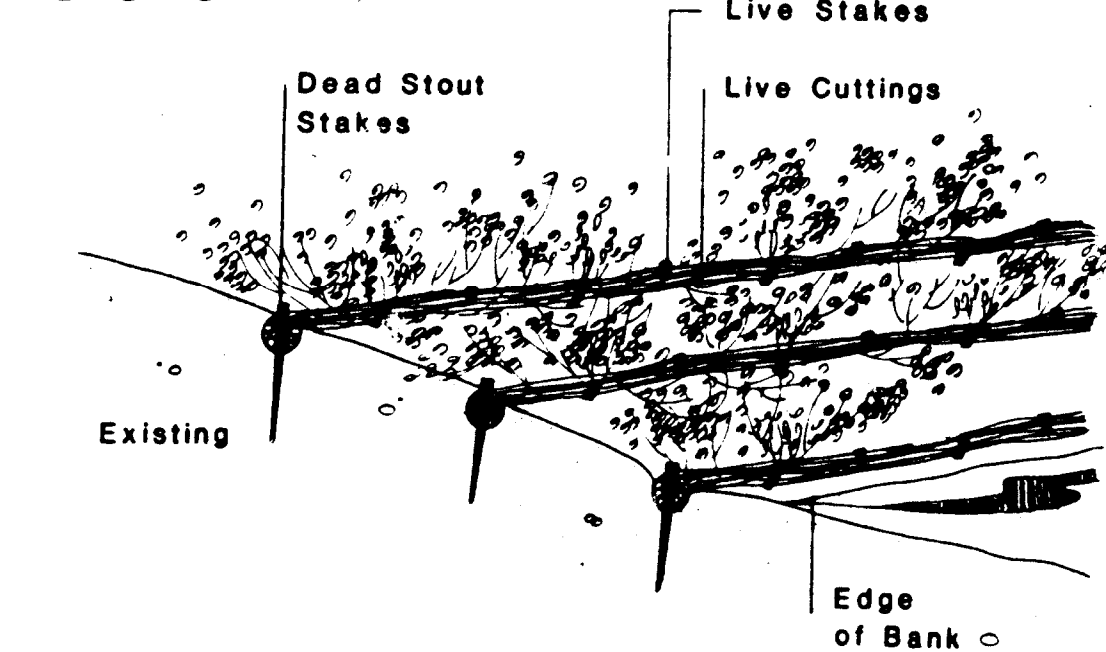
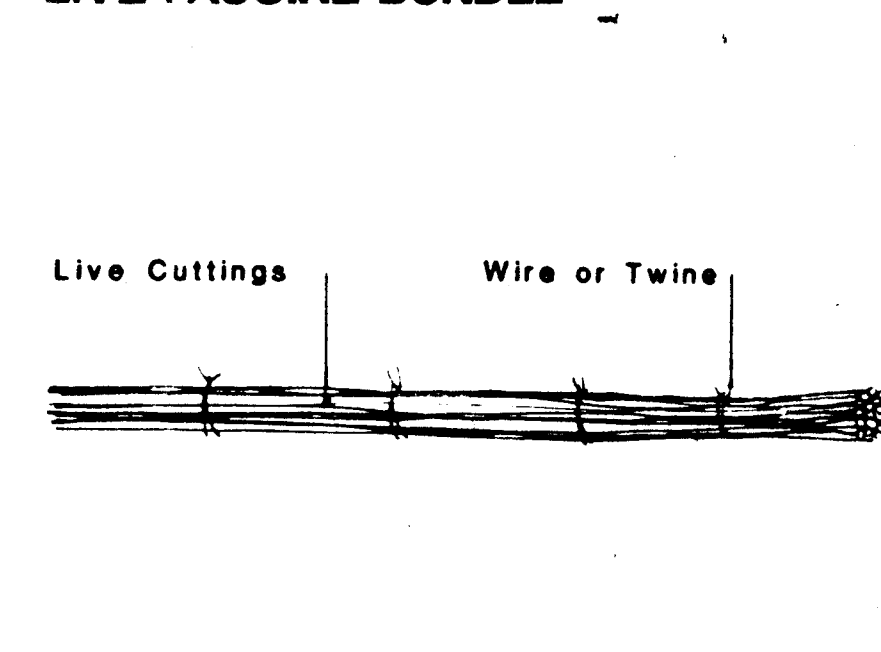


# LIVE FASCINE

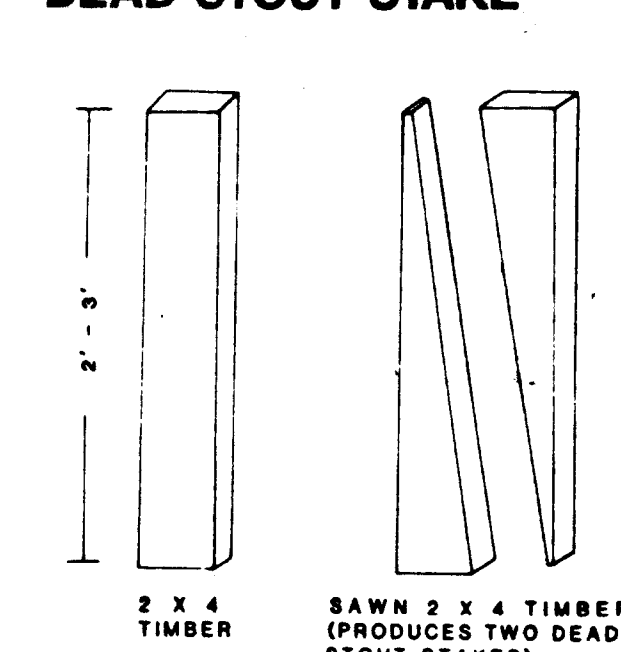
## SECTION



## LIVE FASCINE BUNDLE

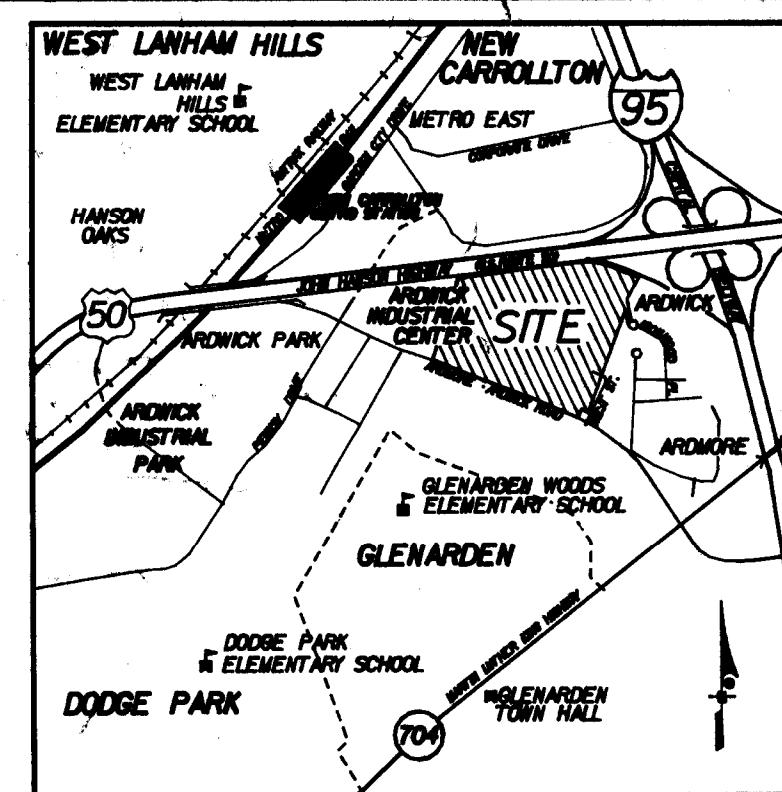


## DEAD STOUT STAKE

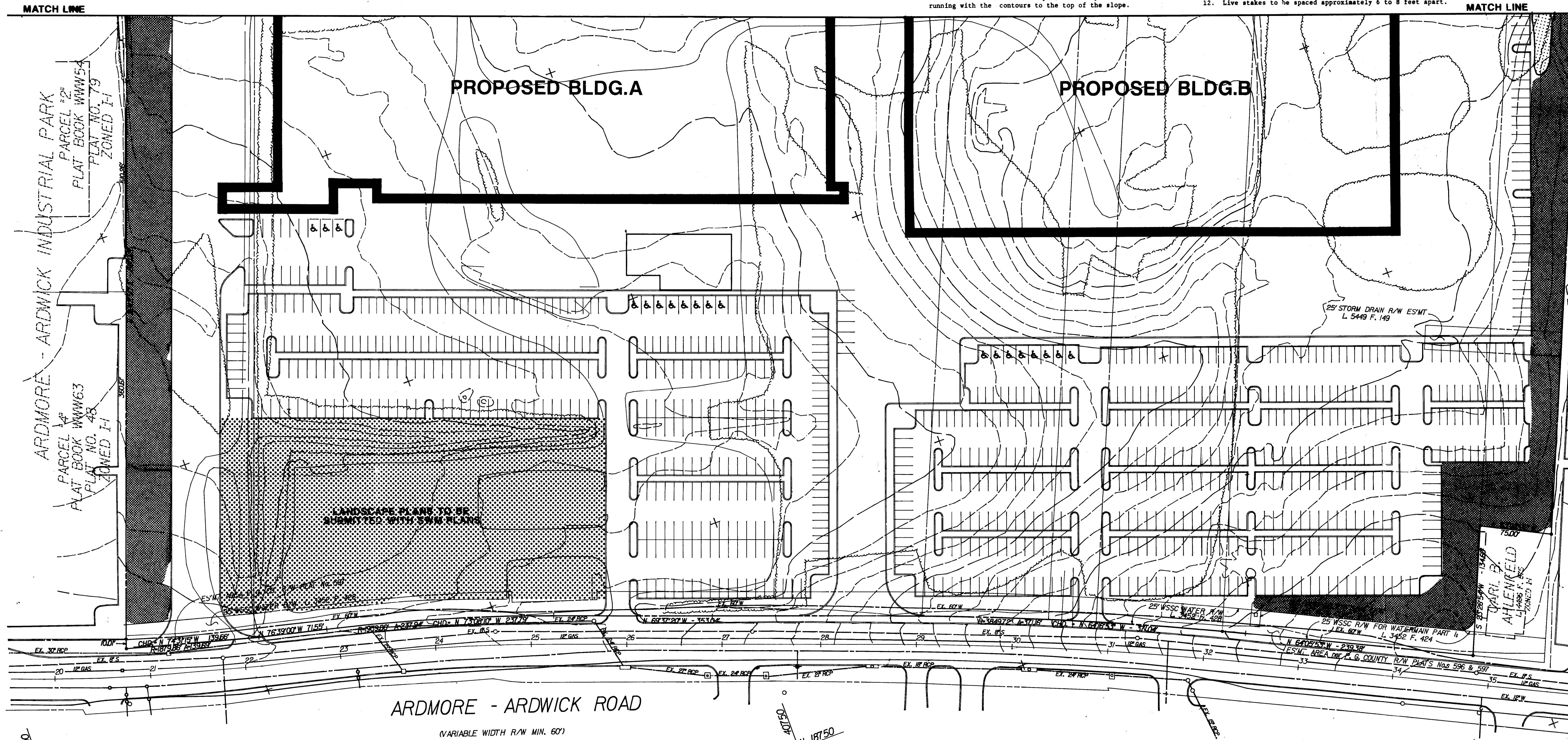


## NOTES:

- Installation of cuttings to occur in the dormant season, generally October to March.
- Cuttings for bundles and live stakes to be alive with side branches removed and bark intact.
- The ends of cuttings to be cleanly cut. For live stakes, the butt end to be cleanly cut on an angle for easy insertion into the soil, and the top cut square.
- Cuttings to be kept fresh and moist and installed the same day that they are cut into appropriate lengths.
- Live fascines to be assembled with 12 to 15 cuttings, approximately 6 feet in length and 1 to 2 inches in diameter to be wired together in bundles.
- The fascines to be placed horizontally and continuously in trenches beginning at the bottom of the slope.
- Trenches to be 1 to 2 foot depth, 5 feet apart and running with the contours to the top of the slope.
- Dead stout stakes and live stakes to secure the fascines as shown by the detail.
- Dead stout stakes 7 to 8 feet in length to be driven directly through the fascine bundles to be flush with the top of the bundle. The stakes to be spaced three feet apart and additional stakes used at the connections of the bundles.
- Soil to be placed in the trenches along the sides of the bundles. The bundles to be walked on to firm them with the soil.
- Live stakes 2 to 3 feet in length to be tamped with a dead blow hammer 4/5 of their length into the ground, at right angle to the slope and staggered between the dead stout stakes on both sides of the fascine bundle. In firm soil, an iron bar to be used to form the pilot hole. Any cuttings that split during the tamping to be replaced. Soil to be firmed around the live stakes.
- Live stakes to be spaced approximately 6 to 8 feet apart.



VICINITY MAP  
SCALE: 1" = 2000'



Approved  
TCP II/1/90  
4/29/90  
Lonne J. Law

## LEGEND

- TREE PRESERVATION AREA
- AFFORESTATION / REFORESTATION AREAS
- STORM WATER MANAGEMENT AREAS
- POSSIBLE WETLAND MITIGATION AREA
- LIMITS OF DISTURBANCE

## SITE DATA

TOTAL SITE AREA	43.03 ACRES
FLOOD PLAIN AREA	± 1.4 ACRES
WOODLAND CONSERVATION AREA REQUIRED	± 4.2 ACRES
WOODLAND CONSERVATION AREA PROVIDED	± 4.9 ACRES
TOTAL AFFORESTATION / REFORESTATION AREA PROVIDED	± 4.0 ACRES

## GENERAL NOTES

- Additional landscaping to be provided in accordance with the requirements of the following:
  - Prince George's County Landscaping Manual.
  - Prince George's County Watershed Protection Branch landscape criteria for stormwater management.
- Tree protection device to be installed in accordance with the detail for three strand arched wire fencing.
- Crack Willow cuttings to be planted in accordance with the detail and specifications for Live Fascines.
- Afforestation areas in the R-use 50 right-of-way will require written approval from the Maryland Dept. of Transportation to be submitted to the Prince George's County Division of Natural Resources.

## PLANT SCHEDULE

Quantity per Acre	Botanical Name	Common Name	Size	Remarks
50	Salix fragilis	Crack Willow	6' Length 1-2" Diameter	Cuttings Wired in Bundles
100	Quercus rubra	Red Oak	1-2' Height	Seedlings
200	Liquidambar styraciflua	Sweet Gum	1-2' Height	Seedlings
100	Acer rubrum	Red Maple	1-2' Height	Seedlings
100	Pinus virginiana	Virginia Pine	1-2' Height	Seedlings

\* See detail and specifications for Live Fascines.

## MANAGEMENT PLAN

- The landscape contractor to inspect all afforestation/ reforestation areas according to the following schedule:
 

Year	No. Inspections	Time of Year
1	3	March to April July to August October to November
2	2	April to May September to October
3	2	April to May September to October
- Inspection to include a recordation of the general health and vigor of the plants and specific adjustments or replantments to be reported.
- Fertilization and watering during years 1 to 3 to be done by the landscape contractor on an as needed basis.
- Replacement seedlings to be installed by the landscape contractor as needed to maintain losses below 50% up to the end of the third year from the time of planting.
- Mulch depth to be maintained in all afforestation/ reforestation areas up to the end of the third year from the time of planting.

# TREE CONSERVATION PLAN

No.	REVISION	DATE	BY
1.	NATURAL RESOURCES COMMENTS	2-19-90	G. L. H.



ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS  
**GREENHORNE & O'MARA, INC.**  
9001 EDMONSTON ROAD, GREENBELT, MARYLAND 20770  
(301) 982-2800

ANNAPOLIS, MD • ATLANTA, GA • AURORA, CO • BALTIMORE, MD • CULPEPER, VA • DULUTH, GA • EXPORT, PA • FAIRFAX, VA  
LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL

## TREE CONSERVATION PLAN

**United Parcel Service**  
PARCEL DISTRIBUTION CENTER / LANOVER  
LANHAM (20TH) ELECTION DISTRICT  
PRINCE GEORGE'S COUNTY, MARYLAND

DESIGN NO. SCALE 1" = 50'

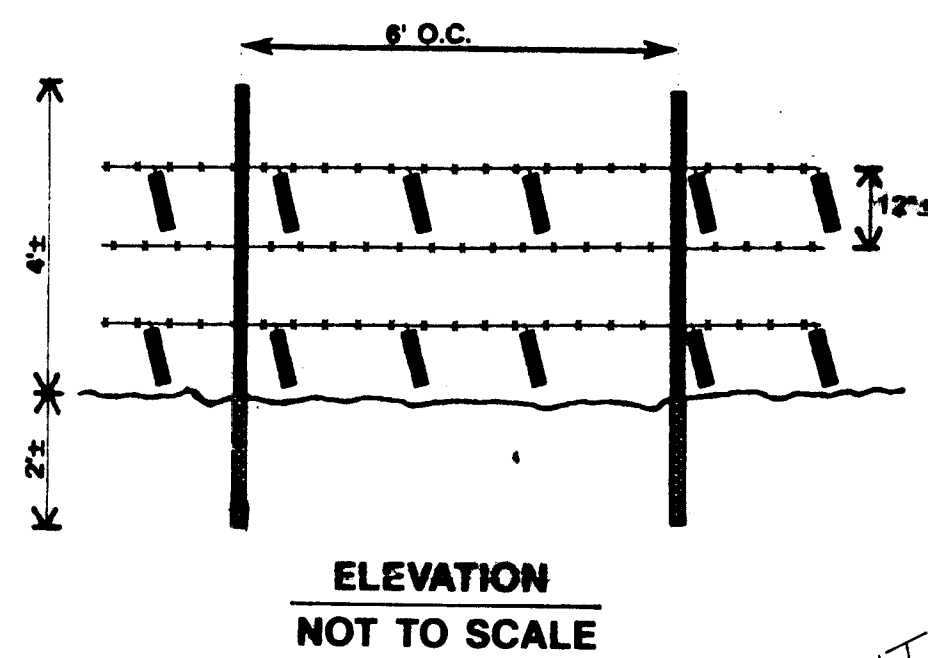
DRAWN BY: [Signature]  
CHECKED: [Signature]  
DATE: JAN 90  
JOB No. [Blank]  
FILE No. [Blank]



# LEGEND

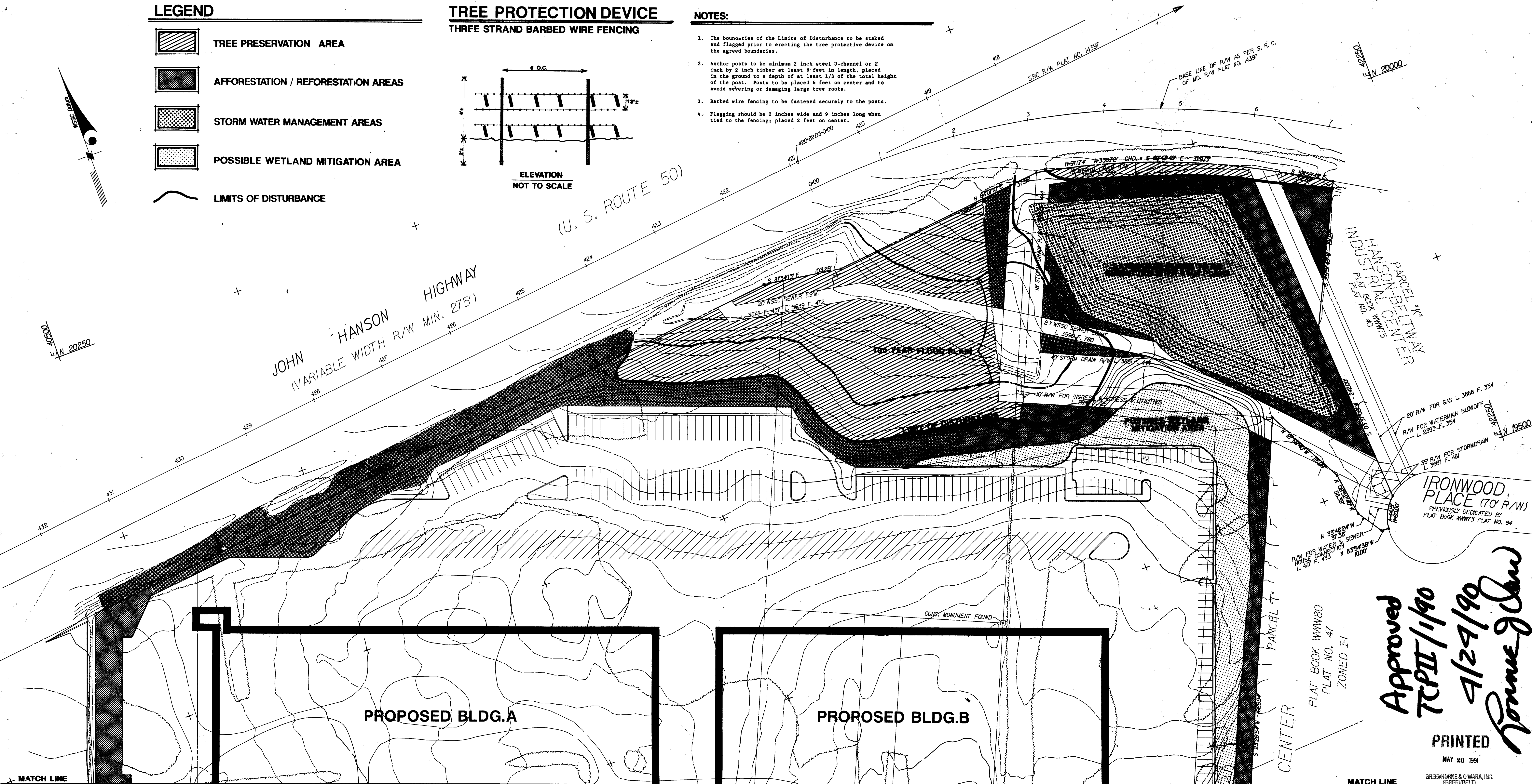
- TREE PRESERVATION AREA
- AFFORESTATION / REFORESTATION AREAS
- STORM WATER MANAGEMENT AREAS
- POSSIBLE WETLAND MITIGATION AREA
- LIMITS OF DISTURBANCE

# TREE PROTECTION DEVICE THREE STRAND BARBED WIRE FENCING



# NOTES:

- The boundaries of the Limits of Disturbance to be staked and flagged prior to erecting the tree protective device on the agreed boundaries.
- Anchor posts to be minimum 2 inch steel U-channel or 2 inch by 2 inch timber at least 6 feet in length, placed in the ground to a depth of at least 1/3 of the total height of the post. Posts to be placed 6 feet on center and to avoid severing or damaging large tree roots.
- Barbed wire fencing to be fastened securely to the posts.
- Flagging should be 2 inches wide and 9 inches long when tied to the fencing; placed 2 feet on center.



# SEQUENCE OF OPERATIONS

Obtain the rough grading permit from the Prince George's County Department of Licenses and Permits and proceed with the Sequence of Construction as outlined in the Sediment Control Plan for Rough Grading and for other applicable sediment control plans for phased construction. In addition to the applicable procedures for grading and sedimentation control the following procedures apply to the Tree Conservation Plan:

- Stake and flag the proposed boundaries of the Limits of Disturbance for Tree Preservation areas.
- Obtain agreement for the boundaries of the Limits of Disturbance for tree preservation areas from the Prince George's County Division of Natural Resources.

- Obtain approval from the Prince George's County Division of Natural Resources for the removal of inappropriate trees which can be selectively cleared along the Limits of Disturbance and remove the inappropriate trees.
- Adjust the stakes and flags as necessary to the agreed boundaries of the Limits of Disturbance for tree preservation areas.
- Erect the tree protective device(s) on the agreed boundaries of the Limits of Disturbance.
- Begin clearing and grubbing operations in accordance with the Sediment Control Plan for Rough Grading and for other applicable sediment control plans for phased construction.
- Chip the appropriate on-site vegetative debris for use as mulch for the afforestation/reforestation areas and stock-pile chips in an area to remain undisturbed but not within a tree preservation area.

- Stock-pile the existing topsoil free of stumps, roots and other debris in an area to remain undisturbed, but not within a tree preservation area.
- Upon completion of rough grading, fine grade all disturbed areas that are to be planted in accordance with the Tree Conservation Plan and the Landscape Plans.
- Before stabilization, assess the final soil condition and the need for conditioning and/or amendments in the afforestation/reforestation areas and the required landscape areas.
- Obtain approval for the soil amendment from the Prince George's County Division of Natural Resources.
- Upon completion and approval of the soil amendments apply stock-piled topsoil not used in soil conditioning to all afforestation/reforestation areas and topsoil landscape areas to a uniform depth.

- During the dormant season, generally October to March, stabilize the afforestation/reforestation areas with the Crack Willow cuttings in accordance with the details and specifications for Live Fascines.
- Also during the dormant season plant the one to two foot seedlings listed in the plant schedule at approximately ten feet on center between the live fascines. Plant the seedlings in a random pattern so that the selected species are distributed throughout the afforestation/reforestation areas.
- Stabilize afforestation/reforestation areas during non-dormant periods, generally April to September, in accordance with sedimentation and erosion control practices.
- Remove the stabilization materials applied in the non-dormant period for planting the afforestation/reforestation areas during the dormant period.

- Apply wood chip mulch to the live fascine areas at a 1 to 2 inch depth.
- Apply wood chip mulch to all seedling planting areas at a depth of 4 to 6 inches.
- Post moving stakes to denote where lawn is to be maintained adjacent to the afforestation/reforestation areas.
- Remove the tree protective device(s).
- Apply wood chip mulch to the existing woodland edge in an area 20 feet in along the edge and spread from an inch thick on the inside edge to a depth of 4 to 6 inches on the outside edge.
- Conduct the Management Plan.

# TREE CONSERVATION PLAN

No.	REVISION	DATE	BY
1.	NATURAL RESOURCES COMMENTS	3/19/90	G.G.B.



ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS  
**GREENHORNE & O'MARA, INC.**  
 9001 EDMONSTON ROAD, GREENBELT, MARYLAND 20770  
 (301) 982-2800  
 ©Latest Date Hereon  
 ANNAPOLIS, MD • ATLANTA, GA • AURORA, CO • BALTIMORE, MD • CULPEPER, VA • DULUTH, GA • EXPORT, PA • FAIRFAX, VA  
 LEESBURG, VA • MANASSAS, VA • ORLANDO, FL • RALEIGH, NC • ROCKVILLE, MD • TAMPA, FL • WEST PALM BEACH, FL

# TREE CONSERVATION PLAN

**United Parcel Service**  
 PARCEL DISTRIBUTION CENTER / LANDOVER  
 LANHAM (20TH) ELECTION DISTRICT  
 PRINCE GEORGE'S COUNTY, MARYLAND

DESIGN	SCALE 1" = 50'
DRAWN BY	TCP-2
CHECKED	SHEET
DATE	JAN 90
JOB No.	
FILE No.	

Approved  
 TCP II / 1/90  
 4/24/90  
 Ronnie J. Shaw

PRINTED

MAY 20 1991

GREENHORNE & O'MARA, INC.  
 (CORPORATE)