 to 8 percent slopes - med loamy & med highly erodible (HSG "B")
 - 16C - Blackloam-Hickoxen channery silt loam, 8 to 15 percent slopes - med loamy & med highly erodible (HSG "B")
 - 161J - Blackloam-Hickoxen channery silt loam, 15 to 25 percent slopes - med loamy & med highly erodible (HSG "B")
 - 17B - Occoquan loam, 3 to 8 percent slopes - med loamy & med highly erodible (HSG "B")
 - 116E - Blackloam channery silt loam, 25 to 45 percent slopes, v. rocky - med loamy & highly erodible (HSG "C/D")

SOIL EROSION AND SEDIMENT CONTROL CONCEPT NARRATIVE

Site and Project Information
 This concept plan is intended for development of a proposed 100 unit subdivision within the Gaithersburg Special Protection Area. The property consists of Parcels 780 and 888 at Liber 6934, Folio 86. The site is currently zoned R-200, but requested zoning is for PD-3. Housing types include townhouses and detached single family houses. Private drives and alleys are also proposed as part of this subdivision. The project site is approximately 24.4 acres and construction disturbance is estimated at less than 15 acres.

Controls
Sediment Traps: Due to 115 acres of disturbed area 3 sediment traps are proposed in the most critical and applicable areas. Proposed Sediment Trap "A" is located in the southwest corner of the main disturbed area, proposed Sediment Trap "B" is located adjacent to Trap "A" to the east and proposed Sediment Trap "C" is located across the stream at the southeast portion of the site. Interim grading will be intricate to the longevity of the traps through the duration of the project due to the substantial amount of cut and fill that is required. All traps will include forebays and be sized with capacity above the minimum required by the State.

Earth Dikes: Earth dikes are proposed and will be necessary to convey sediment laden runoff to each of the proposed traps as well as clean water diversions for offsite drainage areas. During interim conditions the earth dikes will be relocated to conform to proposed grading.

Super Silt Fence: Super silt fence is proposed around the perimeter of the site below conveyances to the traps or where drainage to traps is not possible.

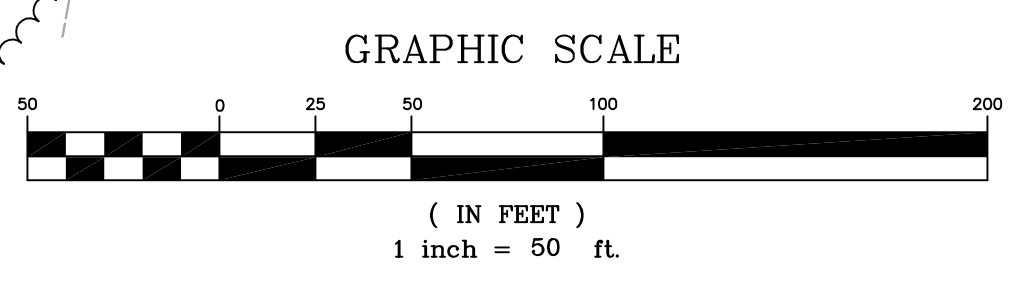
Inlet Protection: Inlet Protection will be used around proposed inlets throughout the duration of the project.

Accelerated Stabilization: Areas of steep slopes or areas near sensitive environmental features will be scheduled to be stabilized within 3 days. Sediment control devices may also be installed below these areas.

Temporary Storm Drain: When practical, permanent storm drain may be installed and used to convey clean water through the site. Temporary storm drain may be necessary during early grading efforts. Outlets from any concentrated flow shall be designed so that discharge is non-erosive.

Call "Miss Utility" at 1-800-257-7777, 48 hours prior to the start of work.
 The excavator must notify all public utility companies with underground facilities in the area of proposed excavation and have those facilities located by the utility companies prior to commencing excavation. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

NOTE: PRIOR TO VEGETATIVE STABILIZATION ALL DISTURBED AREAS MUST BE TOPSOILED PER THE MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING & SOIL AMENDMENTS".



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 Clarksburg Mews, LLC
 c/o Mr. Michael D. Fisher
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 Bethesda, Maryland 20814
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TAX MAP EW31 WSSC 232NW13

CONCEPTUAL SOIL EROSION & SEDIMENT CONTROL PLAN

DOWDEN'S STATION
 PART of LOT 21 and LOT 22, PLAT No. 1982
 2ND ELECTION DISTRICT - MONTGOMERY COUNTY - MARYLAND

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