

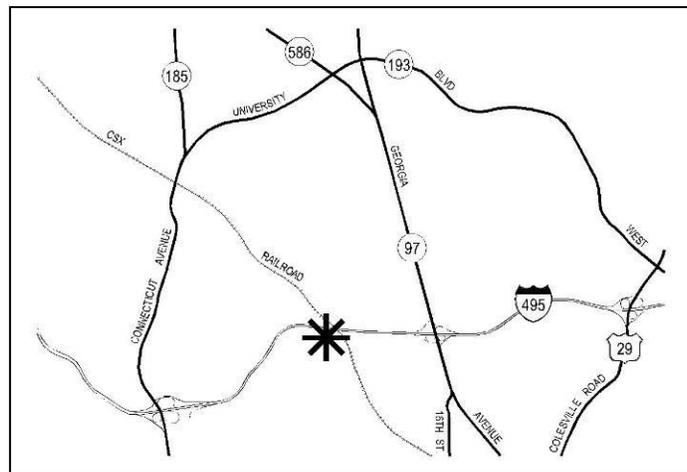
Limited Site Plan Amendmet 82005024E to Amend the Forest Conservation Plan including a Tree Variance Request, National Park Seminary-WSSC Site 5-11 Stream Channel Rehabilitation

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Date of Staff Report: 05/04/2012

Description

- Located southeast of the I-495 Beltway and the Linden Lane overpass;
- Property: Approximately 31 acres, zoned PD-15 in the North & West Silver Spring Master Plan;
- Tree Variance request and Amendment to the Final Forest Conservation Plan
- Applicant: WSSC
- Submitted date: 7/13/2011
- Review authority under chapter 22A-11 & 22A.00.01B



Staff Recommendation:
Approval of the Forest Conservation Plan

Summary

Staff recommends **approval with conditions** of the Final Forest Conservation Plan amendment to allow the Washington Suburban Sanitary Commission (WSSC) to perform required repairs and protection of existing sewer and water infrastructure. The proposed work includes stream alterations, grading and associated forest clearing within a Category I easement area. A portion of the sewer system has become exposed within the active stream channel. The sewer system is in a degraded condition with temporary patchwork repairs. The property is also listed on the National Registry for Historical Places and therefore requires a variance for the removal/disturbance of all associated trees. Although the project area is within a forest conservation easement and historic protection easement, the disturbance is necessary to prevent failure of the sewer system which would be violation of the Clean Water Act. Impact to trees and forest areas have been minimized to the extent possible by strategically locating the access routes and providing specialized tree protection measures. The access routes and disturbed areas will be reforested within areas of the existing forest setting.

RECOMMENDATION: Approval subject to the following conditions:

1. Applicant to submit a revised final forest conservation plan amendment and obtain staff approval prior to the commencement of any clearing or grading activities. The revised plan shall address the following items:
 - a. Re-label the “No Vehicular Zones” to remove reference to a limit of disturbance (LOD), since no disturbance is allowed within the zone.
 - b. Include a provision for the installation of a mulch path within the “No Vehicular Zones” if necessary, to prevent disturbance to the groundcover.
 - c. Include plan notes which clarify that no tree removal is allowed with the “No Vehicular Zones”.
 - d. Clarify root pruning notes and details where applicable to specify that the roots of the save trees shall not be severed by the installation of the sediment control devices.
 - e. Revise legend notes/descriptions to distinguish between WSSC easements and forest conservation easements.
 - f. Expand the planting zones and associated notes and tables to provide reforestation plantings within the disturbed portions of the WSSC easements.
 - g. Increase the tree sizes to specify 2” caliper stock.
 - h. Add the following not to appropriate plan sheets:

In the circumstances where trees are to be removed, the stumps shall remain in place to prevent disturbance to adjacent vegetation and any potential archeological resources. However, stumps directly within areas of soil excavation may be removed if absolutely necessary.
2. Applicant to obtain services of an ISA certified arborist, or a Maryland Licensed Tree Expert, to perform the required tree preservation measures and appropriately protect the saved trees.
3. The final sediment and erosion control plan must match the limit of disturbance as shown on the Amended Final Forest Conservation Plan and be consistent with its recommendations for tree protection.
4. Applicant to execute a maintenance and management agreement for the reforestation plantings.

SITE DESCRIPTION

The project area lies within a stream valley located on the National Park Seminary site which is listed on the National Registry for Historical Places. The approximately 31 acre property is situated south of the Capital Beltway and is generally within the area west of the CSX railroad corridor and east of Linden Lane. Historically, the site had been occupied by a resort hotel, then a girl’s finishing school. The campus-like setting contains numerous unique and whimsical architectural structures. During World War II, the property was assumed by the Army and served as recovering facility for injured soldiers. The site fell into disrepair and was ultimately rezoned to allow the conversion of many of the original structures into various housing (apartments, townhouses and single family dwellings).

The development was approved in two phases that includes new townhomes that are of compatible style and architecture. The new construction and renovations of existing structures in Phase I has been substantially completed. However, a number of renovations are currently ongoing, while a few other structures remain in disrepair. Phase II would consist of additional townhomes that have not yet been approved.

Most of the development is concentrated within the southwestern portion of the site, while the northeastern area is generally in its natural condition. The stream valley and associated buffer includes perennial streams, steep slopes, erodible soils and forest areas, most of which are protected by a Category I forest conservation easement. The streams are unnamed tributaries to the Bethesda main-stem of Rock Creek, which is classified as a Use I watershed¹. The project boundary is almost entirely within the stream buffer and largely within the recorded Category I forest conservation easement. A number of WSSC sewer and water lines and associated easements also traverse the area.



M-NCPPC GIS Image

¹ Use I:

WATER CONTACT RECREATION & PROTECTION OF AQUATIC LIFE

Waters that are suitable for: water contact sports: play and leisure time activities where the human body may come in direct contact with the surface water; fishing; the growth and propagation of fish (other than trout); other aquatic life, and wildlife; agricultural water supply and industrial water supply.

REVIEW HISTORY AND BACKGROUND

On October 26, 2005, a Final Forest Conservation Plan 120050540 / 820050240 (FFCP) was approved for the development of the National Park Seminary site.

On January 17, 2007 an FFCP amendment was approved for the remediation of contaminated soils that were discovered after approval of the original plan. The work for the soil mitigation and associated reforestation is located approximately 500 feet south (upstream) from the current project area.

The forest conservation requirements had been satisfied by the preservation of existing forest within the conservation easement areas. Some areas of forest enhancement, consisting of the control of invasive species and the supplemental plantings of native species were also incorporated into the plan approvals. An additional area of Category I forest conservation easement will be recorded with the future Phase II development.



RK&K Photograph

Sewer line and manhole structure exposed by stream erosion



RK&K photograph

Sewer line and manhole structure exposed by stream erosion

ENVIRONMENTAL GUIDELINES

A Natural Resources Inventory/ Forest Stand Delineation (NRI/FSD) number 420043580 has been previously approved for the property on July 7, 2004. Since the project has an existing Final Forest Conservation Plan (FFPC) approved, a new NRI/FSD is not necessary for proposed amendment. However, the forest conservation plan amendment does reflect the current conditions such as increases in tree sizes.

The NRI/FSD and associated documents can be view at the link below:

<http://www.daicsearch.org/imageENABLE/search.asp?Keyword=420043580>

FOREST CONSERVATION

This property is subject to the Chapter 22A Montgomery County Forest Conservation Law and a Forest Conservation Plan amendment has been submitted for approval.

WSSC is under court order to proactivity identify, maintain and repair problem areas of their sewer system. As part of the Consent Decree efforts WSSC identified an aging and previously un-mapped portion of the sewer system which is exposed in the active stream channel on the subject property. The sewer system is in a degraded condition with temporary patchwork repairs which were performed to stop the leaking that had occurred. Additionally, a water pipe in the same vicinity is actively leaking chlorinated water into the stream channel. WSSC is proposing infrastructure repair and associated stream restoration project within the recorded Category I forest conservation easement. The design includes re-lining the sewer interior and properly encasing the exposed exterior of the pipe. After the initial phase of the work is completed, the stream channel will be modified to restore the vertical elevation of the stream bed, which will re-bury the sewer line and manhole structures, making them less vulnerable to damage and future discharges. The proposed work is generally limited to portions of the stream channel and the access routes.

Forest loss has been minimized by routing access through existing open areas and portions of forest with less dense vegetation. The work areas and access routes within the existing forest setting, including the WSSC easements, will be reforested at a 1:1 ratio (onsite within the LOD). No additional planting requirements are required. In order to complete the project as proposed, the Applicant is required to obtain approval of a variance for the impacts to trees associated with a historic site as described further below.

TREE SAVE

Impact to trees and forest areas have been minimized to the extent possible by strategically locating the access routes and providing specialized tree protection measures such as heavy-duty root protection matting, “root friendly” sediment control devices, and air-spading portions the excavation work near large trees (particularly near the leaking water line which is to be repaired). However the proposed plan amendment also specifies several areas of limited access outside of the formal limits of disturbance (LOD). These areas are identified as “no vehicular zones” (NVZs) and extend from the LOD to a number of nearby manholes. No wheeled and/or tracked vehicles or construction equipment is allowed within these zones, however personnel on foot and possibly with wheelbarrows will hand

carry tripods, pipe lining and associated items through these areas. Absolutely no earth disturbance is allowed in the NVZs.

In some cases, the proposed work will benefit the trees by stabilizing the stream bank, reducing bank erosion and the associated undercutting of the trees. In all cases where impacts are proposed, appropriate trees preservation/stress reduction measures will be performed under the supervision an appropriate tree care professional.

Tree T-16 may be removed, depending on the actual conditions during the time of construction. The tree is located near the top of an eroded stream bank where grading to stabilize the bank is proposed. The intent is to retain the tree and adjust the grading to accommodate its preservation. However, its removal has been requested to allow for field contingencies. Similarly trees T-12 and T-13 are located near the leaking water line, which is to be repaired. As with tree T-16 the work near these trees is to be performed under the direction of a qualified tree care expert. Air-spading in conjunction with a vacuum device will be used to excavate the pipe if the work occurs near the trees. However, the precise location of the leak and the associated extent of the needed repairs are not known. Conceivably the work could require removal of the trees. Refer to the variance section below for further information.

FOREST CONSERVATION VARIANCE

Section 22A-12(b) (3) of Montgomery County Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. Any impact to these trees, including removal of the subject tree or disturbance within the tree's critical root zone (CRZ), requires a variance. An Applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law. The law requires no impact to trees that measure 30 inches DBH or greater; are part of a historic site or designated with a historic structure; are designated as national, state, or county champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or to trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species.

Since the subject property is listed on the National Registry for Historical Places, a variance is required for all trees that will be impacted by the project. The Applicant submitted a variance request on April 6, 2012 for the impacts to, and removal of trees as a result of the proposed layout (see Attachment B for variance request). There are 212 trees proposed for removal as a result of the proposed project. The sizes of the trees proposed for removal range from less than 1" in diameter up to 41". However, the majority of the trees to be removed range in the 1"- 6" size class. The work will also result in the impacts to 14 large trees which will not be removed. Furthermore, three of the specimen size trees identified for removal (T-12, T-13 & T-16) may be retained but permission for removal has been requested because the exact locations of roots and full extent of effects will not be known until construction. In all cases where CRZ impacts are proposed to save trees, appropriate tree preservation and/or stress reduction measures will be performed under the supervision and direction of a licensed tree care professional. 226 trees are that are considered high priority for retention under Section 22A-12(b) (3) of the County Forest Conservation Law will be affected. Refer to tree tables in the Applicants' forest conservation variance request (Attachment B).

Section 22A-21 of the County Forest Conservation Law sets forth the findings that must be made by the Planning Board or Planning Director, as appropriate, in order for a variance to be granted. In addition to the required findings outlined numerically below, staff has determined that the Applicant has demonstrated that enforcement of the variance provision would result in an unwarranted hardship for the following reasons:

- WSSC is attempting to proactively address current and potential failures of the existing sewer and water infrastructure.
- Failure of the sewer system would result in violations of the Federal Clean Water Act and the Consent Decree.
- Access on the property is constrained by existing site conditions including the existing proximity and density of the trees within the setting.
- In order for the infrastructure to be maintained to address the current and future stabilization, these existing conditions and constraints (including sediment control requirements) have severely limited the ability to avoid removal and/or impact to subject trees.
- WSSC is under court order to appropriately monitor, repair and maintain their system to correct and prevent future sewer discharges into waterways.

Staff has reviewed this application and based on the existing circumstances and conditions on the property, staff agrees that there is an unwarranted hardship.

Variance Findings - 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 maintenance of public water resources and sewer infrastructure is the responsibility of public agencies in executing their duties to the community. Therefore, the variance request would be granted to any Applicant in a similar situation.

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

Due to the nature of stream work and locations of the infrastructure, temporary impacts during construction to specimen and/or historic trees are unavoidable and anticipated. Without these unavoidable impacts it would not be possible to conduct this stream rehabilitation project and infrastructure repair. Measures have been taken to avoid impacts as much as possible and mitigation to reduce the effects of the impacts to subject trees has been included.

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

The requested variance is a result of the proposed restoration work and infrastructure maintenance/repair on the subject property and not as a result of land or building use on a neighboring property.

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

Granting this variance request will not violate State water quality standards or cause measurable degradation in water quality. Conversely the project is designed to improve water quality by rehabilitating an exposed and degraded sanitary sewer main within the stream channel, and repairing a leaking waterline which is actively discharging (chlorinated) water in the stream. The work will prevent the potential failure of the sewer system which would otherwise result in severe water quality degradation. Additionally, the water quality will improve by the repair of the actively discharging water pipe and stabilization of the eroding stream channel. All stream channel work will be carried out using a stream flow pump-around to temporarily dry the working area with the stream channels and prevent sediment laden discharges. All activities in the stream channel will be conducted in accordance with appropriate permits, processes, and guidelines in coordination with the Army Corps of Engineers and the Maryland Department of the Environment. Therefore, the project will not violate State water quality standards or cause measurable degradation in water quality.

COUNTY ARBORIST'S RECOMMENDATIONS

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 April 24, 2012. The County Arborist issued a response to the variance request on May 1, 2012 and recommended the variance be approved with the condition that mitigation is provided (Attachment A). Additionally the County Arborist provided general recommendations including reduction of the amount of permanent impacts to critical root zones (CRZ's) by implementing temporary protective matting.

MITIGATION for TREES SUBJECT to the VARIANCE PROVISIONS

No additional planting mitigation for impacts or removal of subject trees is recommend by staff since the disturbed forest areas will be replanted. However there are numerous stress reduction / impact mitigation techniques which are incorporated into the proposed work. Three of the specimen size trees identified for removal (T-12, T-13 & T-16) may be retained, but permission for removal has been requested because the exact locations of roots and full extent of effects will not be known until construction. There will also be some disturbance within the CRZ of another 14 subject large trees, but they are excellent candidates for retention. Impacts to unspecified minor trees near the work are will also occur; however these trees will be appropriately preserved and receive any necessary construction impact mitigation.

STAFF RECOMMENDATION ON VARIANCE

As a result of the above findings, staff recommends the Board approve the Applicant's request for a variance from Forest Conservation Law to remove 212 subject trees and also impact, but retain 14 large trees associated with the site, affecting a total of 226 subject trees.

HISTORIC PRESERVATION

The historic area work permit (HAWP) associated with project was issued by the M-NCPPC Historic Preservation Commission on October 13, 2011. The HAWP includes conditions that the Applicant must comply with and condition set forth by the Maryland Historic Trust Easement Committee and the Planning Department Staff. The Maryland Historic Trust has is satisfied with the proposal on condition that the stumps (of trees to be removed) shall remain in place to prevent disturbance any potential archeological resources.

NOTIFICATION AND OUTREACH

All adjoining and confronting property owners and parties of interest were notified of the public hearing on the proposed amendment in accordance with Planning Board policy. As of the date of this report, planning staff has not received any written inquiry or phone calls regarding the project. Any comments received will be forwarded to the Board.

CONCLUSION

Staff is recommending **approval** of Final Forest Conservation Plan Amendment **with conditions** listed at the front of this report. The variance approval is assumed into the Planning Board's approval of the Preliminary Forest Conservation Plan.

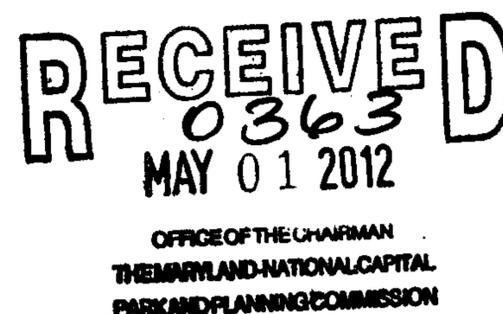
ATTACHMENTS:

Attachment A: Variance response letter from Laura Miller (County Arborist)

Attachment B: Variance request letter

Attachment C: Final Forest Conservation Plan Amendment

Attachment A: Variance response letter from Laura Miller (County Arborist)



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett
County Executive

May 1, 2012

Robert G. Hoyt
Director

Françoise Carrier, Chair
Montgomery County Planning Board
Maryland National Capital Park & Planning Commission
8787 Georgia Avenue
Silver Spring, Maryland 20910

RE: National Park Seminary, DAIC 820050240, NRI/FSD application accepted on 7/13/2011

Dear Ms. Carrier:

The County Attorney's Office has advised me that Section 5-1607 of the Natural Resources Article, Maryland Code, applies to any application required under Chapter 22A of the Montgomery County Code submitted after October 1, 2009. Since the application for the above referenced request is required to comply with Chapter 22A based on a review by the Maryland National Capital Park & Planning Commission (MNCPPC) and was submitted after this date, I am providing the following recommendation pertaining to this request for a variance.

Section 22A-21(d) of the Forest Conservation Law states that a variance must not be granted if granting the request:

1. Will confer on the applicant a special privilege that would be denied to other applicants;
2. Is based on conditions or circumstances which are the result of the actions by the applicant;
3. Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or
4. Will violate State water quality standards or cause measurable degradation in water quality.

Applying the above conditions to the plan submitted by the applicant, I make the following findings as the result of my review:

1. The granting of a variance in this case would not confer a special privilege on this applicant that would be denied other applicants as long as the same criteria are applied in each case. Therefore, the variance can be granted under this condition.
2. Based on a discussion on March 19, 2010 between representatives of the County and the Maryland Department of Natural Resources Forest Service and the MNCPPC, the disturbance of trees, or other vegetation, is not interpreted as a condition or circumstance that is the direct result of the actions by the applicant. Therefore, the variance can be

granted under this condition, as long as appropriate mitigation is provided for the resources disturbed.

3. The disturbance of trees, or other vegetation, by the applicant does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property. Therefore, the variance can be granted under this condition.
4. The disturbance of trees, or other vegetation, by the applicant will not result in a violation of State water quality standards or cause measurable degradation in water quality. Therefore, the variance can be granted under this condition.

Therefore, I recommend that this applicant qualify for a variance conditioned upon mitigating for the loss of resources due to removal or disturbance to trees, and other vegetation, subject to the law based on the limits of disturbance recommended during the review process by the Planning Board staff. In the case of removal, the entire area of the critical root zone (CRZ) should be included in mitigation calculations regardless of the location of the CRZ (i.e., even that portion of the CRZ located on an adjacent property). When trees are disturbed, any area within the CRZ where the roots are severed, compacted, etc., such that the roots are not functioning as they were before the disturbance must be mitigated. Exceptions should not be allowed for trees in poor or hazardous condition because the loss of CRZ eliminates future potential of the area to support a tree or provide stormwater management. Tree protection techniques, such as trimming branches or installing temporary mulch mats to limit soil compaction during construction without permanently reducing the critical root zone, that are implemented according to industry standards are acceptable mitigation to limit disturbance. Techniques such as root pruning should be used to improve survival rates of impacted trees but they should not be considered mitigation for the permanent loss of critical root zone. I recommend requiring mitigation based on the number of square feet of the critical root zone lost or disturbed. The mitigation can be met using any currently acceptable method under Chapter 22A of the Montgomery County Code.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,



Laura Miller
County Arborist

cc: Robert Hoyt, Director
Walter Wilson, Associate County Attorney
Mark Pfefferle, Acting Chief

Attachment B: Variance request letter



25 Old Solomons Island Road
Annapolis, MD 21401
410-956-9000
410-956-0566 (Fax)

April 5, 2012

Mr. Marco Fuster
The Maryland-National Capital Park and Planning Commission
Environmental Planning Division
8787 Georgia Avenue
Silver Spring, MD 20910

Subject: Variance Request
Project: Forest Conservation Plan Amendment #120050540/820050240 – National Park Seminary, WSSC Site 5-11

As part of the amendment to the Forest Conservation Plan of the National Park Seminary, Coastal Resources Inc. (CRI) is submitting this variance request on behalf of the Washington Suburban Sanitary Commission (WSSC). Since the subject property is listed on the National Registry for Historical Places, a variance is required for all trees that will be impacted by the project (see Table 1 attached). In accordance with Section 22A-21(b) of the Forest Conservation Law, the following is a description of the application requirements.

a.) Describe the special conditions peculiar to the property which would cause the unwarranted hardship.

The study area lies within a stream valley located on the National Park Seminary property which is listed on the National Registry for Historical Place. The unnamed tributary to Rock Creek flows westward through the study area. A WSSC sewer line parallels the stream through the valley and crosses it at several locations. Due to geomorphic changes in the stream channel a portion of the sewer has become exposed. The top of the concrete encasement is eroded, exposing a crack in the pipe near the connection with the downstream manhole that is actively leaking. The pipe has been temporarily repaired and the project was declared an emergency due to public safety by WSSC. In order to protect the sewer crossing, the sewer will be lined, the encasement repaired and the channel bottom will be raised to sufficiently cover the crossing. Stream restoration is proposed both upstream and downstream of the crossing to adjust the channel bed elevations and help protect the sewer crossing and nearby manholes in the future. In addition, a water pipe in the project area is actively leaking chlorinated water into the stream channel. This will be repaired concurrently with the sewer line. Not granting the variance would cause undue hardship on the applicant because without removing the trees for access, the sewer line and water line repairs will not be possible.

b.) Describe how enforcement of this chapter will deprive the landowner of rights commonly enjoyed by others in similar areas.

The variance request is not based on conditions or circumstances which are the result of actions of the applicant. The variance to remove the trees will not confer a special privilege that would be denied to other applicants. This work is being done out of need for public safety. Not granting the variance will

prevent WSSC from rehabilitating the leaking sewer line and water pipe, and therefore perpetuating a public safety threat.

c.) Verify that State water quality standards will not be violated and that a measurable degradation in water quality will not occur as a result of granting the variance.

The variance will not violate state water quality standards or cause measurable degradation in water quality. The proposed sewer pipe rehabilitation and associated stream restoration have an approved sediment and erosion control plan and will not violate any state water quality standards. The proposed sewer pipe rehabilitation should prevent any future leaking of sewage into the stream. Repairing the leaking water pipe would stop the flow of chlorinated water into the stream channel.

d.) Provide any other information appropriate to support the request.

The applicant is minimizing tree impacts by utilizing a previously cleared access path. Four specimen trees (71/T-11, 127/T-12, 133/T-13, 193/T-16) are proposed for removal, however all efforts will be made to protect and save trees T-11, T-12, and T-16. Tree T-16 is located on the stream bank within the LOD. The stream bank is undercut in this area and the roots of T-16 are exposed, as part of the stream restoration the bank will be filled and stabilized in this area. Trees T-12 and T-13 are located just outside of the LOD near the area where a water main leak is to be repaired. Since the exact location of the leak is unknown, it is uncertain how much excavation is needed and where it will occur. Air spading will be used for all excavation occurring in the proximity of these trees. All other specimen trees located in close proximity to the LOD will be protected during construction. Tree planking and tree protection fence will be installed and the super silt fence will be placed using air spading and the fencing will be split to bypass roots. Forest impacts will be mitigated at a 1:1 ratio; therefore, the cleared areas will be replanted. Stream restoration is proposed both upstream and downstream of the crossing to adjust the channel bed elevations and help protect the sewer crossing and nearby manholes in the future.

Please contact Heather Speargas at heathers@coastal-resources.net, if any additional information is required.

Sincerely,

Heather Speargas
Environmental Scientist
Coastal Resources, Inc

Attachments: **Table 1: Impacted Trees**

Table 1: Trees to be Impacted

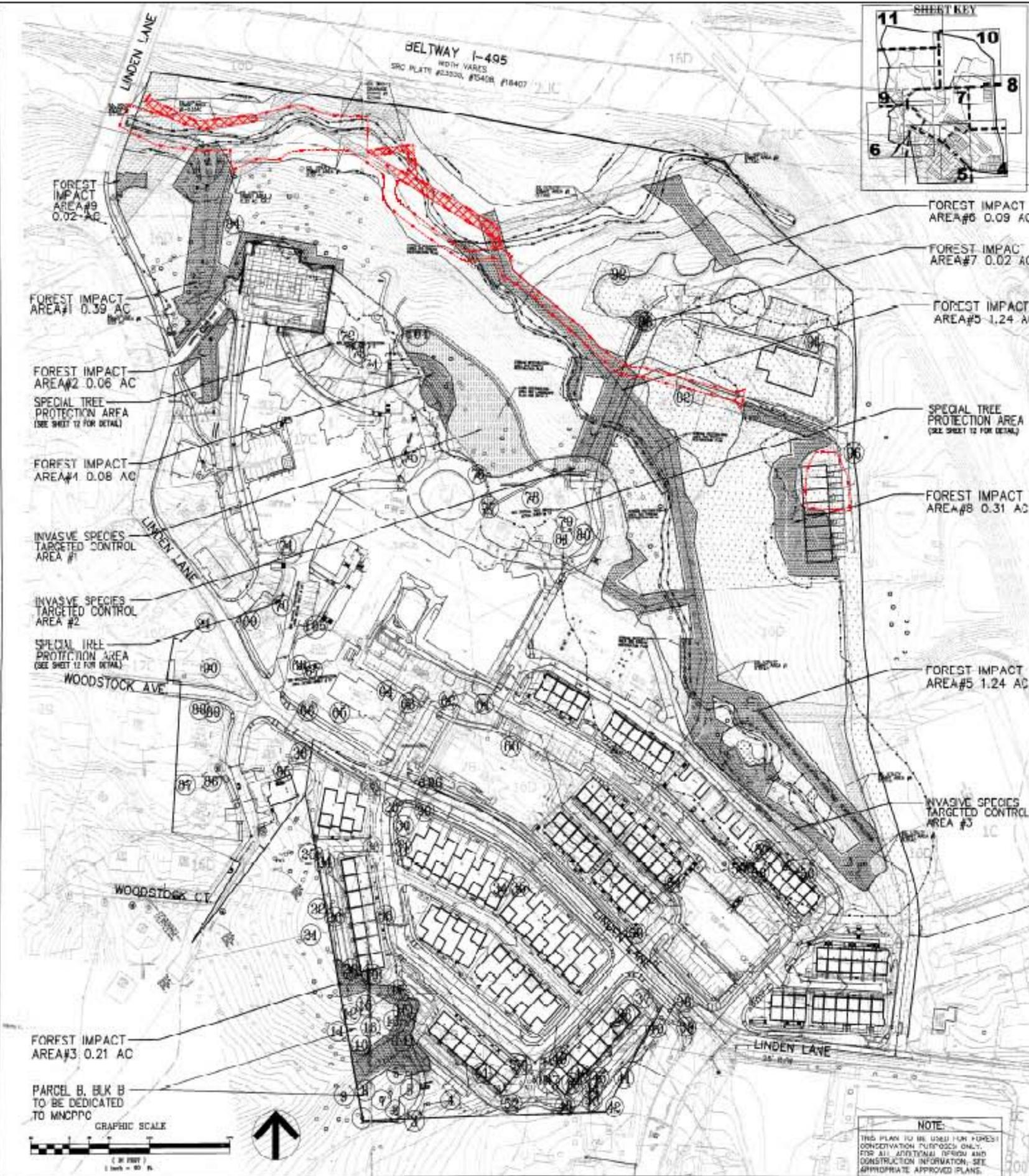
	TREE #	SPECIES	DBH		TREE #	SPECIES	DBH
	1	oak	1		58	elm	1.5
	2	box elder	<1		59	elm	4
	3	maple	1.5		60	elm	3.5
	4	maple	1.5		61	elm	1
	5	maple	2		62	elm	1
	6	box elder	2.5		63	elm	4.5
	7	box elder	6		64	ash	3.5
	8	oak	<1		65	elm	<1
	9	elm	4		66	box elder	2
	10	elm	7		67	elm	5.5
	11	ash	4.5		68	elm	6
	12	ironwood	2		69	box elder	5.5
	13	ironwood	2		70	elm	1
	14	ironwood	2		71 (T-11)*	elm	23.5
	15	beech	5		72	box elder	3
	16	basswood	3, 4		73	box elder	7.5
	17	basswood	3		74	box elder	2
	18	maple	7		75	elm	4
SAVE	19 (T-7)*	walnut	23.5		76	elm	1.5
	20	elm	4		77	cherry	6
	21	maple	6.5		78	ash	<1
	22	box elder	2.5		79	elm	2
	23	box elder	4		80	tulip poplar	6
	24	box elder	5.5		81	tulip poplar	8.5
	25	box elder	1		82	elm	3
	26	box elder	5		83	tulip poplar	13
	27	tulip poplar	5.5		84	box elder	7
	28	elm	1		85	elm	2
	29	basswood	3		86	elm	5.5
	30	basswood	4		87	tulip poplar	16.5
	31	box elder	6		88	box elder	1.5
	32	elm	<1		89	tulip poplar	6.5
SAVE	33 (T-8)*	oak	51		90	elm	4
	34	basswood	3		91	elm	2
	35	basswood	4		92	elm	2.5
	36	basswood	4.5		93	box elder	1.5
	37	tulip poplar	5		94	elm	4, 5
	38	basswood	2		95	elm	2
	39	tulip poplar	5		96	elm	2.5
	40	basswood	5		97	elm	3.5
	41	tulip poplar	1.5		98	elm	<1
	42	tulip poplar	8		99	elm	1
SAVE	43 (T-9)*	oak	45		100	elm	1
	44	maple	1		101	box elder	6
	45	elm	3		102	elm	1
	46	basswood	2.5		103	elm	5
	47	box elder	2		104	elm	4
	48	elm	2		105	fruit tree	2.5
	49	box elder	4		106	elm	3
	50	basswood	6		107	elm	5
	51	basswood	6.5		108	box elder	2
	52	basswood	9		109	elm	2.5
	53	box elder	4		110	elm	1
	54	box elder	4		111	box elder	7.5
	55	box elder	3		112	tulip poplar	5.5
	56	box elder	7		113	elm	4.5
	57	box elder	3		114	box elder	3.5

TREE #	SPECIES	DBH
115	basswood	5.5
116	beech	4
117	box elder	4
118	tulip poplar	13
119	elm	5.5
120	box elder	5
121	elm	3.5
122	walnut	11
123	box elder	<1
124	box elder	1.5
125	elm	14.5
126	elm	5
127 (T-12)*	tulip poplar	35.5
128	elm	2
129	elm	2
130	oak	<1
131	maple	<1
132	maple	<1
133 (T-13)*	tulip poplar	41
134	beech	4
135	beech	6.5
136	beech	1.5
137	black willow	<1
138	tulip poplar	2
139	beech	5
140	maple	5
141	elm	3.5
142	beech	2
143	beech	1.5, 3.5
144	maple	12
145	beech	3
146	beech	7
147	beech	4
148	beech	5.5
149	box elder	3
150	beech	<1
151	elm	4.5
152	elm	1
153	box elder	3
154	tulip poplar	2
155	box elder	9
156	hickory	4
157	elm	5
158	box elder	8
159	elm	2
160	elm	2
161	elm	4
162	ironwood	2.5
163	ironwood	2
164	ironwood	2.5
165	maple	2
166	maple	<1
SAVE 167 (T-14)*	tulip poplar	24, 24
168	elm	1.5
169	elm	5
170	fruit tree	1
171	maple	1.5

TREE #	SPECIES	DBH
172	elm	<1
173	beech	1
174	maple	4
175	elm	5
176	elm	4.5, 3
SAVE 177 (T-15)*	oak	41
178	elm	2.5
179	elm	1
180	elm	<1
181	elm	<1, 2
182	elm	<1
183	elm	1.5
184	box elder	9
185	beech	<1
186	maple	3
187	box elder	1
188	beech	2.5
189	tulip poplar	16.5
190	elm	9, 2, 3.5, <1
191	box elder	4
192	elm	10
193 (T-16)*	sycamore	33
194	elm	5
195	elm	6.5
196	ash	5
197	ash	4
198	hickory	15
199	ash	5
200	box elder	4
201	elm	1.5
202	elm	8
203	elm	1.5
204	elm	5
205	elm	6
206	elm	9
207	beech	<1
208	hickory	5
209	hickory	1
210	black gum	2
211	black gum	5
212	elm	<1
213	maple	1
214	black gum	4
215	maple	<1
216	maple	1
217	oak	1
SAVE 218 (T-19)*	beech	32.5
SAVE 219 (T-1)*	tulip poplar	42
SAVE 220 (T-2)*	oak	37
SAVE 221 (T-3)*	oak	27
SAVE 222 (T-4)*	oak	32
SAVE 223 (T-5)*	oak	37.5
SAVE 224 (T-6)*	sycamore	37
SAVE 225 (T-17)*	dead	35
SAVE 226 (T-18)*	oak	36.7

*tree numbers associated with the FCP and stream design plans.

Attachment C: Final Forest Conservation Plan Amendment



SHEET INDEX

- 1 FOREST CONSERVATION PLAN - INVASIVE CONTROL, IMPACTS & PROTECTION
- 1A ~~FCP AMENDMENT - INVASIVE CONTROL~~
- 2 FOREST CONSERVATION PLAN - SPECIAL TREE PROTECTION
- 3 FOREST CONSERVATION PLAN - PLANTINGS & PHASING
- 4 FOREST CONSERVATION PLAN - FCP AMENDMENT
- 5 FOREST CONSERVATION PLAN - SPECIAL TREE PROTECTION DETAILS
- 6 FOREST CONSERVATION PLAN - SPECIAL TREE PROTECTION DETAILS
- 7 FOREST CONSERVATION PLAN - SPECIAL TREE PROTECTION DETAILS
- 8 FOREST CONSERVATION PLAN - SPECIAL TREE PROTECTION DETAILS
- 9 FOREST CONSERVATION PLAN - SPECIAL TREE PROTECTION DETAILS
- 10 FOREST CONSERVATION PLAN - SPECIAL TREE PROTECTION DETAILS
- 11 FOREST CONSERVATION PLAN - SPECIAL TREE PROTECTION DETAILS



PROJECT TEAM

CLIENT: WASHINGTON SUBURBAN SANITARY COMMISSION

DESIGNER: R.K.K. CONSULTANTS, INC.

DATE: 04/20/12

**FOREST CONSERVATION PLAN
INVASIVE CONTROL, IMPACTS & PROTECTION
NATIONAL PARK SEMINARY**

LEGEND

- Symbol: Forest Impact Area
- Symbol: Special Tree Protection Area
- Symbol: Invasive Species Targeted Control Area
- Symbol: Stream Channel
- Symbol: Stream Valley Buffer
- Symbol: Wetland Buffer
- Symbol: 100' Floodplain

FCP FOREST TABULATIONS

AREA #	ACRES
TOTAL FOREST COVER	1.24
TOTAL SPECIAL TREE PROTECTION	0.02
TOTAL INVASIVE SPECIES CONTROL	0.08
TOTAL SPECIAL TREE PROTECTION	0.02
TOTAL FOREST COVER	1.24

NOTES

1. THE SUBJECT PROPERTY IS LOCATED ON THE ASSUMED MAP NUMBER 1500-417502.
2. THE SUBJECT PROPERTY IS LOCATED ON THE ASSUMED MAP NUMBER 1500-417502.
3. THE SUBJECT PROPERTY IS LOCATED ON THE ASSUMED MAP NUMBER 1500-417502.
4. THE SUBJECT PROPERTY IS LOCATED ON THE ASSUMED MAP NUMBER 1500-417502.
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9. THE SUBJECT PROPERTY IS LOCATED ON THE ASSUMED MAP NUMBER 1500-417502.
10. THE SUBJECT PROPERTY IS LOCATED ON THE ASSUMED MAP NUMBER 1500-417502.
11. THE SUBJECT PROPERTY IS LOCATED ON THE ASSUMED MAP NUMBER 1500-417502.

INVASIVE SPECIES CONTROL PROGRAM

1. THE INVASIVE SPECIES CONTROL PROGRAM IS DESIGNED TO PROTECT THE FOREST COVER FROM INVASIVE SPECIES.

2. THE INVASIVE SPECIES CONTROL PROGRAM IS DESIGNED TO PROTECT THE FOREST COVER FROM INVASIVE SPECIES.

3. THE INVASIVE SPECIES CONTROL PROGRAM IS DESIGNED TO PROTECT THE FOREST COVER FROM INVASIVE SPECIES.

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11. THE INVASIVE SPECIES CONTROL PROGRAM IS DESIGNED TO PROTECT THE FOREST COVER FROM INVASIVE SPECIES.

REVISIONS

NO.	DATE	DESCRIPTION
1	04/20/12	REVISED PER AGENCY COMMENTS
2	04/20/12	REVISED PER AGENCY COMMENTS

DATE: 04/20/12

PROJECT FILE NO.: 1000

SHEET NO.: 1

CONTRACT: CI 5071 B10

DATE: APRIL 2012

NO.: 1A

OF: 14

THIS FCP HAS BEEN PREPARED BY:

MD QUALIFIED FOREST PROFESSIONAL

THIS IS AN AMENDMENT TO THE EXISTING FOREST CONSERVATION PLAN FOR NATIONAL PARK SEMINARY, MNCPPC FCP # 1-05054 & 8-05024 APPROVED 10/26/2005



WASHINGTON SUBURBAN SANITARY COMMISSION

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL.

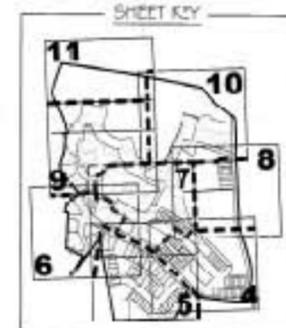
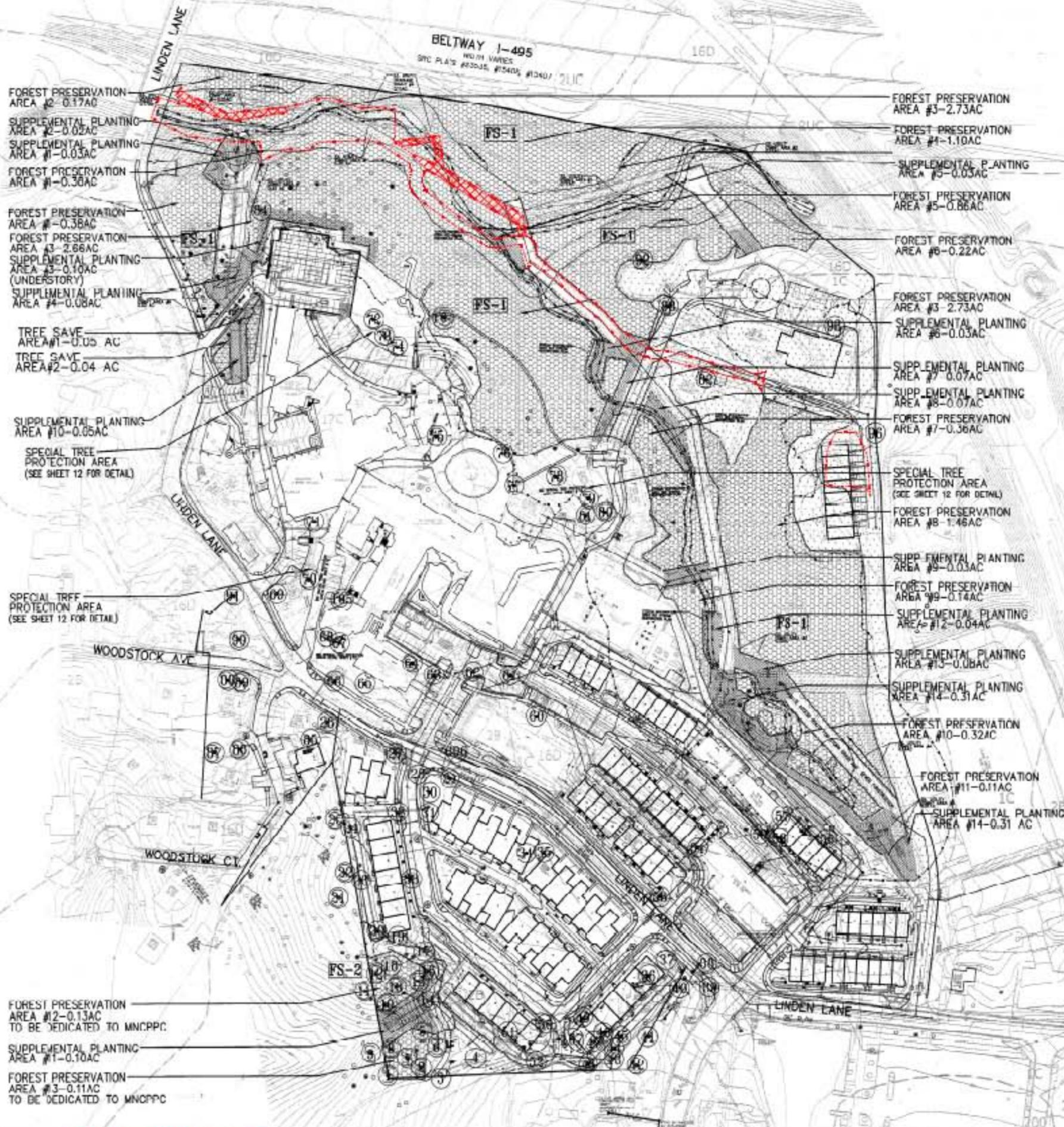
**FOREST GLEN DISTRICT
WSSC SITE 5-11 STREAM CHANNEL REHABILITATION - FCP AMENDMENT
UPSTREAM OF LINDEN LANE
PART OF BLOCK 1, FOREST GLEN PARK SUBDIVISION**

CONTRACT: CI 5071 B10

DATE: APRIL 2012

NO.: 1A

OF: 14



PROJECT T&A
Alexander Company
 345 EAST BRIDGE ROAD
 SUITE 300
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 (703) 661-1000

Galaxy Youngblood
 1888 WILSON BELL PLAZA
 SUITE 2700
 COLLEGE PARK, MD 20740
 CONTACT: MATT BERENSON
 (301) 320-1000

ARCHITECTURAL GROUP, INC.
 4000 WOODBURN ROAD
 SUITE 100
 WOODBURN, MD 21796
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 (301) 591-4100

THE TRUCK GROUP
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 SUITE 110
 WOODBURN, MD 21796
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 (301) 591-4100

QUAL SERVICES
 (301) 591-4100

NATIONAL PARK SEMINARY
 1311 ELECTROCONTRACT, SILVER SPRING
 MONTGOMERY COUNTY, MARYLAND

FOREST CONSERVATION PLAN
PRESERVATION & REFORESTATION
NATIONAL PARK SEMINARY

LEGEND

- 37: IN TREE
- 38: TO BE SAVED
- 39: TO BE SAVED
- 40: TO BE SAVED
- 41: TO BE SAVED
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- 116: TO BE SAVED
- 117: TO BE SAVED
- 118: TO BE SAVED
- 119: TO BE SAVED
- 120: TO BE SAVED

REFORESTATION/REFORMATION MANAGEMENT PROGRAM

1. ALL REFORESTATION/REFORMATION WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROVED REFORESTATION/REFORMATION MANAGEMENT PROGRAM.

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SEDIMENT CONTROL & TRFF PROTECTION

1. ALL SEDIMENT CONTROL AND TRFF PROTECTION WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL AND TRFF PROTECTION PLAN.

2. ALL SEDIMENT CONTROL AND TRFF PROTECTION WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL AND TRFF PROTECTION PLAN.

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10. ALL SEDIMENT CONTROL AND TRFF PROTECTION WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL AND TRFF PROTECTION PLAN.

SUPPLEMENTAL PLANTING AREAS

EXISTING SOILS

SYMBOL	SOIL NAME	AREA (AC)
1C	1C	0.13
2B	2B	0.10
6A	6A	0.10
16D	16D	0.10
17C	17C	0.10

TOTAL FOREST/REFORMATION

Area	Area (AC)
Area 1	0.13
Area 2	0.10
Area 3	0.10
Area 4	0.10
Area 5	0.10
Area 6	0.10
Area 7	0.10
Area 8	0.10
Area 9	0.10
Area 10	0.10
Area 11	0.10
Area 12	0.10
Area 13	0.10
Area 14	0.10
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Area 117	0.10
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Area 120	0.10

FCP FOREST TABULATIONS

Area	Area (AC)	Area (AC)
Area 1	0.13	0.13
Area 2	0.10	0.10
Area 3	0.10	0.10
Area 4	0.10	0.10
Area 5	0.10	0.10
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Area 8	0.10	0.10
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Area 116	0.10	0.10
Area 117	0.10	0.10
Area 118	0.10	0.10
Area 119	0.10	0.10
Area 120	0.10	0.10

NOTE:
 THIS PLAN IS TO BE USED FOR FOREST CONSERVATION PURPOSES ONLY. FOR ALL ADDITIONAL DESIGN AND CONSTRUCTION INFORMATION, SEE APPROPRIATE APPROVED PLANS.



LEGEND

- LIMIT OF DISTURBANCE FOR WSSC WORK
- LIMIT OF DISTURBANCE - NO VEHICULAR TRAFFIC

GRAPHIC SCALE
 0 100 200 300 400 500 600 700 800 900 1000
 (IN FEET)
 1 inch = 100 feet

FOREST CONSERVATION PLAN
NATIONAL PARK SEMINARY
 MNCPPC FCP # 1-05054 & 8-05024

THIS FCP HAS BEEN PREPARED BY:

MD QUALIFIED FOREST PROFESSIONAL

THIS IS AN AMENDMENT TO THE EXISTING FOREST CONSERVATION PLAN FOR NATIONAL PARK SEMINARY, MNCPPC FCP # 1-05054 & 8-05024 APPROVED 10/28/2005



DATE	REVISIONS
10/20/11	REVISED PER AGENCY COMMENTS
04/20/12	REVISED PER AGENCY COMMENTS

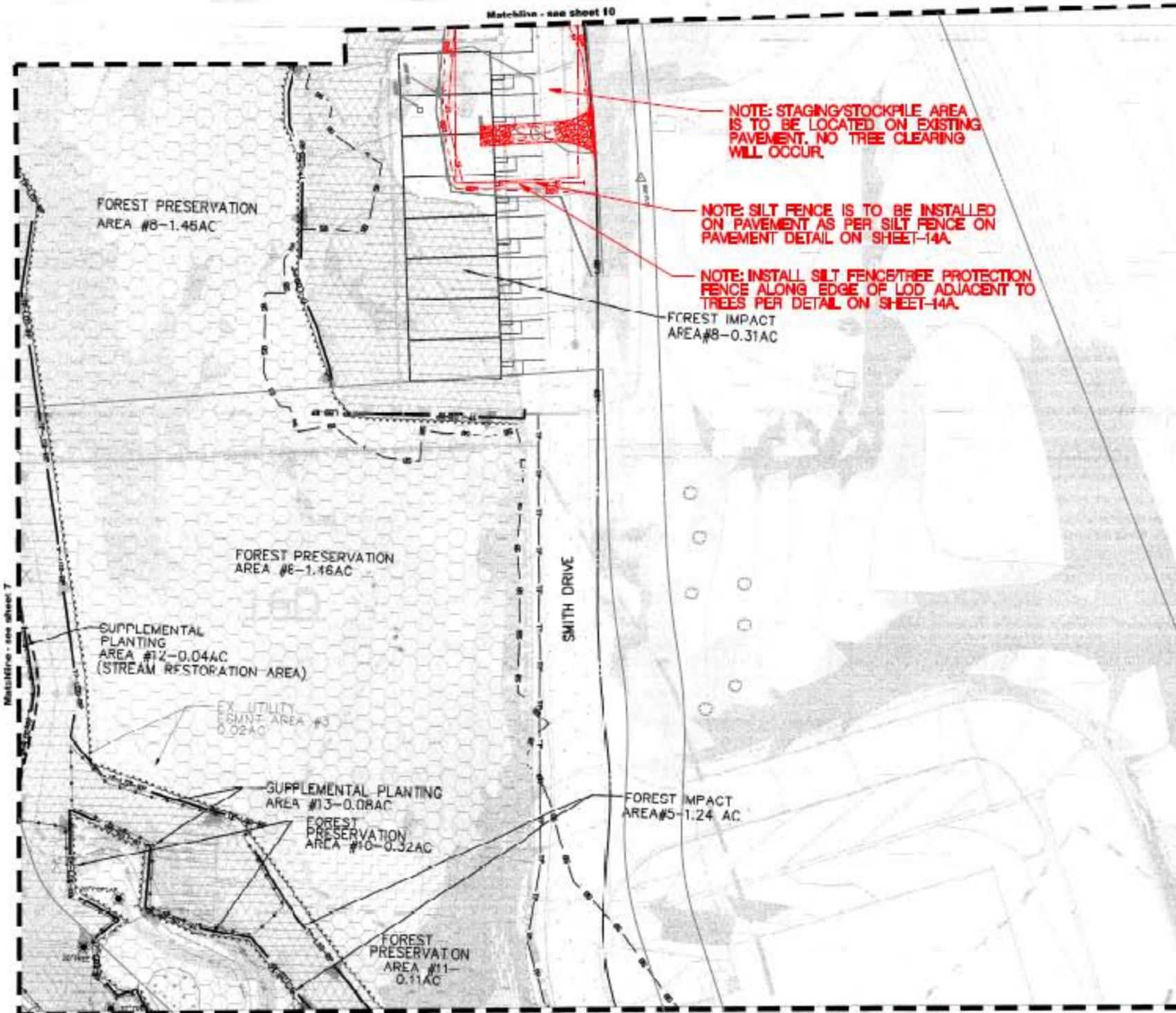
WASHINGTON SUBURBAN SANITARY COMMISSION

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FOREST GLEN DISTRICT
WSSC SITE 5-11 STREAM CHANNEL REHABILITATION - FCP AMENDMENT
 UPSTREAM OF LINDEN LANE
 PART OF BLOCK 1, FOREST GLEN PARK SUBDIVISION

CONTRACT CI 5071 B10
APRIL 2012
212 HW 03

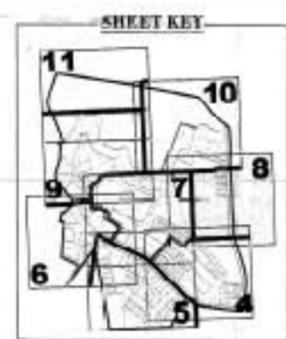
NO. 2A
OF 14



NOTE: STAGING/STOCKPILE AREA IS TO BE LOCATED ON EXISTING PAVEMENT. NO TREE CLEARING WILL OCCUR.

NOTE: SILT FENCE IS TO BE INSTALLED ON PAVEMENT AS PER SILT FENCE ON PAVEMENT DETAIL ON SHEET-14A.

NOTE: INSTALL SILT FENCE/TREE PROTECTION FENCE ALONG EDGE OF LOD ADJACENT TO TREES PER DETAIL ON SHEET-14A.



PROJECT TEAM
 ARCHITECT/ENGINEER
 140 EAST BRUNN ROAD
 HANSON, WISCONSIN, 53126
 CONTACT: DAVID E. BOYD
 414-224-2200

OWNER
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 SUITE 200
 MILWAUKEE, WISCONSIN 53212
 CONTACT: WYATT BERENSON
 414-444-6900

ARCHITECT/ENGINEER
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 800 WEST WISCONSIN CENTER DR
 SUITE 100
 MILWAUKEE, WISCONSIN 53212
 CONTACT: WYATT BERENSON
 414-444-6900

FOREST CONSERVATION PLAN
 NATIONAL PARK SEMINARY

LEGEND

EXISTING FOREST	EXISTING FOREST
PROPOSED FOREST PRESERVATION AREA	PROPOSED FOREST PRESERVATION AREA
PROPOSED FOREST IMPACT AREA	PROPOSED FOREST IMPACT AREA
PROPOSED FOREST RESTORATION AREA	PROPOSED FOREST RESTORATION AREA
PROPOSED FOREST PLANTING AREA	PROPOSED FOREST PLANTING AREA
PROPOSED FOREST RESTORATION AREA	PROPOSED FOREST RESTORATION AREA
PROPOSED FOREST PLANTING AREA	PROPOSED FOREST PLANTING AREA
PROPOSED FOREST RESTORATION AREA	PROPOSED FOREST RESTORATION AREA
PROPOSED FOREST PLANTING AREA	PROPOSED FOREST PLANTING AREA

THE TRAFFIC GROUP
 5000 TRANSLIN RD DRIVE
 SUITE H
 MILWAUKEE, WI 53226
 CONTACT: VES SUCCERT
 800-383-9400

THE TRAFFIC GROUP
 5000 TRANSLIN RD DRIVE
 SUITE H
 MILWAUKEE, WI 53226
 CONTACT: VES SUCCERT
 800-383-9400

NOTE:
 THIS PLAN IS TO BE USED FOR FOREST CONSERVATION PURPOSES ONLY. FOR ALL ADDITIONAL DESIGN AND CONSTRUCTION INFORMATION SEE APPROPRIATE APPROVED PLANS.

SEDIMENT CONTROL & TREE PROTECTION

A. IF SUPER-SILT FENCE IS TO BE USED, IT SHALL BE INSTALLED ALONG THE LOD WITHIN ALL FORESTED AREAS OF THE PROJECT AREA IN ACCORDANCE WITH THE DETAIL ON SHEET 14A.

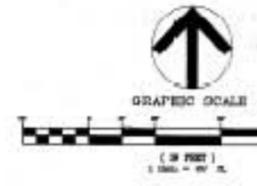
B. IF SUPER-SILT FENCE IS TO BE USED, IT SHALL BE INSTALLED ALONG THE LOD WITHIN ALL FORESTED AREAS OF THE PROJECT AREA IN ACCORDANCE WITH THE DETAIL ON SHEET 14A.

LEGEND

	EXAMPLE 2" OR GREATER DIA TREE		PROPOSED FOREST IMPACT AREAS OUTSIDE EASEMENT
	CRITICAL ROOT ZONE		PROPOSED FOREST IMPACT AREAS WITHIN EASEMENT
	LIMIT OF DISTURBANCE FOR WSSC WORK		TREES TO BE REMOVED
	LIMIT OF DISTURBANCE - NO VEGETATION ZONE		TREE PROTECTION FENCE
	TREE PLANTING		MATCH ACCESS ROAD
	SILT FENCE		SUPER SET FENCE
	LIMITS OF EASEMENT		

NOTE: TREE PROTECTION SIGNS SHALL BE INSTALLED ALONG THE LOD WITHIN ALL FORESTED AREAS OF THE PROJECT AREA IN ACCORDANCE WITH THE DETAIL ON SHEET 14A.

NOTE: NO VEHICULAR ZONE - NO PROPOSED AREAS WITHIN THE LOD THAT CANNOT BE ACCESSED WITH WHEELED AND/OR TRACKED VEHICLES. ONLY FOOT TRAFFIC WITH MANUAL EQUIPMENT CAN BE UTILIZED WITHIN THIS ZONE. ABSOLUTELY NO SOIL DISTURBANCE IS ALLOWED, ONLY TRENCHES FOR UV CURING OF PIPE LINES AND HAND CARRYING OF ASSOCIATED MATERIALS ALLOWED TO BE WITHIN THIS ZONE.



FOR PREPARED BY: MATTHEW J. H. [Name]
 NO. LICENSED LANDSCAPE ARCHITECT NO. [Number]

FOREST CONSERVATION PLAN
 NATIONAL PARK SEMINARY
 MNCPPC FCP # 1-06054 & 8-06024

NATIONAL PARK SEMINARY
 1534 SECTION DISTRICT, MILWAUKEE
 WISCONSIN COUNTY, WISCONSIN

FOREST CONSERVATION PLAN

VTKA REVISIONS

REVISED AND SUBMITTED PER AGENCY COMMENTS	04/2012
REVISED AND SUBMITTED PER AGENCY COMMENTS	05/2012
REVISED AND SUBMITTED PER AGENCY COMMENTS	07/2012
DATE SUBMITTED	04/2012
SCALE	1"=40'
PROJECT FILE NO.	1000
SHEET NO.	8

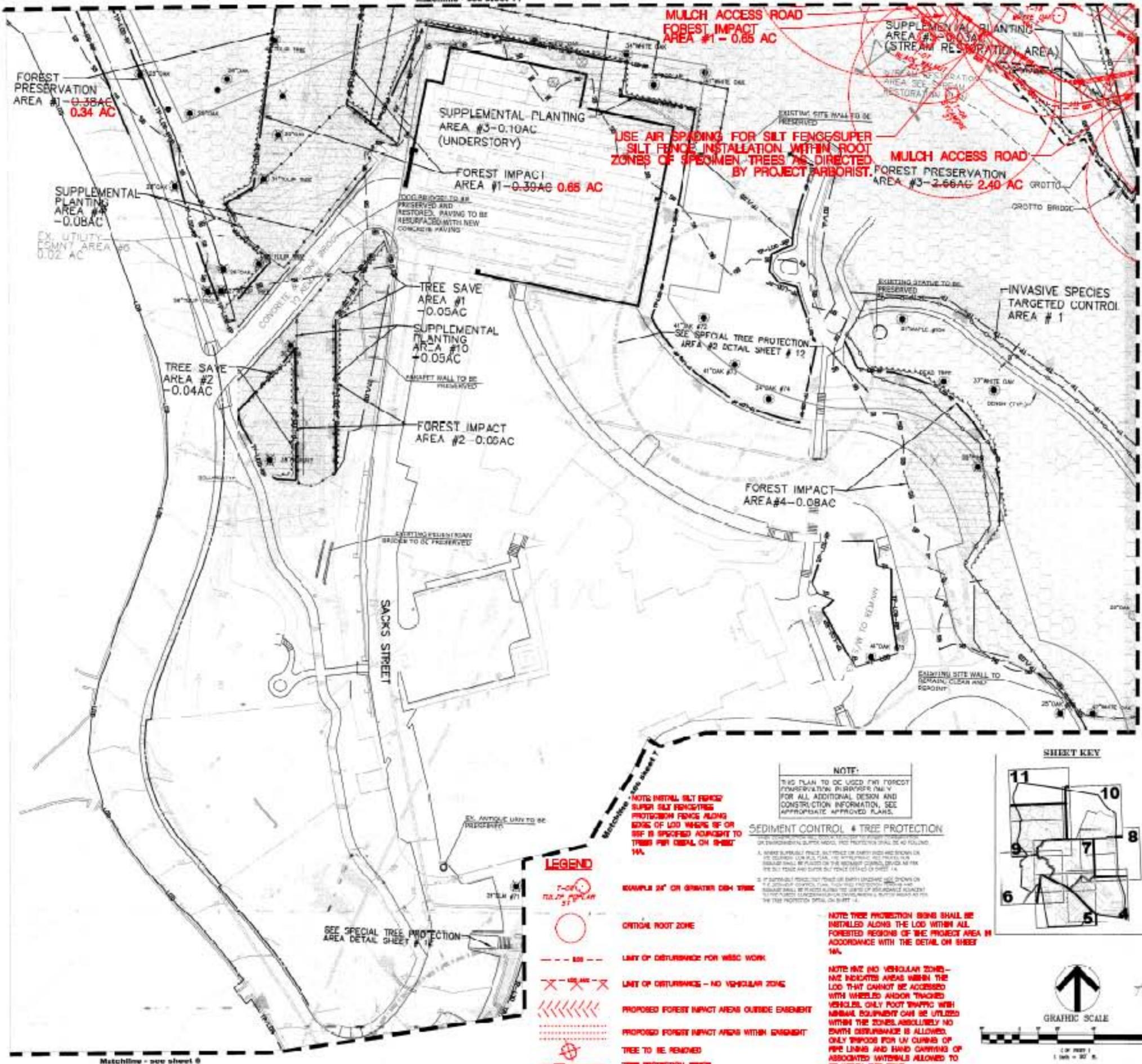
THIS IS AN AMENDMENT TO THE EXISTING FOREST CONSERVATION PLAN FOR NATIONAL PARK SEMINARY, MNCPPC FCP # 1-06054 & 8-06024 APPROVED 10/28/2006

DATE	REVISIONS
10/2011	REVISED PER AGENCY COMMENTS
04/2012	REVISED PER AGENCY COMMENTS
CONTRACT CI 5071 B10	
APRIL 2012	NO. 8A
212 NW 05	OF 14

WASHINGTON SUBURBAN SANITARY COMMISSION

THESE DOCUMENTS CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REDISTRIBUTED WITHOUT PRIOR WSSC APPROVAL

FOREST GLEN DISTRICT
 WSSC SITE 5-11 STREAM CHANNEL REHABILITATION - FCP AMENDMENT
 PART OF BLOCK 1, FOREST GLEN PARK SUBDIVISION



PROJECT TEAM

Client: WASHINGTON SUBURBAN SANITARY COMMISSION

Site: WSSC SITE 5-11

Project: FOREST GLLEN DISTRICT WSSC SITE 5-11 STREAM CHANNEL REHABILITATION - FCP AMENDMENT

Architect: WASHINGTON SUBURBAN SANITARY COMMISSION

Architect's Representative: SAIDMAN, SHARRBRO & COMPANY, INC.

Scale: 1" = 400'

LEGEND

[Symbol]	EXISTING VALLEY SUPER SILT FENCE
[Symbol]	PROPOSED FOREST IMPACT AREAS
[Symbol]	PROPOSED FOREST IMPACT AREAS OUTSIDE EMBANKMENT
[Symbol]	PROPOSED FOREST IMPACT AREAS WITHIN EMBANKMENT
[Symbol]	TREE TO BE REMOVED
[Symbol]	TREE PROTECTION FENCE
[Symbol]	TREE PLANNING
[Symbol]	MULCH ACCESS ROAD
[Symbol]	SILT FENCE
[Symbol]	SUPER SILT FENCE
[Symbol]	LIMITS OF EXISTENCE

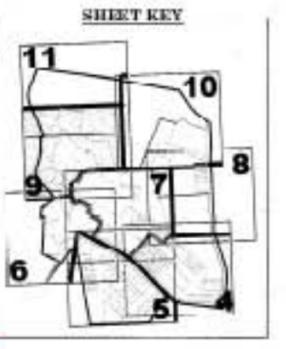
SEDIMENT CONTROL & TREE PROTECTION

NOTE: THIS PLAN TO BE USED FOR FOREST PRESERVATION PURPOSES ONLY FOR ALL ADDITIONAL DESIGN AND CONSTRUCTION INFORMATION, SEE APPROPRIATE APPROVED PLANS.

NOTE: INSTALL SILT FENCE SUPER SILT FENCE/STRESS PROTECTION FENCE ALONG EDGE OF LOD INSIDE OF OR BEYOND AS SPECIFIED TO TREE PER DETAIL ON SHEET 10A.

NOTE: TREE PROTECTION SIGNS SHALL BE INSTALLED ALONG THE LOD WITHIN ALL FORESTED REGIONS OF THE PROJECT AREA IN ACCORDANCE WITH THE DETAIL ON SHEET 10A.

NOTE: NO NO VEHICULAR ZONE-INDICATES AREAS WITHIN THE LOD THAT CANNOT BE ACCESSED WITH WHEELED AND/OR TRACKED VEHICLES. ONLY FOOT TRAFFIC WITH MINIMAL EQUIPMENT CAN BE UTILIZED WITHIN THE ZONE. ABSOLUTELY NO EARTH DISTURBANCE IS ALLOWED. ONLY TRIPPODS FOR UV CURING OF PIPE LINGS AND HAND CARRYING OF ASSOCIATED MATERIALS ALLOWED TO BE WITHIN THE ZONE.



VIA REVISIONS

DATE	REVISIONS
12/20/11	REVISED PER AGENCY COMMENTS
04/20/12	REVISED PER AGENCY COMMENTS

REVISED AND SUBMITTED PER AGENCY COMMENTS:

03/24/05

REVISED AND SUBMITTED PER AGENCY COMMENTS:

06/09/05

REVISED AND SUBMITTED PER AGENCY COMMENTS:

03/23/05

DATE: OCTOBER 12, 2005

SCALE: 1" = 40'

PROJECT/FILE NO: 1209

SHEET NO: 9

THIS FCP HAS BEEN PREPARED BY:

 MD QUALIFIED FOREST PROFESSIONAL

THIS IS AN AMENDMENT TO THE EXISTING FOREST CONSERVATION PLAN FOR NATIONAL PARK SEMINARY, MNCPPC FCP # 1-05054 & 8-05024 APPROVED 10/26/2005

WASHINGTON SUBURBAN SANITARY COMMISSION

FOREST GLLEN DISTRICT WSSC SITE 5-11 STREAM CHANNEL REHABILITATION - FCP AMENDMENT

CONTRACT CI 5071 B10

APRIL 2012

NO. 8A

212 NW 08

OP 14

SUPPLEMENTAL PLANTING AREAS SCHEDULE

NO.	BOTANICAL NAME	COMMON NAME	SUBSTRATE	PLANTING DATE	APPROX. QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1	10/10/10	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL UNDERSTORY																	
TOTAL FOREST																	



FOREST CONSERVATION PLAN WORKSHEET, NOTES & SCHEDULES NATIONAL PARK SEMINARY

ADDITIONAL SIGNIFICANT AND SPECIES TREE LIST

DATE	COMMON NAME	BOTANICAL NAME	DBH	UNDER
SAVE 10-7	40"	...
SAVE 10-8	30"	...
SAVE 10-9	25"	...
SAVE 10-10	20"	...
SAVE 10-11	15"	...
SAVE 10-12	10"	...
SAVE 10-13	8"	...
SAVE 10-14	6"	...
SAVE 10-15	5"	...
SAVE 10-16	4"	...
SAVE 10-17	3"	...
SAVE 10-18	2"	...
SAVE 10-19	1"	...
SAVE 10-20	1"	...

SUPPLEMENTAL UNDERSTORY PLANTING AREA

NO.	BOTANICAL NAME	COMMON NAME	SUBSTRATE	PLANTING DATE	APPROX. QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY
1	10/10/10	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL UNDERSTORY																
TOTAL FOREST																

FCP FOREST TABULATIONS

NO.	COMMON NAME	BOTANICAL NAME	DBH	UNDER
SAVE 10-7	40"	...
SAVE 10-8	30"	...
SAVE 10-9	25"	...
SAVE 10-10	20"	...
SAVE 10-11	15"	...
SAVE 10-12	10"	...
SAVE 10-13	8"	...
SAVE 10-14	6"	...
SAVE 10-15	5"	...
SAVE 10-16	4"	...
SAVE 10-17	3"	...
SAVE 10-18	2"	...
SAVE 10-19	1"	...
SAVE 10-20	1"	...

FOREST CONSERVATION WORKSHEET

NET TRACT AREA

A. Total tract area = 31.79

B. Land dedication area (park, nearby facility, etc.) = 0.00

C. Land dedication for roads or utilities (not being constructed by this plan) = 0.97

D. Area to remain in commercial agricultural production/use = 0.00

E. Other dedications (optional) = 0.00

F. Net Tract Area = 30.82

LAND USE CATEGORY (From Tract Technical Manual)

USE TO REMAIN: 1' (use 0)

USE TO BE REMOVED: 2' (use 0)

USE TO BE RECLAIMED: 3' (use 0)

USE TO BE PLANTED: 4' (use 0)

USE TO BE RESTORED: 5' (use 0)

USE TO BE MAINTAINED: 6' (use 0)

USE TO BE DESTROYED: 7' (use 0)

USE TO BE RELOCATED: 8' (use 0)

USE TO BE ABANDONED: 9' (use 0)

USE TO BE RECONSTRUCTED: 10' (use 0)

USE TO BE REPAIRED: 11' (use 0)

USE TO BE REPLACED: 12' (use 0)

USE TO BE RESTORED: 13' (use 0)

USE TO BE MAINTAINED: 14' (use 0)

USE TO BE DESTROYED: 15' (use 0)

USE TO BE RELOCATED: 16' (use 0)

USE TO BE ABANDONED: 17' (use 0)

USE TO BE RECONSTRUCTED: 18' (use 0)

USE TO BE REPAIRED: 19' (use 0)

USE TO BE REPLACED: 20' (use 0)

USE TO BE RESTORED: 21' (use 0)

USE TO BE MAINTAINED: 22' (use 0)

USE TO BE DESTROYED: 23' (use 0)

USE TO BE RELOCATED: 24' (use 0)

USE TO BE ABANDONED: 25' (use 0)

USE TO BE RECONSTRUCTED: 26' (use 0)

USE TO BE REPAIRED: 27' (use 0)

USE TO BE REPLACED: 28' (use 0)

USE TO BE RESTORED: 29' (use 0)

USE TO BE MAINTAINED: 30' (use 0)

USE TO BE DESTROYED: 31' (use 0)

USE TO BE RELOCATED: 32' (use 0)

USE TO BE ABANDONED: 33' (use 0)

USE TO BE RECONSTRUCTED: 34' (use 0)

USE TO BE REPAIRED: 35' (use 0)

USE TO BE REPLACED: 36' (use 0)

USE TO BE RESTORED: 37' (use 0)

USE TO BE MAINTAINED: 38' (use 0)

USE TO BE DESTROYED: 39' (use 0)

USE TO BE RELOCATED: 40' (use 0)

USE TO BE ABANDONED: 41' (use 0)

USE TO BE RECONSTRUCTED: 42' (use 0)

USE TO BE REPAIRED: 43' (use 0)

USE TO BE REPLACED: 44' (use 0)

USE TO BE RESTORED: 45' (use 0)

USE TO BE MAINTAINED: 46' (use 0)

USE TO BE DESTROYED: 47' (use 0)

USE TO BE RELOCATED: 48' (use 0)

USE TO BE ABANDONED: 49' (use 0)

USE TO BE RECONSTRUCTED: 50' (use 0)

USE TO BE REPAIRED: 51' (use 0)

USE TO BE REPLACED: 52' (use 0)

USE TO BE RESTORED: 53' (use 0)

USE TO BE MAINTAINED: 54' (use 0)

USE TO BE DESTROYED: 55' (use 0)

USE TO BE RELOCATED: 56' (use 0)

USE TO BE ABANDONED: 57' (use 0)

USE TO BE RECONSTRUCTED: 58' (use 0)

USE TO BE REPAIRED: 59' (use 0)

USE TO BE REPLACED: 60' (use 0)

USE TO BE RESTORED: 61' (use 0)

USE TO BE MAINTAINED: 62' (use 0)

USE TO BE DESTROYED: 63' (use 0)

USE TO BE RELOCATED: 64' (use 0)

USE TO BE ABANDONED: 65' (use 0)

USE TO BE RECONSTRUCTED: 66' (use 0)

USE TO BE REPAIRED: 67' (use 0)

USE TO BE REPLACED: 68' (use 0)

USE TO BE RESTORED: 69' (use 0)

USE TO BE MAINTAINED: 70' (use 0)

USE TO BE DESTROYED: 71' (use 0)

USE TO BE RELOCATED: 72' (use 0)

USE TO BE ABANDONED: 73' (use 0)

USE TO BE RECONSTRUCTED: 74' (use 0)

USE TO BE REPAIRED: 75' (use 0)

USE TO BE REPLACED: 76' (use 0)

USE TO BE RESTORED: 77' (use 0)

USE TO BE MAINTAINED: 78' (use 0)

USE TO BE DESTROYED: 79' (use 0)

USE TO BE RELOCATED: 80' (use 0)

USE TO BE ABANDONED: 81' (use 0)

USE TO BE RECONSTRUCTED: 82' (use 0)

USE TO BE REPAIRED: 83' (use 0)

USE TO BE REPLACED: 84' (use 0)

USE TO BE RESTORED: 85' (use 0)

USE TO BE MAINTAINED: 86' (use 0)

USE TO BE DESTROYED: 87' (use 0)

USE TO BE RELOCATED: 88' (use 0)

USE TO BE ABANDONED: 89' (use 0)

USE TO BE RECONSTRUCTED: 90' (use 0)

USE TO BE REPAIRED: 91' (use 0)

USE TO BE REPLACED: 92' (use 0)

USE TO BE RESTORED: 93' (use 0)

USE TO BE MAINTAINED: 94' (use 0)

USE TO BE DESTROYED: 95' (use 0)

USE TO BE RELOCATED: 96' (use 0)

USE TO BE ABANDONED: 97' (use 0)

USE TO BE RECONSTRUCTED: 98' (use 0)

USE TO BE REPAIRED: 99' (use 0)

USE TO BE REPLACED: 100' (use 0)

FOREST CONSERVATION DATA TABLE

NO.	COMMON NAME	BOTANICAL NAME	DBH	UNDER
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SIGNIFICANT AND SPECIES TREE LIST

NO.	COMMON NAME	BOTANICAL NAME	DBH	UNDER
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