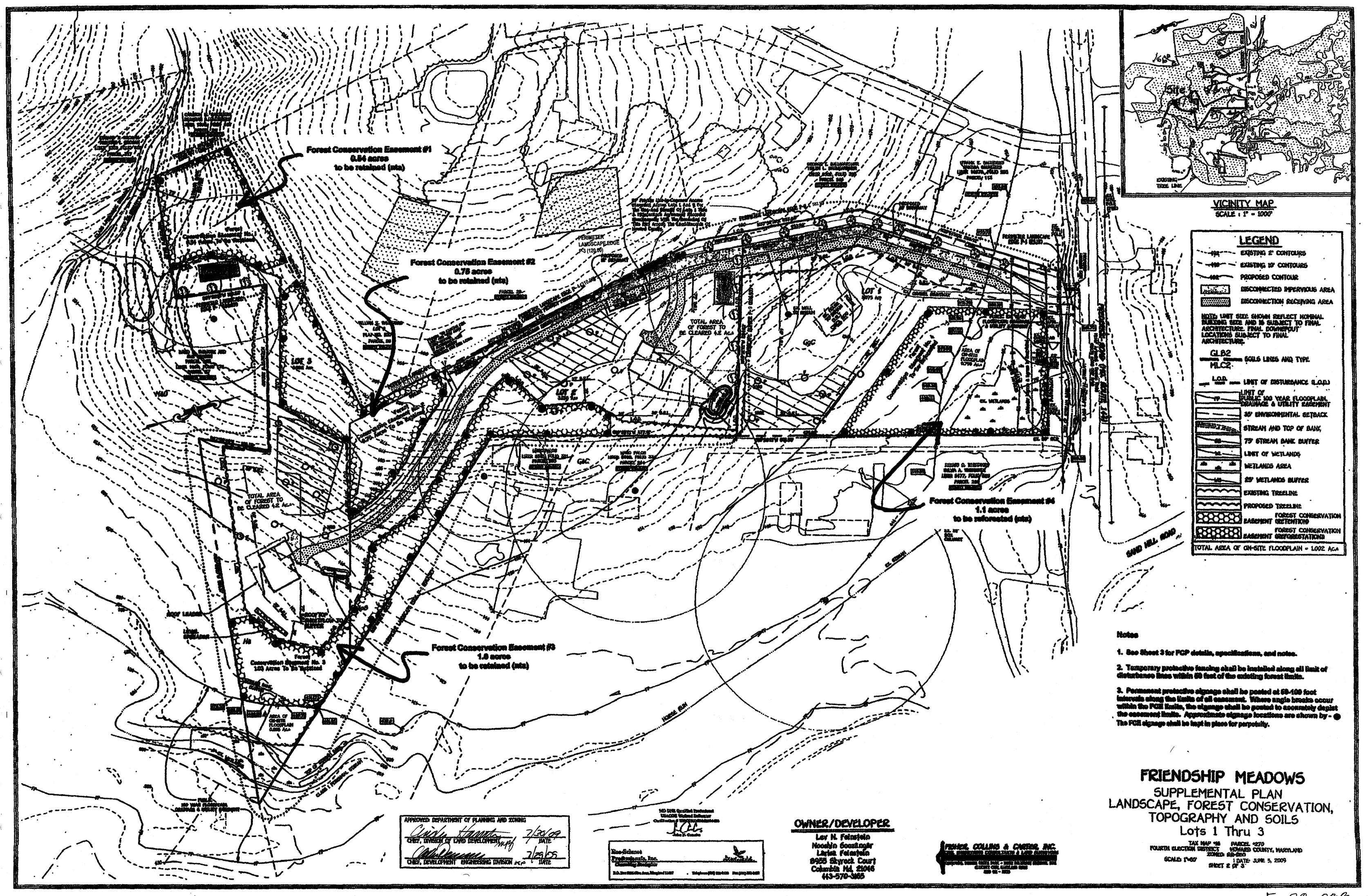


F-09-038



# **FOREST CONSERVATION WORKSHEET**

Project: Friendship Meadows Date: January 19, 2009

NET TRACT AREA	Acres	
A. Total tract area	10.1	
B. Area within 100 Year Floodplain	1.1	
C. Area to remain in agricultural production	0	
D. Net Tract Area	9.0	
LAND USE CATEGORY: (from table 3 2.1, page 40, Menual) ARA MDR IDA HDR MPD CIA X		
E. Afforestation Threshold (percentage) 0.20	18	
F. Conservation Threshold (percentage) 0.25	23	
EXISTING FOREST COVER.		
G. Existing forest cover (excluding floodplain)	6.5 4.7	
H. Area of forest above afforestation threshold		
Area of forest above conservation threshold	4.2	
BREAK EVEN POINT:		
J. Forest retention above threshold with no miligation	0.8	
Break-Even Point	31	
K. Clearing permitted without mitigation	3.4	
PROPOSED FOREST CLEARING		
L. Total area of Forest to be Cleared or Retained Outside FCE	4.2	
M. Total area of Forest to be Retained	2.3	
PLANTING REQUIREMENTS		
N. Referestation for clearing above Conservation Threshold (4.2 x 9.25)	1.1	
P. Referestation for clearing below Conservation Threshold	0	
Q. Credit for retention above conservation threshold	G	
R. Total referentation required	1.1	
S. Total afforestation required T. Total reforestation and afforestation required	0.0	

### PFCP NOTES

- Any Forest Conservation Easement (FCE) area shown hereon is subject to protective coverants which may be found in the Land Records of Howard County which restrict the disturbance and use of these areas.
- 2. Limits of disturbance shall be restricted to areas outside the limit of temporary fencing.
- 3. There shall be no clearing, grading, construction or disturbance of vegetation beyond the depicted limits of disturbance, except as permitted by Howard County DPZ.
- No stockpiles, parking areas, equipment cleaning areas, etc. shall occur within areas designated as nondiaturbance areas.
- Temporary fencing shall be used to protect forest resources during construction. Fencing shall be installed along limits of disturbance occurring within 50 feet of the proposed forest retention limits.
- The Forest Conservation Act requirements for this project will be met through the retention of 2.3 acres of forest in an easement on Lots 2 and 3 and onsite referentation of 1.1 acres on Lot 1. A waiver to allow for the creation of forest conservation easement on lots less than 10 acres have been submitted for approval.
- 7. No Specimen trees are located on this property.
- There are no slopes 15%-25% or greater on this site.
- No rare, threatened or endangered species or critical habitats were observed
- 10. Perennial streams and their required buffers are located on this property.
- 11. Non-tidal wetlands and their required buffers are located on this property.
- 12. No cemeteries or historic features are located on this property.

A. Planting Plan and Methods

Plant species selection was based on our knowledge regarding plant communities in Maryland's Pledmont Plateau and formation provided in the soil survey on typical regalation for the soil type on the planting site. Species selection was also based on our nowledge of plant availability in the aureary industry.

Referentation will be accomplished through a mixed planting of whips and branched transplants. Combiner grown stock is sommended but barerost stock may be used to help control afforestation costs. If barerost stock is used the rost systems of all plants ill be dipped in an anti-decisioning prior to planting to improve moisture retention in the rost systems.

Prior to planting the proposed Forest Conservation Essements all multiflore rose in the planting area shall be removed formoved of the rose may be performed with moving and furthfolds treatments. Physical removal of all top growth following by a periodic harbicide treatment of stump aprovide is recommended. Notice tree and shrule species occurring within the rose thickets should be retained whenever possible. Herbicides treatments shall occur on 2 month intervals during the first growing season and once each in the spring and fall for subsequent years. Herbicide used shall be made appointed trees would plant material and shall be applied as per manufacturers specifications. Care should be taken not to apray planted trees or naturally occurring native tree/shrule seedlings. It is recommended that initiation of rose removal begin at least elements prior to planting.

B. Planting and Soil Specifications

Plant material will be Installed in accordance with the Planting Dotall and Planting Specifications shown on the Forest

Amendments to existing soil will be in accordance with the Planting Specifications shown on the Forest Conservation Plant. Soil disturbance will be limited to individual planting tocallors.

C. Maintenance of Plantings

For information regarding maintenance of the referentiation plantings, see Post Construction Management Plans.

A 90 percent survival rate of the referrelation plantings will be required after one growing season. All plant metafial below the 90 percent survival threshold will be replaced at the beginning of the second growing season. At the end of the second growing season, a 76 percent survival threshold will be required. All plant material below the 75 percent survival threshold will be required out by the beginning of the

E. Socurity for Referentation/Retention

Section 16-1209 of the Howard County Forest Conservation Act requires that a developer shall post a security (sond, feiter of credit, etc.) with the County to insure that all work is done in accordance with the FCP.

Construction Period Protection Program

A. Forest Protection Techniques

1 Soil Protection Area (Critical Root Zone)

The soil protection area, or critical mut zone, of a free is that portion of the soil column where most of a its roots may be found. The majority of roots responsible for water and mutdent uptake are located just below the soil surface. Temporary fending shall be placed around the children root zone of the forest in areas where the forest limits occur within 28 feet of the limit of disturbance.

Existing forest limits occurring within 25 feet of the limits of disturbance shall be protected using temporary protective fencing Permanent signage shall be placed around the efforestellon area prior to plant installation, as shown on the plan

**B. Pre-Construction Meeting** 

Upon staking of limits of disturbance a pre-construction meeting will be held between the developer, contractor and appropriate County inspector. The purpose of the meeting will be to verify that all sediment control is in order, and to notify the Contractor of possible pensities for non-compliance with the FCP.

C. Storage Facilities/Equipment Cleaning

All equipment storage, parking, senitary facilities, material stockpiling, atc. associated with construction of the project will be restricted to those areas autistic of the proposed Forest Conservation Expensent. Cleaning of equipment will be limited to area within the LOD of the proposed homesides. Westewater resulting from equipment cleaning will be controlled to prevent runoffinto environmentally.

The following timetable represents the proposed timetable for development. The items outlined in the Forest Conservation Plan will be enacted within two (2) years of subdivision approve

Below find a proposed sequence of construction

1 Install all signage and sediment control devices

2. Hold pre-construction meeting between developer, contractor and County inspector 3. Build access reads, install well and septic systems, and construct houses. Sixbilize all djatuibed areas

4 Begin multificra rose removal. Install permanent protective eignage for Easements and initiate plantings in accordance with Forest Gonservation Plan. Plantings will be completed within two (2) years of

5. Remove sediment control

6 Hold post-construction meeting with County inspectors to assure compliance with FCP. Submit Certification of

7 Monitor and maintain plantings for 2 years.

E. Construction Monitoring

Eco-Science Professionals, or another qualified professional designated by the developer, will mondor construction of the project to ensure that all activities are in compliance with the Forest Copesivation Plan

F. Post-Construction Meeting

Upon completion of construction, Eco-Solence Professionals, or another qualified professional designated by the developer, will arrive the County that construction has been completed and arrange for a post-construction meeting to review the project site. The meeting will allow the County inspector to verify that afforestation plantings have been installed.

PORT-CONSTRUCTION MANAGEMENT PLAN

Howard County requires a two year post-construction management plan be prepared as part of the ferest conservation plan.

The plan goes into effect upon acceptance of the construction certification of completion by the County. Eco-Science Professionals, or another qualified professional designated by the downloper, will be responsible for implementation of the pust-construction management.

The following items will be incorporated into the plan:

A. Fencing and Signage

Permanent signage indicating the limits of the rejention/referentation area shall be exploited

B. General Stie inspections/Maintenance of Plantings

Site inspections will be performed a minimum of three times during the growing season. The purpose of the inspections will be used the treath of the afforestation plantings. Appropriate measures will be taken to rectify any problems which may arise

in addition, meintenence of the efforestation plantings will involve the following steps

- Watering All plant material shall be watered twice a month during the 1st growing season, more or less frequently depending on weather conditions. During the second growing season, once a month during May-September, if needed.
- Removal of invasive excites and noxious weeds. Old field successional species will be retained
- (dentification of serious plant pests and diseases, treatment with appropriate agent

D. Final inspection

After 12 and 24 months, replacement of plants, if required, in accordance with the Guarantee Regultements shown

The developer will provide appropriate materials to properly owners informing them of the location and purpose of the afforestation error. Materials may include allegate and information explaining the intent of the forest conservation law

At the end of the two year post-construction management period, Eco-Science Professionals, or another qualified professional, will submit to the administrator of the Howard County Forest Conscription Program certification that all relention/efforestation requirements have been met. Upon acceptance of this cartification, the County will release the developer from all future obligations and

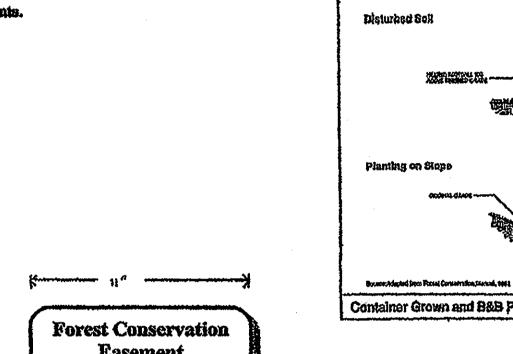
### PLANTING SCHEDULE

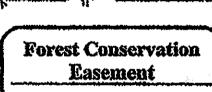
FCE#4 - 1.1 acres Planting units Required. 770 Planting units Provided 771

Qty	Species	Size	Spacing	Total FCA Units
10	Acer rubrum - Red maple	1" cal.	15' o.c.	
6	Liriodendron tulipifera - Tulip poplar **	1" cal.	15' o.c.	
10	Piatanus occidentairs - Sycamore	1" cal.	15' o.c.	
28	Total 1" cellper trees × 3.6 units/tree= FCA unit credit			
70	Acer rubrum - Red maple	2-3' whip	11' o.c.	
10	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
70	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11° o.c	
40	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
25	Piatanus occidentalis - Sycamore	2-3' whip	11' o.c	
30	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
20	Quercus alba - White oak **	2-3' whip	11' o.c.	
20	Quercus palustris - Pin oak	2-3' whip	11' o.c.	
10	Salix nigra - Błack willow	2-3' whip	11' o c.	
20	Ulmus rubra - Slippery Elm	2-3' whip	11'0 C.	
25	Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	1
340	Total whip p		ee = FCA unit credit	680
		Tot	al Unit Credit	المراجعات المراجع والمراجع والمراجعات

- Planting density based on 700 planting units per acro. 2" caliper trees = 7 planting units, 1" callper trees = 3.5 planting units, whips with chelter = 2 planting units.
- \*\* These species should not be planted within the welland limits.
- 1" callper trees should be staggered along the outer perimeter of the planting area to serve as demarcation of the boundary. The trees should be no closer than 15 foot spacing.
- Planting shall be made in a curvilinear fashion along contour. The planting should avoid a grid appearance but should be spaced to facilitate maintenance
- Multiflora roselheavy brush removalicontrol may be required prior to installation of planting.
- All whips are required to be installed with tree shelters per Howard County FCA requirements.

Seeding and Whip Planting Specification

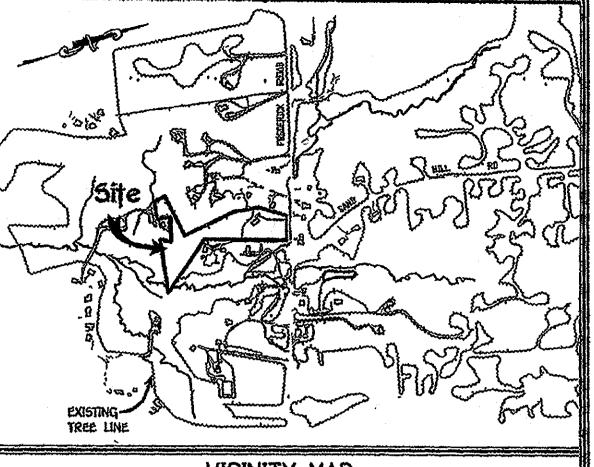




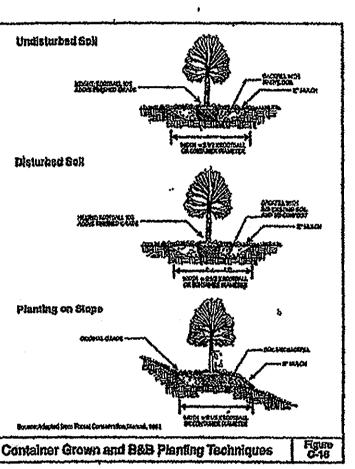
vegetation is prohibited. Violators are subject to fines as imposed by the Howard County Forest Conservation Act of 1997

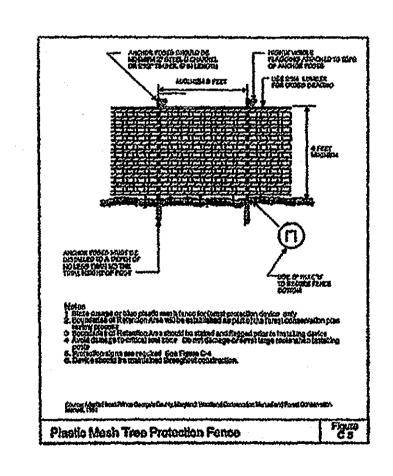
Unauthorized disturbances of

Trees for Your Future



VICINITY MAP SCALE . 1" = 1000"





## FRIENDSHIP MEADOWS

SUPPLEMENTAL PLAN LANDSCAPE, FOREST CONSERVATION, TOPOGRAPHY AND SOILS

Lots 1 Thru 3

TAX MAP \*16 PARCEL \*270
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ZONED: RR-DEO

APPROVED DEPARTMENT OF PLANNING AND ZONING CHIEF. DEVELOPMENT ENGINEERING DIVISION HEP

Eco-Science

OWNER/DEVELOPER

Lev N. Feinstein Nooshin Soozangar Larisa Feinstein 8955 Skyrock Court Columbia Md. 21046

PISHER, COLLINS & CARTER, INC. entennial course office plot - 10272 billybook hathanic fr