TREE CONSERVATION PLAN II

SHEET INDEX

LANDBAY:	SDP:	TCP II:
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Q		94/04
R		94/04

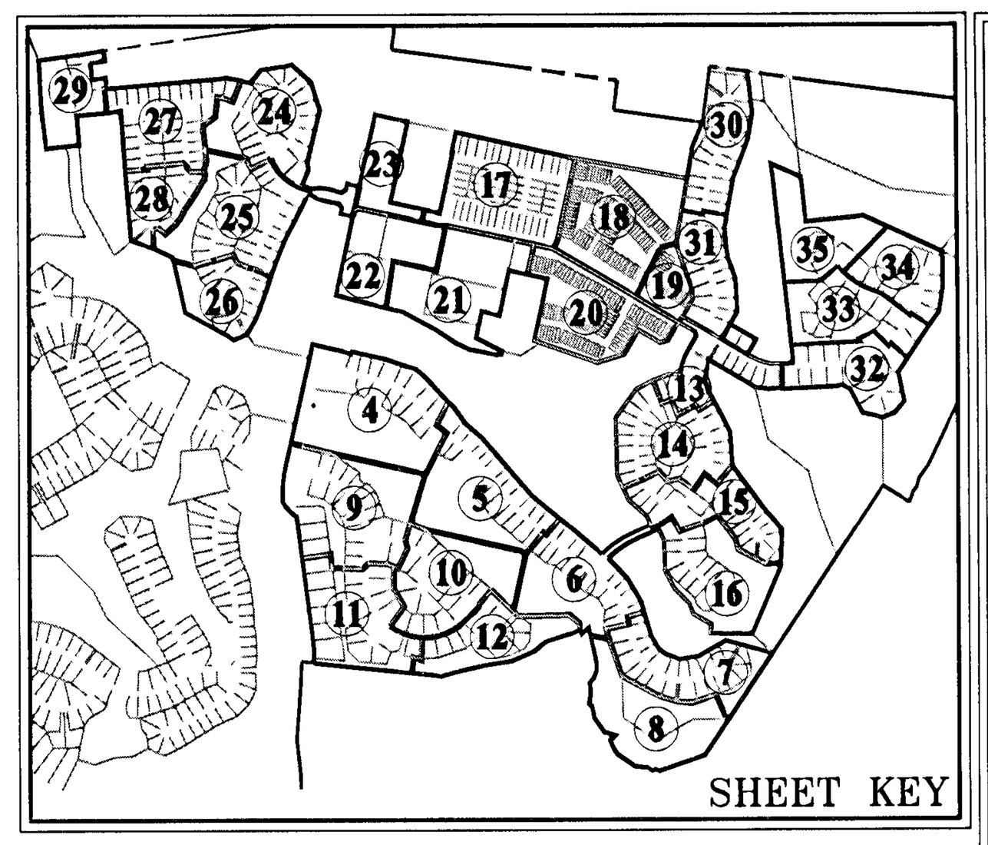
LIBER/FOLIO REFS.

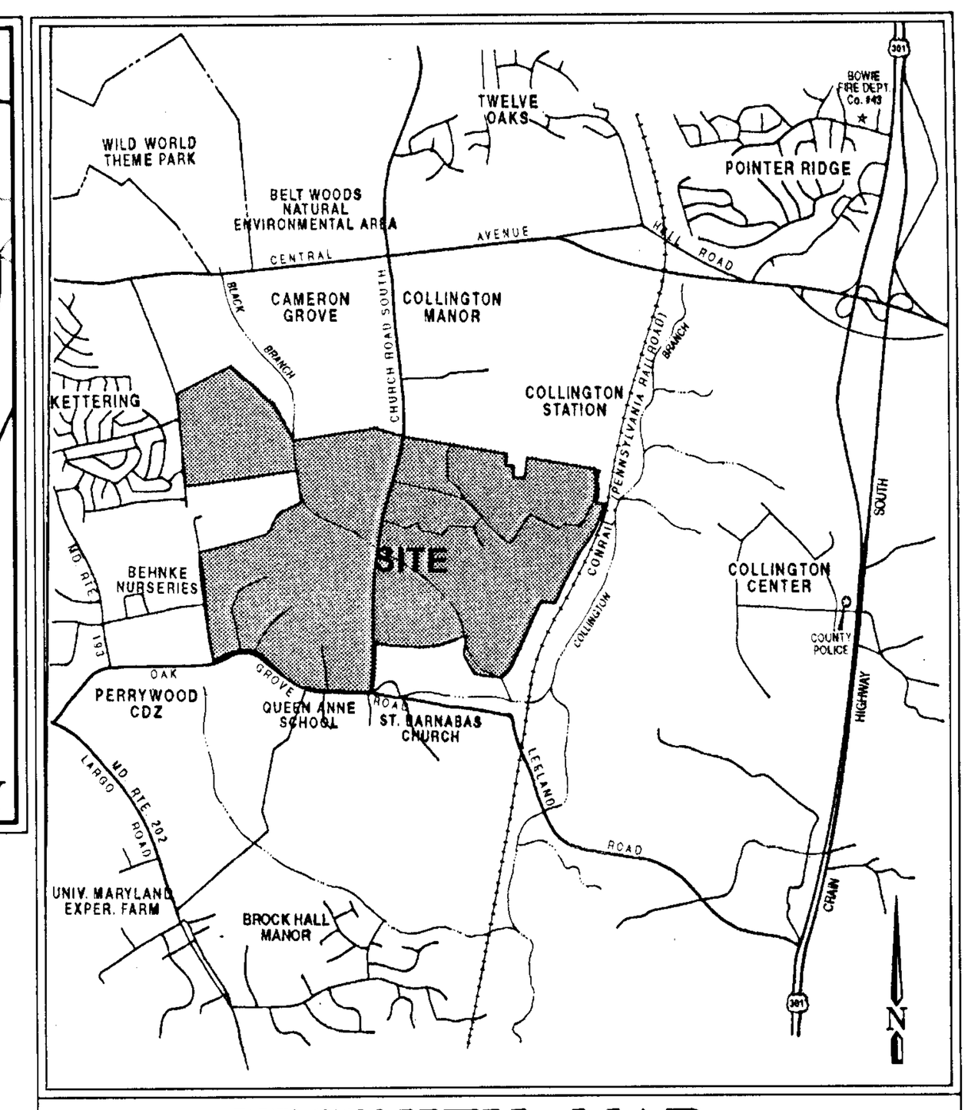
OWNER	L/F	PARCEL	ACRES
ALBERT TURNER ET. AL.	3899/840	53	4.00
ALBERT TURNER ET. AL.	3899/840	53	56.66
ALBERT TURNER ET. AL.	3951/609	52	9.86
M.C.D. EMPLOYEES ASSOCIATES	4038/283	31	57.45
ALBERT TURNER ET. AL.	5550/191	3	44.00
ALBERT TURNER ET. AL.	5550/191	3	210.31
ALBERT TURNER ET. AL.	5550/191&194	10	206.97
ALBERT TURNER ET. AL.	5550/191	3	6.00
ALBERT TURNER ET. AL.	5550/191	10	1.00
PAUL A. BATSON ET. AL.	5134/347	32	0.54
ALBERT TURNER ET. AL.	5619/210	32	57.50
MARTHA BEALL ET AL TRUSTEES	9639/641	2	3.00
MARTHA BEALL ET AL TRUSTEES	9639/641	2	265.72

NOTE: ALL UNDISTURBED AREAS MUST BE FIELD INSPECTED WITH MNCPPC AND THE CONTRACTOR PRIOR TO PLANTING TO DETERMINE BOTH THE NEED FOR AND METHODS OF INVASIVE SPECIES CONTROL, AND THE POSSIBILITY OF REDUCTION IN THE NUMBER OF TREES TO BE PLANTED BASED UPON ANY NATURAL REGENERATION WHICH MAY HAVE OCCURRED WITHIN THE PLANTING AREAS.

NOTE: PRIOR TO CONSTRUCTION OF ANY TRAIL ON LAND TO BE DEDICATED TO MNCPPC, THE PROPOSED LOCATION SHALL BE FIELD LOCATED AND APPROVED BY MNCPPC PARKS DEPARTMENT. FOR ALL OTHER TRAILS THE PROPOSED LOCATION SHALL BE FIELD LOCATED AND APPROVED BY ENVIRONMENTAL PLANNING SECTION AND THE DER INSPECTOR.

SEE SHEET 2 FOR FOREST CALCULATIONS TABLES.





VICINITY MAP
PRINCE GEORGES COUNTY
NTS

GENERAL NOTES - PHASE I

Zone	L-A-C & R-L
Existing Water Service Area	W-4C
Existing Sewer Service Area	S-3
Proposed Sewer	Public
Council District	6
Tax Map Reference	69,70,76,77
WSSC Map Reference	201NE12/13, 201SE12/13
Basic Plan Reference	A8427, A8578
CDP Reference	CDP-9902, CDP-9903
Preliminary Plan Reference	#4-01032
Planning Area	Bowie/Collington
Boundary	Surveys by Charles P. Johnson & Associates, Inc. & M-K Enterprises
Topography	Two foot Aerial
Wetlands	Delineated by McCarthy & Assoc., Corps of Engineers permit #02-NT-0257/200264343

1. In no event shall the maximum number of dwelling units exceed 1,096 in the R-L zone or 52 in the L-A-C zone.
2. This development proposes private streets pursuant to section 24-128(b)(14) of the subdivision regulations. Gates, Guardhouses or other buildings or structures that are in keeping with the overall development scheme may be located within these street rights of way. The use of private roads in this subdivision is approved by Bill # CB-72-2000.
3. There are no known cemeteries on this site.
4. All golf cart paths shall be field located in consultation with the Environmental Planning Section.
5. On-street parking shall be prohibited throughout the proposed development.
6. Public utilities shall be buried wherever possible on site.
7. All existing structures to be removed unless otherwise noted on plan.
8. All building sitings are conceptual unless building ties are shown.
9. This plan should not be used as a legal document for representation of bearings, distances, lot square footages and easements. For recorded information, please see record plats or applicable recorded documents.
10. There are no wetland mitigation areas within this Phase.
11. The A-44 right-of-way shown on previously approved plans has been removed pursuant to City of Bowie CR11-2006 adopted by the Bowie City Council on February 11, 2006.
12. This site is subject to RFA Conditions and Permit Triggers.
13. Minimum residential square footage is 2,200 square feet.
14. This plan covers stormwater management concept approvals as follows:
    - Overall project - #6397-2001-dated 10/1/2012
    - Landbay A - 42867-2002-00 (3/10/2008-complete) Landbay B – 2719-2004-00 (5/4/2013)
    - Landbay C – 2723-2004-02 (5/4/2013) Landbay F – 23239-2004-00 (5/4/2013)
    - Landbay G – 23535-2004-00 (3/10/2008-complete) Landbay H – 23245-2004-01 (10/1/2012)
    - Landbay I – 16665-2003-02 (3/10/2008-complete) Landbay J – 23905-2003-03 (5/4/2013)
15. This SDP is subject to a declaration of covenants and restrictions recorded in Liber 20001 at Folio 120.
16. A declaration of covenants and access easement for bus service was recorded in Liber 20319 at Folio 116. Bus service was suspended per Planning Board memorandum dated 6 November 2012.
17. Prior to permits, a final plat shall be recorded pursuant to Section 24-108(a)(3) for a lot line adjustment that incorporates the entire Mary Bowie Lane slip-lane within Part of Parcel A and re-establishes the 10-foot PUE on Parcel 24 and Parcel PP.

Prince George's County Planning Department, M-NCPPC
Environmental Planning Section
TYPE 2 TREE CONSERVATION PLAN APPROVAL
TCPII – 109-03

	Approved by	Date	DRD #	Reason for Revision
00	JOHN MARKOVICH	04/15/04	SDP-0308	Approval of Landbays A, B, C, I & J
NA		03/18/15	SDP-0308-01	Fencing, tot lots; staff level approval
01	K. FINCH	10/10/06	SDP-0308-02	Remove A-44 R/W, Malboro clay
02	K. FINCH	07/10/07	SDP-0308-03	Revise PMA in Landbay "J"
NA		04/17/08	SDP-0308-04	Architectural revision; staff level
NA		02/04/09	SDP-0308-05	Urban Design revisions; staff level
03	K. FINCH	10/07/10	SDP-0610	Add Landbays D and E
04	K. FINCH	07/11/13	SDP-0308-06	Slip lane to GC, Sewer outfall in D & E
05	K Finch	2/28/17	SDP-0308-07	Revisions to LOD for Trail & bridge

TREE CONSERVATION PLAN CERTIFIED BY:

2/8/17 Sallie P. Stewart
Date: Sallie P. Stewart, RLA, ASLA
MD Registered Landscape Architect #612

STATE OF MARYLAND SALLIE PHILLIPS STEWART LICENSED LANDSCAPE ARCHITECT 612

Seal not valid without signature

THIS BLOCK IS FOR OFFICIAL USE ONLY

QR LABEL CERTIFIES THAT THIS PLAN MEETS CONDITIONS OF FINAL APPROVAL BY THE PLANNING BOARD, ITS DESIGNEE OR THE DISTRICT COUNCIL.

M-NCPPC APPROVAL

PROJECT NAME: OAK CREEK CLUB-PH 1

PROJECT NUMBER: SDP-0308-07

FOR CONDITIONS OF APPROVAL SEE SITE PLAN COVER SHEET OR APPROVAL SHEET REVISION NUMBERS MUST BE INCLUDED IN THE PROJECT NUMBER.

PLANNER/ENGINEER/SURVEYOR
CHARLES P. JOHNSON AND ASSOCIATES
1751 ELTON ROAD
SILVER SPRING, MARYLAND 20903 • (301) 434-7000

LEGAL COUNSEL
LAW OFFICES OF NORMAN D. RIVERA, LLC
17251 MELFORD BOULEVARD • SUITE 200
BOWIE, MARYLAND 20715 • (301) 352-4973

DEVELOPER
NVR MS CAVALIER OAK CREEK OWNER, LLC
11700 PLAZA AMERICA DR. SUITE 310
RESTON, VA 20190 • (703) 649-5100

ENVIRONMENTAL CONSULTANT
McCARTHY AND ASSOCIATES
14458 OLD MILL ROAD • SUITE 201
UPPER MARLBORO, MARYLAND • (301)627-7505

M.N.C.P.P.C. APPROVALS

PROJECT NAME: OAK CREEK CLUB

PROJECT NUMBER: SDP-0610

For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet
The Revision Listed Below Apply to this Sheet

Approval or Revision #	Approval Date	Reviewer's Signature	Certification Date
	11-01-07	RUTH GROVER	10-13-10
01	01-08-15		

If this Approvals Block has been duplicated or modified in any way by digital or other methods of reproduction, the signature of a licensed engineer, architect or landscape architect below guarantees the plans are the approved certified plans:

Signature: ____________

Title: ____________

M.N.C.P.P.C. APPROVALS

PROJECT NAME: OAK CREEK CLUB

PROJECT NUMBER: SDP-0308

For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet
The Revision Listed Below Apply to this Sheet

Approval or Revision #	Approval Date	Reviewer's Signature	Certification Date
	11-10-03	RUTH GROVER	05-03-04
02	10-10-06	RUTH GROVER	10-11-06
06	06-26-13	EPS	07-12-13

If this Approvals Block has been duplicated or modified in any way by digital or other methods of reproduction, the signature of a licensed engineer, architect or landscape architect below guarantees the plans are the approved certified plans:

Signature: ____________

Title: ____________

UPDATES/REVISIONS :
- 10/15/07 ADD LANDBAY D & E TO TCP 109/03 RPI
- 08/31/10 SUBMIT FOR FINAL REVIEW OF TCPII/109/03-03 SPS
- 09/21/10 SUBMIT FOR CERTIFICATION OF TCPII/109/03-03 SPS
- 04/03/13 UPDATE CLUBHOUSE & MARY BOWIE PARKWAY SPS
- 6/7/13 SUBMIT FOR CERTIFICATION OF SDP-0308/06, APPROVAL OF SLIP-LANE SPS
- 02/23/15 REVISE PER CONDITIONS OF SDP-0610/01 APPROVAL SPS

UPDATES/REVISIONS :
- 08/20/03 ADDRESSED P&P COMMENTS MLB
- 09/23/03 ADDRESSED REFERRAL COMMENTS SPS
- 11/20/03 ADDRESSED SDP APPROVAL COMMENTS. MLB
- 02/09/04 SUBMIT DRAFT SIGNATURE SET MLB
- 5/24/06 UPDATED PER REVISIONS TO SDP. MLB
- 11/3/06 UPDATE OVERALL LAYOUT RPI

UPDATES/REVISIONS :
- 07/25/16 UPDATE TO REFLECT CHURCH ROAD DESIGN SPS
- 01/03/17 REMOVE PARK PARCEL I SPS

TCP II - 109 - 03 - COVER SHEET

OAK CREEK CLUB

QUEEN ANNE (7TH) ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

CPJ Associates
Charles P. Johnson & Associates, Inc.
PLANNERS • ENGINEERS • LANDSCAPE ARCHITECTS • SURVEYORS
1751 ELTON ROAD SUITE 300 SILVER SPRING, MARYLAND 20903
Phone:(301)434-7000 E-mail:ss@cpja.com Fax:(301)434-9394
FREDERICK, MD FAIRFAX, VA

CLIENT: NVR MS CAVALIER OAK CREEK OWNER, LLC
11700 PLAZA AMERICA DR.
SUITE 310
RESTON, VA 20190

PRELIMINARY PLAN NO:	4-01032
SITE PLAN NO:	SDP-0308 & SDP 0610
DESIGN	SPS
DRAFT	RPI
DATE	OCT. 2007
SCALE	1"300'
SHEET	1 OF 35
FILE NO.:	31-102-22.5 D

Plotted: Feb. 9, 2017

Dwg: N:\31100\dwg\22-109.03 COVER Xrefs: TOPO-EA/TOPO-WE/21-EA/21-GOLF/21-WE/22-WE/22-EA/21-099-PH5

Phased Woodland Conservation Worksheet for Prince George's County

SECTION 1 - Establishing Site Information (Enter acres for each zone)

Zone:	R-L	L-A-C	
Gross Tract:	884.75	33.00	
Floodplain:	78.50	0.00	
Previously Dedicated Land:	0.00	0.00	
Net Tract (NTA):	806.25	33.00	0.00

Include acreages only in columns for which there is a corresponding zone.

Property Description or Subdivision Name:	Oak Creek Club
TCP1 Number	TCPI-91-92
Is this site subject to the 1989 Ordinance?	No
Break-even Point (preservation acres) =	249.07
Acres of Net Tract clearing permitted w/o refore	170.24

SECTION II - Determining Woodland Conservation Requirements (Enter acres for each corresponding column)

Existing Woodland on Net Tract (acres)		419.31
Existing Woodland in Floodplain (acres)		72.24
Woodland Conservation Threshold (WCT) =	24.61%	206.51
Smaller of 11 or 13		206.51
Woodland above WCT		212.80

Plan Number: (This must be completed for each phase)	SDP-0306	SDP-0308 & SDP-0610	SDP-0411, 0610 & 1501	SDP-0417	MNCPPC			
Plan Phase or Name:	Golf Course	Landbays 'A'-'J'	Landbays 'M'-'Q'	Landbays 'K'-'L'	Park	Parcel "OO"	School/Park Site	
TCP2 Number for this Phase or Section	TCPII-97-95	TCPII-109-03	TCPII-94-04	TCPII-51-05	TCPII-96-06	Future	Future	
Revision Number	08	04	07	02	00			
Status	7/19/2016	Approved	pending	Approved	Approved			
Approval Date		7/11/2013		8/28/2014	9/22/2006			Total
Total area in this application (acres)	265.40	309.82	206.85	68.75	35.57	4.88	26.48	917.75
Floodplain area in this application (acres)	8.16	26.94	30.35	11.41	1.64	0.00	0.00	78.50
Net Tract area in the application (acres)	257.24	282.88	176.50	57.34	33.93	4.88	26.48	839.25
Woodland on the Net Tract for this phase (acres)	144.06	171.94	69.84	25.41	31.51			442.76
Woodland in the Floodplain for this phase	7.68	26.91	28.22	7.78	1.64			72.23
Woodland Cleared on Net Tract for this phase	64.77	133.95	16.95	7.68	16.02			239.37
Woodland Cleared in Floodplain for this phase	0.58	1.77	1.23	0.23	0.05			3.86
Off-site Woodland Clearing (1:1)	0.00	1.06	0.00	0.00	0.00			1.06
Off-site WCA being provided on this property (preservation)	18.00	0.00	0.00	0.00	0.00			18.00
Off-site WCA being provided on this property (aff/reforestation)	0.00	0.00	2.96	0.00	0.00			2.96
Cummulative acres of Net Tract Woodland cleared	64.77	198.72	215.67	223.35	239.37			
Cummulative acres of Floodplain woodland cleared	0.58	2.35	3.58	3.81	3.86			
Woodland Cleared above WCT (Smaller of 15 or 32)	64.77	198.72	212.80	212.80	212.80			
Woodland Clearing below WCT	0.00	0.00	2.87	10.55	26.57			
Clearing below WCT (2:1 replacement requirement)	0.00	0.00	5.74	21.11	53.15			
Replacement for clearing above the WCT (0.25 : 1)	16.19	49.68	53.20	53.20	53.20			
Replacement for clearing below the WCT (2 : 1)	0.00	0.00	5.74	21.11	53.15			
Afforestation Threshold (AFT) = 19.80%	0.00	0.00	0.00	0.00	0.00			
Cumulative Woodland Conservation Required	241.29	277.60	288.18	296.09	312.17			

Latest phase indicates cumulative requirement through that phase of work

SECTION III - Meeting the Requirements

								Total
Woodland Preservation	72.96	49.48	24.25	17.01	15.22			178.92
Afforestation/Reforestation	37.89	8.76	20.43	7.67	1.67			76.42
Natural Regeneration								0.00
Specimen & Historic Tree Credit (CRZ area * 2)								0.00
Forest Enhancement Credit (area * 0.25)								0.00
Area approved for fee-in-lieu/ PFA								0.00
Area approved for fee-in-lieu/ Non-PFA	0.12							0.12
Credit for Off-site Conservation on another property	8.06	22.36	1.58		3.98			35.98
Off-site WCA (preservation) being provided on this property	18.00							18.00
Off-site WCA (afforestation) being provided on this property			2.96					2.96
Total Woodland Conservation Provided	137.03	217.63	266.85	291.53	312.40			312.40
Woodland saved on this phase but not counted	-11.67	-11.49	25.68	0.72	0.27			3.51
Existing Net Tract Woodland in later phases	293.25	121.31	51.47	26.06	-5.45			486.64
Requirement Status per Phase					-5.217375 Shortage			

18.00 acres if Off-site WCA (preservation) being provided on this within limits of TCPII-97-95, for Largo Plaza-Target Store (TCPII-071-95)
2.96 acres if Off-site Wetland Mitigation being provided within the lmits of TCPII-94-04 for Karington (TCPII-126-05) in accordance with the requirements of COE Permit #02-NT-0257/200264343.
0.12 Ac. fee-in-lieu to be provided by the owner of the telecommunications monopole located on Golf Course Parcel 27 (TCPII-097-95).

Prepared by:
License Number: Signature

PARCEL	USE	NEIGH-BOR-HOOD	SHEET #	AREA (sq.ft)	AREA (Acs.)	EXISTING FOREST (sq.ft.)	RETAINED FOREST (sq.ft.)	CLEARED FOREST (sq.ft.)	RETAINED FOREST W/IN F.P. (sq.ft.)	RET. FOREST IN W.C.A. (sq.ft.)	W.C.A. (Acs.)
A	HOA/ROAD	A	4,5,6,7	239637	5.50	204613	0	204613	0	0	0.0
B	HOA	A	4	19145	0.44	19145	8415	10730	3297	5118	0.1
C	HOA	A	4	18961	0.44	5782	4107	1675	0	4107	0.1
D	HOA	A	4	22250	0.51	22250	16033	6217	0	16033	0.4
E	HOA	A	7	2561	0.06	2069	0	2069	0	0	0.0
F	HOA	A	7	2724	0.06	2724	0	2724	0	0	0.0
G	HOA	A	6	2391	0.05	2391	0	2391	0	0	0.0
H	HOA	A	4	30606	0.70	30606	15183	15423	4305	10878	0.2
I	MNCPPC	A	4,5,6,8,9,10	929524	21.34	1685830	1450767	235064	974247	476520	10.9
J	HOA	A	6	745089	17.10						
K	HOA	A	8	16664	0.38						
L	HOA	A		23416	0.54						
A	HOA/ROAD	B	9,10,11,12	167518	3.85	167518	0	167518	0	0	0.0
A1	HOA/ROAD	B	9	35238	0.81	35238	0	35238	0	0	0.0
F	HOA	B	9	14768	0.34	14768	6713	8055	0	6713	0.2
C	HOA	B	12	2576	0.06	2576	0	2576	0	0	0.0
D	HOA	B	9,11,12	281357	6.46	281357	247390	33967	1588	245803	5.6
D1	HOA	B	9	51474	1.18	51474	38087	13387	0	38087	0.9
E	HOA	B	10	35484	0.81	35484	34296	1188	0	34296	0.8
A	HOA/ROAD	C	13,14,15,16	275335	6.32	107867	0	107867	0	0	0.0
B	HOA	C	13	3188	0.07	0	0	0	0	0	0.0
C	HOA	C	15	2339	0.05	886	0	886	0	0	0.0
D	HOA	C	16	2531	0.06	2897	0	2897	0	0	0.0
E	HOA	C	13	1500	0.03	0	0	0	0	0	0.0
F	HOA	C	13	1378	0.03	0	0	0	0	0	0.0
G	HOA	C	13	273273	6.27	260966	221469	39497	0	221469	5.1
A	HOA/ROAD	D	30,31	91772	2.11	67526	0	67526	0	0	0.0
B	HOA	D		18083	0.42		0	0	0	0	0.0
C	HOA	D	31	2640	0.06	2640	0	2640	0	0	0.0
D	HOA	D		9778	0.22		0	0	0	0	0.0
E	HOA	D	31	2734	0.06	2734	0	2734	0	0	0.0
A	HOA/ROAD	E	32,33,34,35	161215	3.70	67775	0	67775	72070	0	0.0
B	HOA	E	33,34,35	430047	9.87	330186	300540	29646	16203	284337	6.5
C	HOA	E	33	17541	0.40	17541	5850	11691	0	5850	0.1
A	HOA/ROAD	F	17,18,19,20	134839	3.10	27976	0	27976	0	0	0.0
B	HOA	F	17	4311	0.10	0	0	0	0	0	0.0
C	HOA	F	17	4311	0.10	0	0	0	0	0	0.0
D	HOA	F	17	4311	0.10	1351	0	1351	0	0	0.0
E	HOA	F	17	2631	0.06	1906	0	1906	0	0	0.0
F	HOA	F	17	2631	0.06	0	0	0	0	0	0.0
G	HOA	F	17	2631	0.06	0	0	0	0	0	0.0
H	HOA	F	17	8286	0.19	0	0	0	0	0	0.0
A	HOA/ROAD	G	18,19,20	53031	1.22	330	0	330	0	0	0.0
B	HOA	G	18,19	418102	9.60	101489	84512	16978	0	84512	1.9
A	HOA	H	20	270994	6.22	61422	17680	43742	0	17680	0.4
A	HOA/ROAD	H1	21,22,23	48957	1.12	8080	0	8080	0	0	0.0
A-1	HOA/ROAD	H1	23	53803	1.24	36598	0	36598	0	0	0.0
K	HOA	H1	23	140235	3.22	64783	45788	18995	0	42220	1.0
L	HOA	H1	22	75270	1.73	75270	57352	17918	0	54929	1.3
D	HOA	H1	21	126756	2.91	69090	54291	14799	0	26962.54	0.6
F	HOA	H1	21	13136	0.30	5170	0	5170	0	0	0.0
G	HOA	H1	21	47802	1.10	5170	0	5170	0	0	0.0
H	HOA	H1	21	17636	0.40	5170	0	5170	0	0	0.0
I	HOA	H1	21	280347	6.44	5170	0	5170	0	161940.79	3.7
J	HOA	H1	21	5809	0.13	5170	0	5170	0	0	0.0
24	GOLF	H1	21	150322	3.45	21955	0	21955	0	877	0.0
A	HOA/ROAD	I	24,25,26	146592	3.37	17820	0	17820	0	0	0.0
A-1	HOA/ROAD	I	24	64213	1.47	1630	0	1630	0	0	0.0
B	HOA	I	26	2538	0.06	34	0	34	0	0	0.0
C	HOA	I	24,25,26	303825	6.97	280168	193672	86496	7863	185809	4.3
A	HOA/ROAD	J	27,28,29	180578	4.15	179275	0	179275	0	0	0.0
B	HOA	J	28	1912	0.04	1912.00	0	1912	0	0	0.0
C	MNCPPC	J	29	51093	1.17	51093	35972	14939	24680	11292	0.3
D	MNCPPC	J	29	85664	1.97	78074	64278	13809	57549	6729	0.2
F	HOA	J	29	20038	0.46	20038	13603	6701	5437	8166	0.2

TCP 109/03 WOODLAND PRESERVATION CALCULATIONS			
SYM.	SQUARE FEET	ACRES	SHEET
S-1	1345	0.03	4
S-2	10878	0.25	4
S-3	13424	0.31	4
S-4	9698	0.22	4
S-5	16033	0.37	4
S-6	58320	1.34	4
S-7	26497	0.61	4
S-8	4200	0.10	5
S-9	31107	0.71	5
S-10	1358	0.03	5
S-11	3507	0.08	5
S-12	46875	1.08	5
S-13	9552	0.22	6
S-14	5114	0.12	6
S-15	564	0.01	6
S-16	4550	0.10	6
S-17	12085	0.28	7
S-18	29145	0.67	8
S-19	73299	1.68	8
S-20	6713	0.15	9
S-21	20859	0.69	9
S-22	30858	0.71	9
S-23	17970	0.41	9
S-24	47189	1.08	9
S-25	71228	1.64	10
S-26	34296	0.79	10
S-27	27069	0.62	11
S-28	3458	0.08	11
S-29	56099	1.29	11
S-30	39315	0.90	12
S-31	52093	1.20	12
S-32	2087	0.05	12
S-33	62659	1.44	12
S-34	8153	0.19	15
S-35	88410	2.03	16
S-36	100731	2.31	16
S-37	22867	0.52	16
S-38	84512	1.94	18
S-39	3890	0.09	20
S-40	169	0.00	20
S-41	2359	0.05	20
S-42	10388	0.24	20
S-43	3773	0.09	4
S-44	239924	5.51	21
S-45	1837	0.04	22
S-46	181868	4.18	22
S-47	42220	0.97	23
S-48	68119	1.56	24
S-49	98307	2.26	25
S-50	6268	0.14	26
S-51	3396	0.08	26
S-52	7693	0.18	26
S-53	4526	0.10	29
S-54	2182	0.05	29
S-55	8187	0.19	29
S-56	8252	0.19	29
S-57	3019	0.07	29
S-58	4107	0.09	4
S-59	159	0.01	26
S-60	6804	0.16	30
S-61	4372	0.10	30
S-62	9268	0.21	30
S-63	2858	0.07	34
S-64	57951	1.33	34
S-65	45210	1.04	35
S-66	167967	3.86	35
S-67	8876	0.20	35
S-68	1033	0.02	35
S-69	6811	0.16	33
TOTAL	2145911	49.48	

TCP 109/03 REFORESTATION CALCULATIONS			
SYM.	AREA (S.F.)	AREA (Ac.)	SHEET #
UPLAND REFORESTATION			
UP-1	1972	0.05	3
UP-2	REMOVED	0.00	3
UP-3A	REMOVED	0.00	3
UP-3B	777	0.02	6
UP-4	8379	0.19	11
UP-5	10954	0.25	14
UP-6	2783	0.06	15
UP-7	25585	0.59	17
UP-8	19696	0.45	18
UP-9	5181	0.12	19
UP-10	4878	0.11	19
UP-11	3194	0.07	19
UP-12	27527	0.63	21
UP-13	85003	1.95	22
UP-14	REMOVED	0.00	23
UP-15	7833	0.18	24
UP-16	22737	0.52	25
UP-17	3225	0.07	25
UP-18	80169	1.84	33
UP-19	REMOVED	0.00	33
UP-20	5662	0.13	35
UP-21	2797	0.06	28
UP-22	577	0.01	30
UP-23	2683	0.06	30
SUBTOTAL	**321612**	**7.31**	
BOTTOMLAND REFORESTATION			
BO-1	1943	0.04	3
BO-2	285	0.01	3
BO-3	12752	0.29	3
BO-4	366	0.01	3
BO-5	666	0.02	3
BO-6	REMOVED	0.00	3
BO-7	REMOVED	0.00	8
BO-8	1125	0.03	8
BO-9	6166	0.14	10
BO-10	REMOVED	0.00	
BO-11	7586	0.17	28
BO-12	1270	0.03	28
BO-13	6619	0.15	28
BO-14	REMOVED	0.00	
BO-15	4356	0.10	33
BO-16	5992	0.14	4
SUBTOTAL	**49126**	**0.99**	
LARGE STOCK REFORESTATION			
LG-1	1372	0.03	3
LG-2	3652	0.08	15
LG-3	1638	0.04	14
LG-4	4136	0.09	18
LG-5	REMOVED	0.00	29
LG-6	REMOVED	0.00	29
SUBTOTAL	**10798**	**0.25**	
TOTAL	**370737**	**8.76**	
LANDSCAPE STOCK REFORESTATION			
LA-1	7105.96	0.16313	26
SUBTOTAL	7105.96	0.16313	
TOTAL	7105.96	0.16313	

UPLAND REFORESTATION AREA: acres
6.83 acres @ 350 1-3 gal. cont. trees/acre = 2324 trees

QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
284	Acer rubrum	Red Maple	3/4' - 1" cal. cont.	20' o.c.
284	Carya tomentosa	Mockernut Hickory	3/4' - 1" cal. cont.	20' o.c.
284	Liquidambar styraciflua	Sweet Gum	3/4' - 1" cal. cont.	20' o.c.
284	Quercus rubra	Red Oak	3/4' - 1" cal. cont.	20' o.c.
284	Liquidambar styraciflua	Sweet Gum	3/4' - 1" cal. cont.	20' o.c.
284	Quercus rubra	Northern Red Oak	3/4' - 1" cal. cont.	20' o.c.
310	Ilex opaca	American Holly	6-8' in height	8' o.c.
310	Pinus taeda	Loblolly Pine	6-8' in height	8' o.c.

BOTTOM-LAND REFORESTATION AREA: acres
1.05 acres @ 350 1-3 gal. cont. trees/acre = 378 trees

QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
41	Acer rubrum	Red Maple	3/4' - 1" cal. cont.	20' o.c.
34	Fraxinus pennsylvanica	Green Ash	3/4' - 1" cal. cont.	20' o.c.
48	Carpinus caroliniana	Ironwood	3/4' - 1" cal. cont.	20' o.c.
48	Liriodendron tulipifera	Tulip Poplar	3/4' - 1" cal. cont.	20' o.c.
48	Liquidambar styraciflua	Sweet Gum	3/4' - 1" cal. cont.	20' o.c.
48	Platanus occidentalis	Sycamore	3/4' - 1" cal. cont.	20' o.c.
48	Prunus serotina	Black Cherry	3/4' - 1" cal. cont.	20' o.c.
63	Ilex opaca	American Holly	6-8' in height	8' o.c.
63	Pinus taeda	Loblolly Pine	6-8' in height	8' o.c.

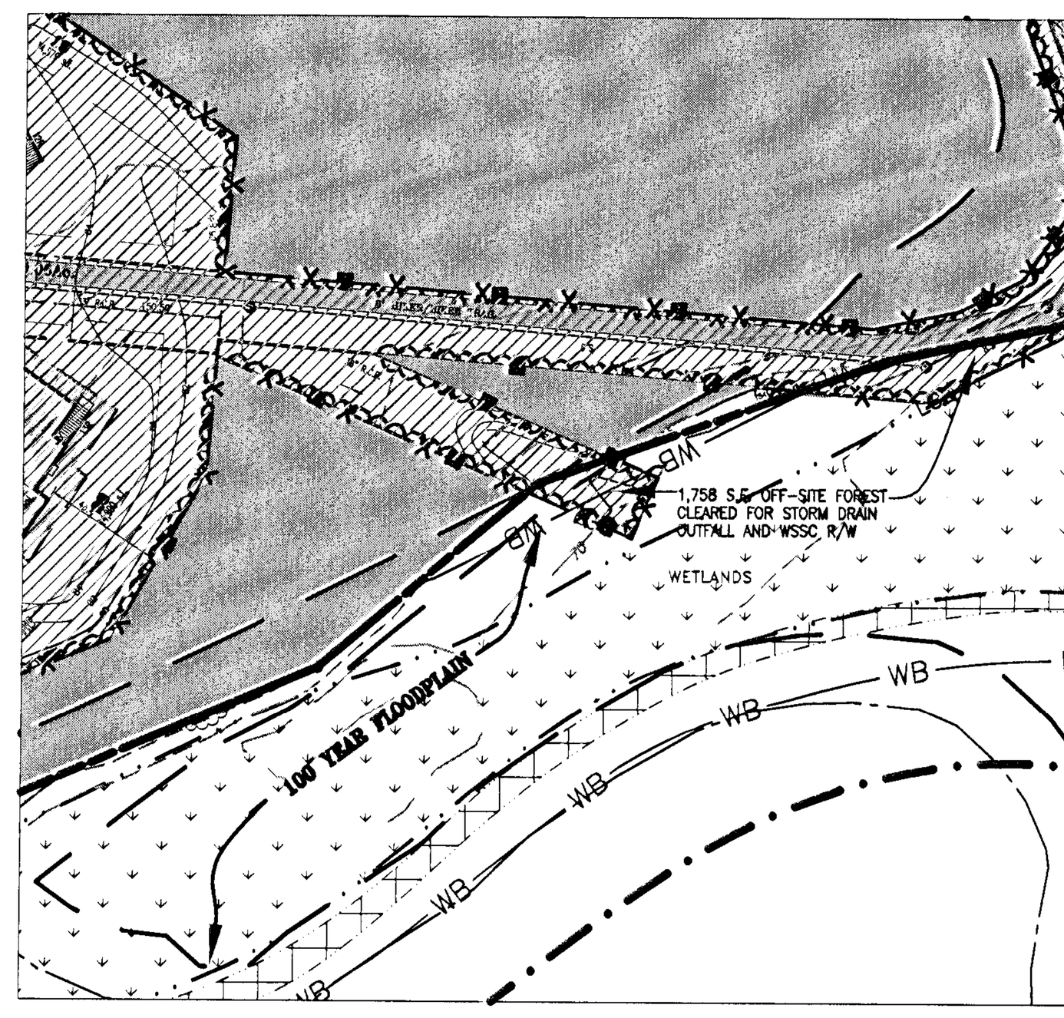
LARGE STOCK REFORESTATION AREA: acres
.27 acres @ 200 5-7 gal. cont. trees/acre = 53 trees

QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
13	Acer rubrum	Red Maple	1 1/2 -2" cal. B&B	20' o.c.
10	Liquidambar styraciflua	Sweet Gum	1 1/2 -2" cal. B&B	20' o.c.
10	Liriodendron tulipifera	Tulip Poplar	1 1/2 -2" cal. B&B	20' o.c.
10	Ilex opaca	American Holly	6-8' in height	8' o.c.
10	Pinus taeda	Loblolly Pine	6-8' in height	8' o.c.

LANDSCAPE STOCK REFORESTATION AREA: acres
0.16 acres @ 200 5-7 gal. cont. trees/acre = 32 trees

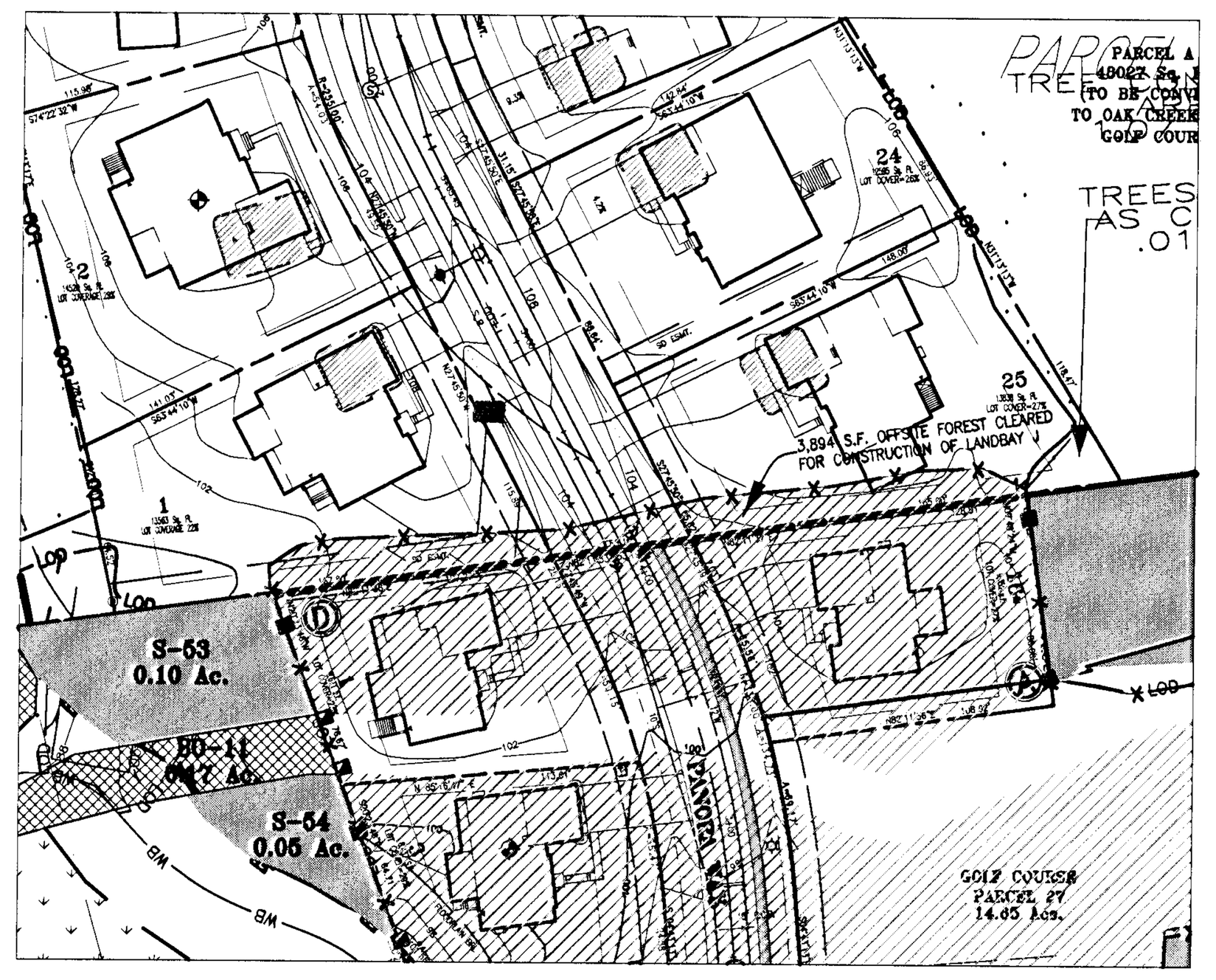
QTY.	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING
3	Acer rubrum	Red Maple	1 1/2 -2" cal. B&B	20' o.c.
3	Cercis canadensis	Redbud	1 1/2 -2" cal. B&B	20' o.c.
5	Magnolia soulangiana	Saucer Magnolia	1 1/2 -2" cal. B&B	20' o.c.
1	Quercus rubra	Red Oak	1 1/2 -2" cal. B&B	20' o.c.
12	Ilex opaca	American Holly	6-8' in height	8' o.c.
7	Pinus taeda	Loblolly Pine	6-8' in height	8' o.c.
15	Hydrangea quercifolia	Oakleaf Hydrangea	3 gal. Cont.	2' o.c.

GRAPHIC SCALE
100 0 50 100 200
SCALE : 1" = 100'



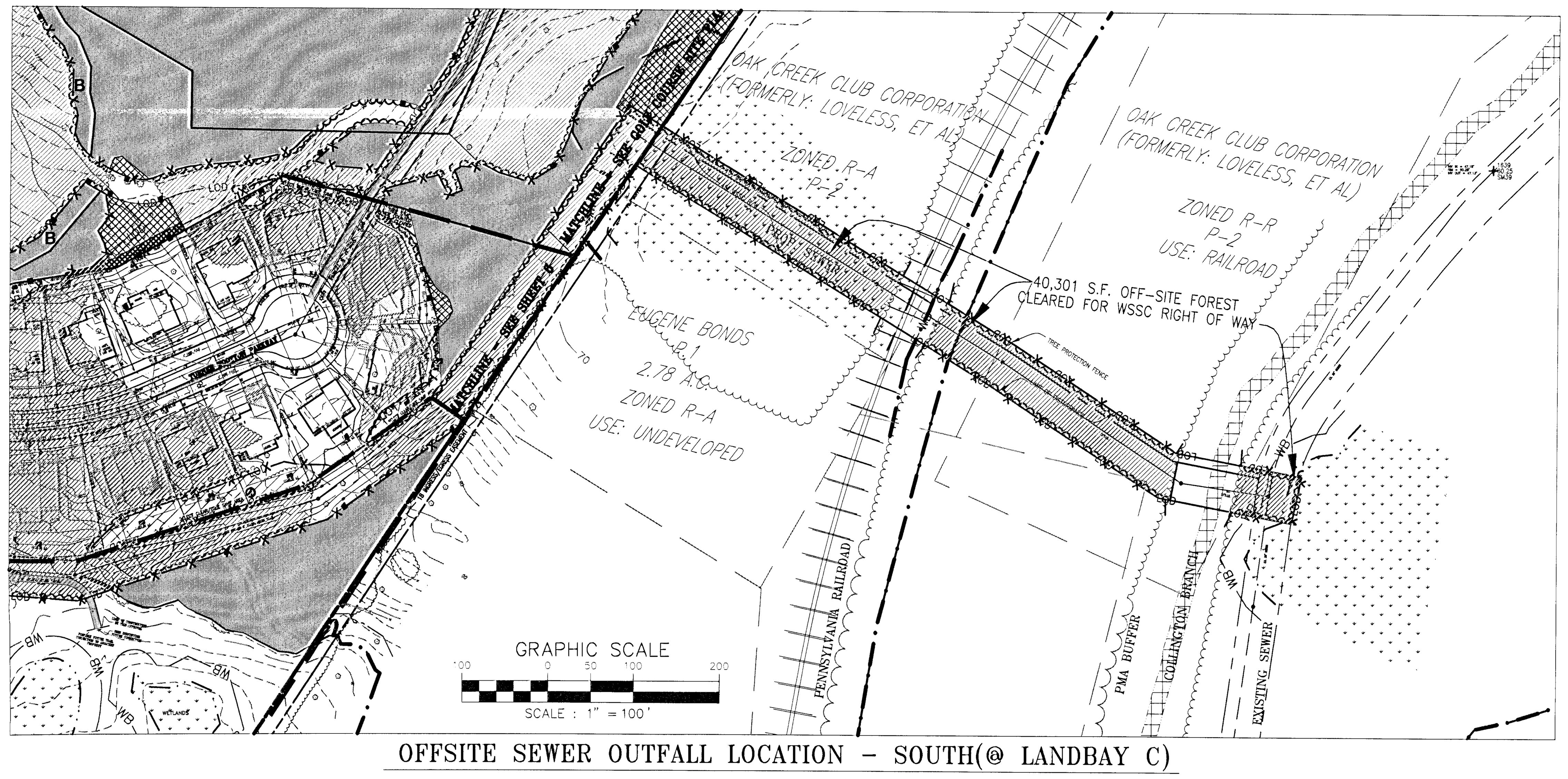
OFFSITE STORM DRAIN OUTFALL LOCATION SOUTH(@ LANDBAY B)

SCALE: 1"=70'



OFFSITE CLEARING FOR LANDBAY J (@ LANDBAY J & LANDBAY S)

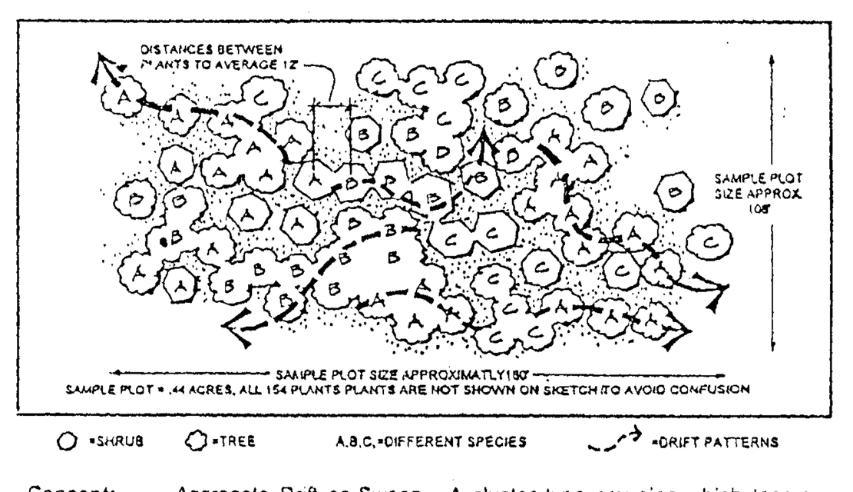
SCALE: 1"=70'



OFFSITE SEWER OUTFALL LOCATION - SOUTH(@ LANDBAY C)

SCALE: 1"=100'

PLANTING LAYOUT
(AGGREGATE DISTRIBUTION DRIFT THEORY)



Concept: Aggregate Drift or Sweep. A cluster type grouping which tapers or feathers out along the edges.

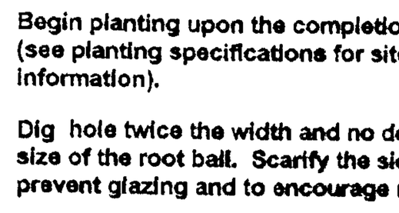
Example: Aggregate massing or drifts are one of the most common vegetation distribution patterns occurring in nature. Principle seed bearers are at the central core of the cluster with seed dispersal outwards, often windblown with densities thinning out along the fringes or extremities. Groupings blend through and into other groupings. Imagine the fallout of windblown milkweed seeds. They often appear as aggregate drifts, elongated and tear drop in shape.

Application: This does not mean that plants must be in a grid pattern, that drifts of shrubs cannot blend into groupings of trees or that groupings of same species cannot occur together. It simply means that the installer should meet the aforementioned forest conservation act criteria at the same time replicating natures aggregate drift patterns (see detail).

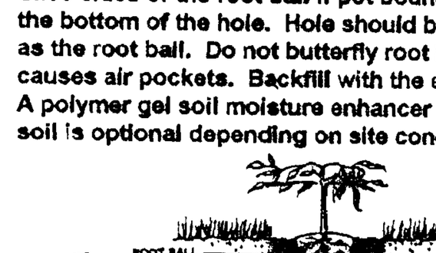
When using this theory to lay out a planting plan the size of the drifts will depend on the quantity of plants allocated, the scale of the site, and the careful consideration of the installer.

PLANTING METHOD
(1-3 gallon container grown stock)

1. **Begin planting upon the completion of site preparation (see planting specifications for site specific preparation information).**
2. **Dig hole twice the width and no deeper than the actual size of the root ball. Scarify the sides of the hole to prevent glazing and to encourage root penetration.**

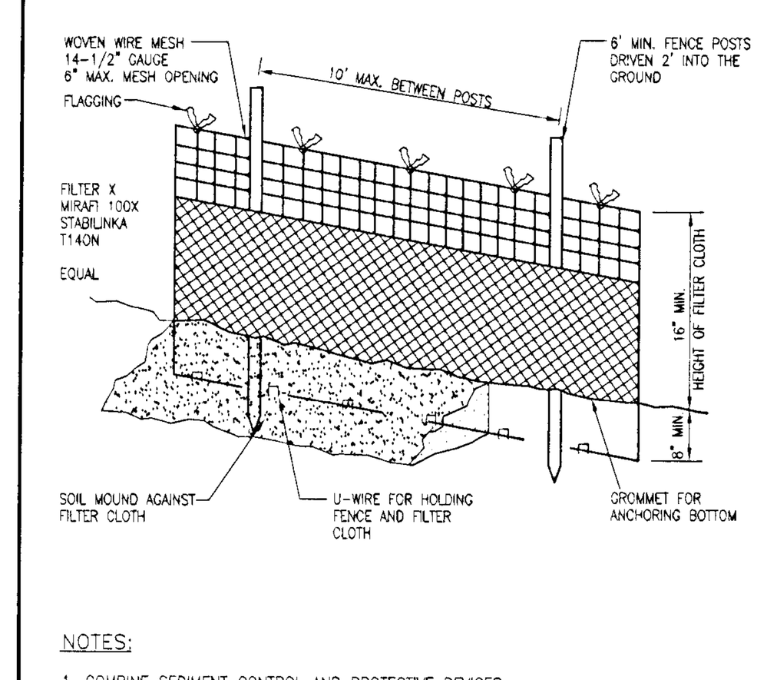


3. **Slice sides of the root ball if pot bound, and place onto the bottom of the hole. Hole should be the same depth as the root ball. Do not butterfly root ball, as this method causes air pockets. Backfill with the existing native soil. A polymer gel soil moisture enhancer mixed into backfill soil is optional depending on site conditions.**



4. **Tamp existing back fill soil around root ball. Avoid excessive tamping and other soil compacting activities.**
5. **No fertilizer is necessary at the time of planting because site specific fertilizer determined by soil test results was applied during site preparation.**
6. **Mulch with 3" of shredded hardwood mulch, shredded pinebark mulch or composted woodchips.**
7. **Water all plants at the time of initial planting.**

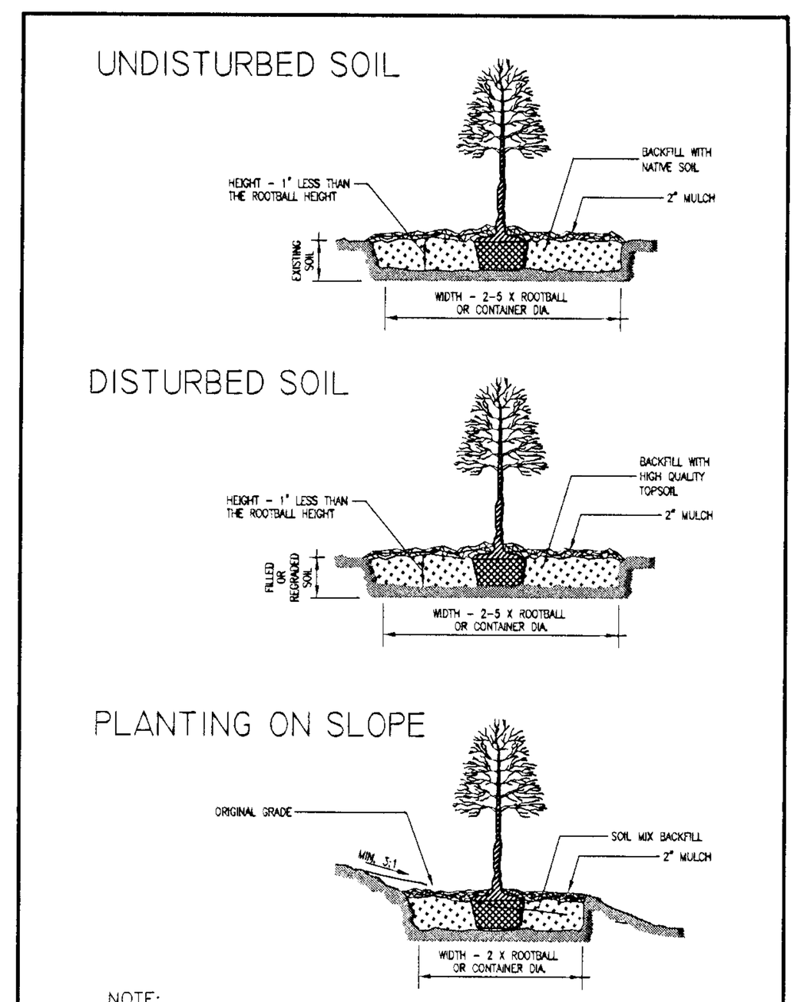
FILTER CLOTH ON WIRE MESH



NOTES:
1. COMBINE SEDIMENT CONTROL AND PROTECTIVE DEVICES.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED PRIOR TO INSTALLING DEVICES.
4. AVOID ROOT DAMAGE.
5. MOUND SOIL ONLY WITHIN THE LIMITS OF DISTURBANCE.
6. PROTECTIVE SIGNAGE IS REQUIRED.
7. ALL STANDARD MAINTENANCE FOR SEDIMENT CONTROL DEVICES APPLY TO THESE DETAILS.

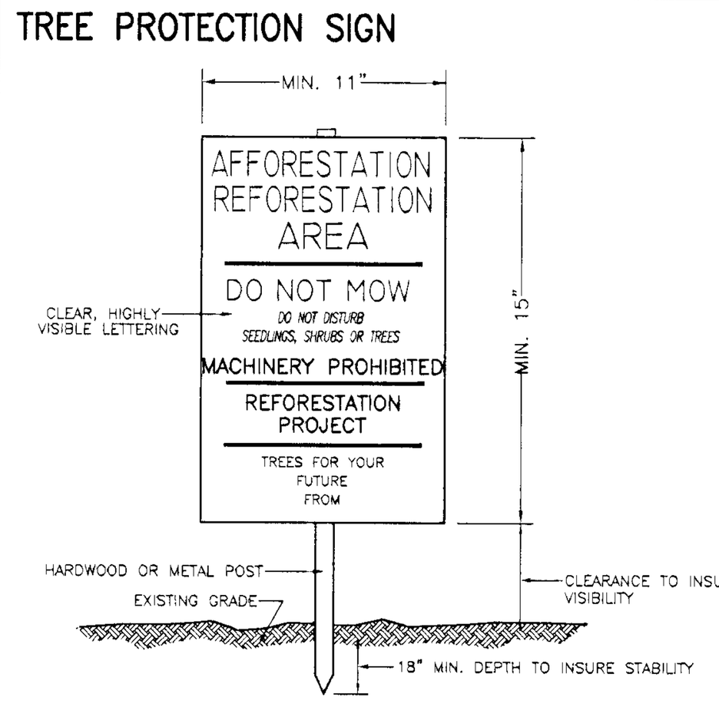
SOURCE: PRINCE GEORGE'S COUNTY, MARYLAND: WOODLAND CONSERVATION MANUAL ADAPTED FROM MARYLAND STATE FOREST CONSERVATION MANUAL

TREE PROTECTION AND SEDIMENT CONTROL



NOTE:
TREE PIT TO BE FIVE TIMES THE ROOTBALL IS PREFERRED, PARTICULARLY IN POOR SOIL.

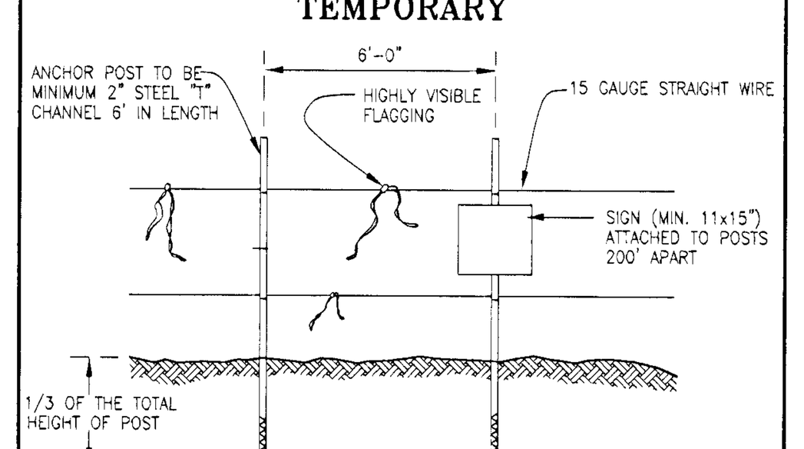
TREE PROTECTION SIGN



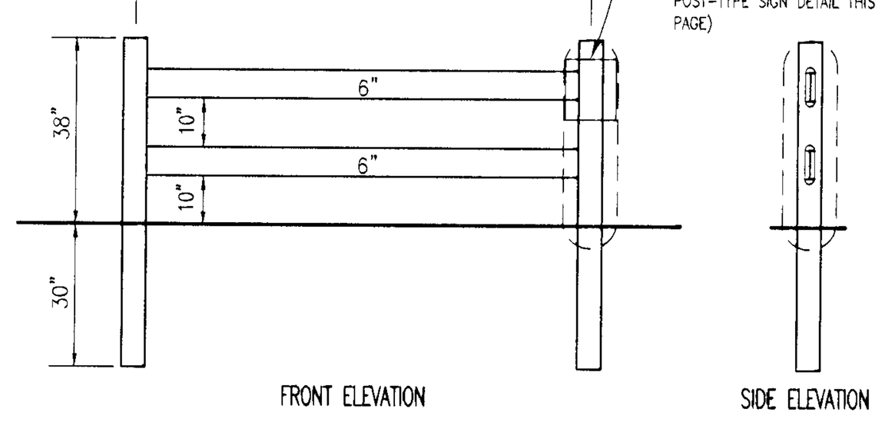
NOTES:
1. ATTACHMENT OF SIGN TO TREES PROHIBITED.
2. SIGNS SHOULD BE PROPERLY MAINTAINED.
3. AVOID INJURY TO ROOTS WHEN PLACING POSTS FOR THE SIGNS.
4. SIGNS SHOULD BE PLACED AT OR NEAR APPROXIMATE EDGE OF CRITICAL ROOT ZONE WHEN EVER POSSIBLE, AT OR NEAR TREE PROTECTION FENCE.
5. SIGNS SHOULD BE PLACED AS TO BE VISIBLE TO ALL CONSTRUCTION PERSONAL AND FROM ALL DIRECTIONS.
6. AT A MINIMUM, THE INFORMATION INDICATED FOR EACH TYPE OF SIGN ABOVE SHALL BE SHOWN FOR EACH AREA BEING PROTECTED.
7. SEE PAGE J9 IN STATE F.C.A. MANUAL FOR OTHER SIGN INFORMATION.

AFF/REFORESTATION SIGNAGE

TREE PROTECTION/REFORESTATION FENCE
TEMPORARY



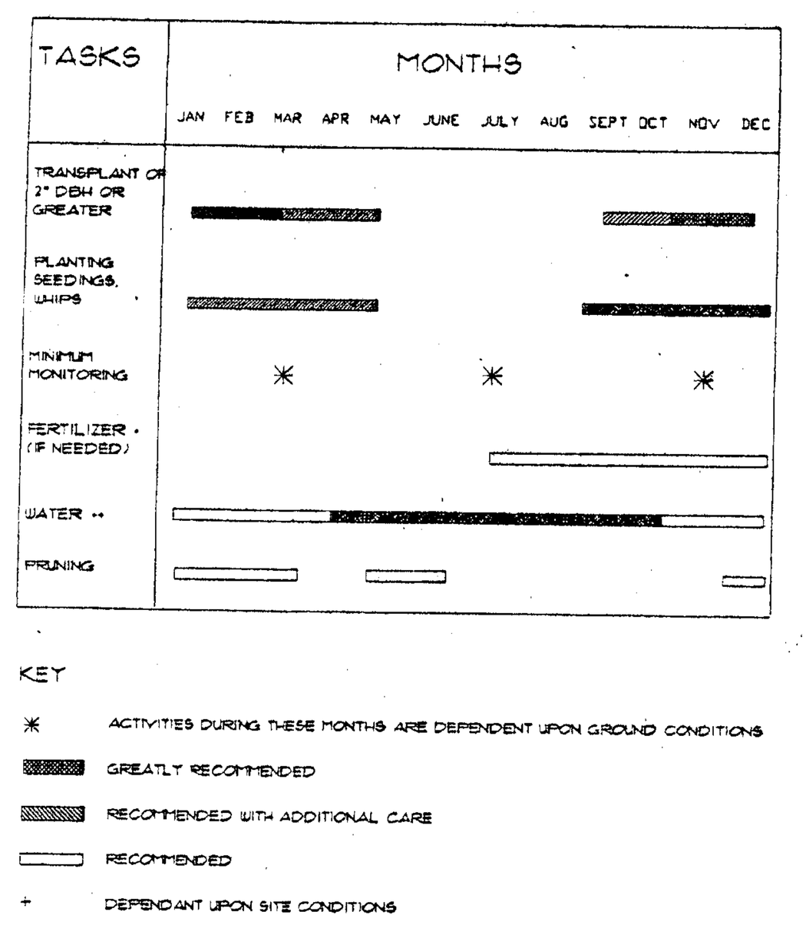
NOTES:
1. TREE PROTECTION DEVICE ONLY.
2. RETENTION/REFORESTATION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
4. AVOID ROOT DAMAGE WHEN PLACING ANCHOR POSTS.
5. WIRE SHOULD BE SECURELY ATTACHED TO POSTS.
6. DEVICE SHOULD BE PROPERLY MAINTAINED DURING CONSTRUCTION.
7. PROTECTIVE SIGNAGE IS ALSO RECOMMENDED.



1. SIGNS & FENCE TO BE PROPERLY MAINTAINED.
2. SIGNS TO BE ATTACHED TO FENCE POSTS ±50' AC & AT CORNERS.
3. TEMPORARY TREE PROTECTION FENCE TO BE INSTALLED IN LEIU OF PERMANENT DURING CONSTRUCTION. PERMANENT TO BE INSTALL UPON COMPLETION OF FINAL GRADING, PRIOR TO FINAL GRADING INSPECTION.
4. THE SMALLER POST-TYPE WOODLAND CONSERVATION SIGNAGE (5½"x8") MAY BE SUBSTITUTED FOR THE LARGER PLASTIC WOODLAND CONSERVATION SIGN SHOWN ON THE ABOVE DETAIL.
5. THE PERMANENT PROTECTION FENCING DETAIL IS TO BE USED TO PROTECT THE VULNERABLE EDGES OF WOODLAND CONSERVATION AREAS DURING THE REQUIRED MAINTENANCE PERIOD. AFTER THE MAINTENANCE PERIOD HAS BEEN SATISFACTORILY FULFILLED, THE PERMNENT PROTECTION FENCE MAY BE REMOVED & REPLACED WITH "POST-TYPE TREE PROTECTION SIGNAGE".

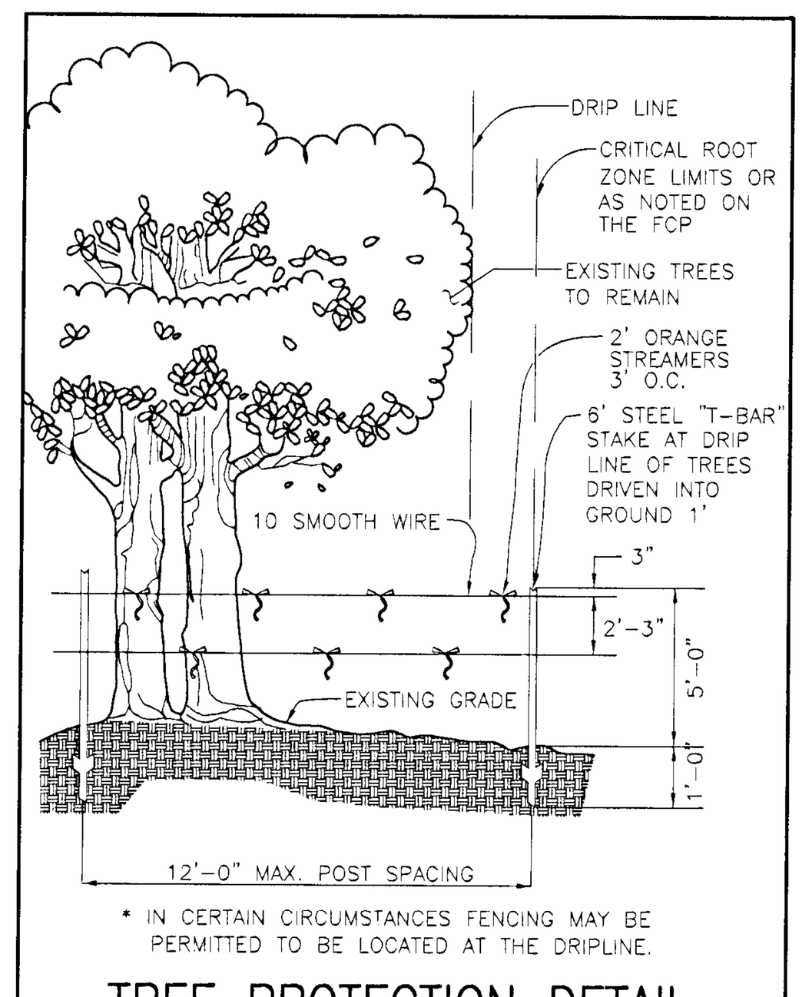
TREE PROTECTION FENCE-PERMANENT FENCE

NOT TO SCALE



KEY
- ✳ ACTIVITIES DURING THESE MONTHS ARE DEPENDENT UPON GROUND CONDITIONS
- GREATLY RECOMMENDED
- RECOMMENDED WITH ADDITIONAL CARE
- RECOMMENDED
- • DEPENDANT UPON SITE CONDITIONS
- •• DEPENDANT UPON SITE CONDITIONS: WEEKLY WATERING IS GREATLY RECOMMENDED FROM MAY THROUGH OCTOBER UNLESS WEEKLY RAINFALL EQUALS 1"

NOTE:
The planting and care of trees is most successful when coordinated with the local climatic conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.



* IN CERTAIN CIRCUMSTANCES FENCING MAY BE PERMITTED TO BE LOCATED AT THE DRIPLINE.

TREE PROTECTION DETAIL

NOT TO SCALE

M.N.C.P.P.C. APPROVALS

PROJECT NAME:	OAK CREEK CLUB		
PROJECT NUMBER:	SDP-0308		
For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet. The Revision Listed Below Apply to this Sheet			
Approval or Revision #	Approval Date	Reviewer's Signature	Certification Date
	11-10-03	RUTH GROVER	05-03-04
02	10-10-06	RUTH GROVER	10-11-06
06	06-26-13	EPS	07-12-13

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Signature:
Title:

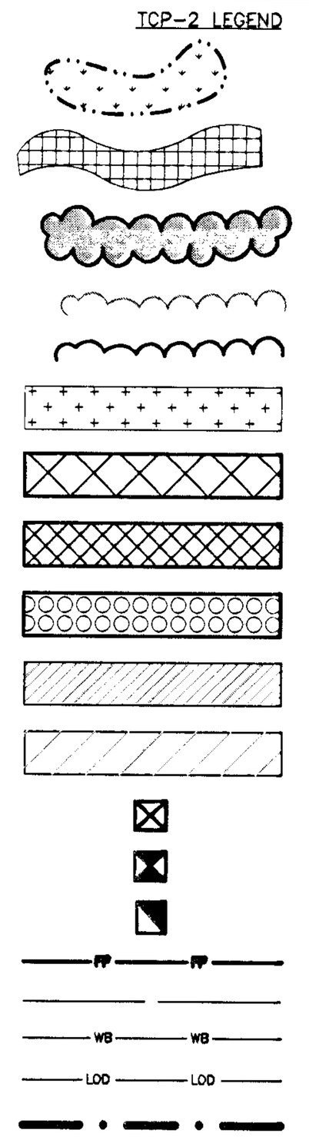
M.N.C.P.P.C. APPROVALS

PROJECT NAME:	OAK CREEK CLUB		
PROJECT NUMBER:	SDP-0610		
For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet. The Revision Listed Below Apply to this Sheet			
Approval or Revision #	Approval Date	Reviewer's Signature	Certification Date
	11-01-07	RUTH GROVER	10-13-10
01	01-08-15		

If this Approvals Block has been duplicated or modified in any way by digital or other methods of reproduction, the signature of a licensed engineer, architect or landscape architect below guarantees the plans are the approved certified plans:

Signature:
Title:

TCP-2 LEGEND



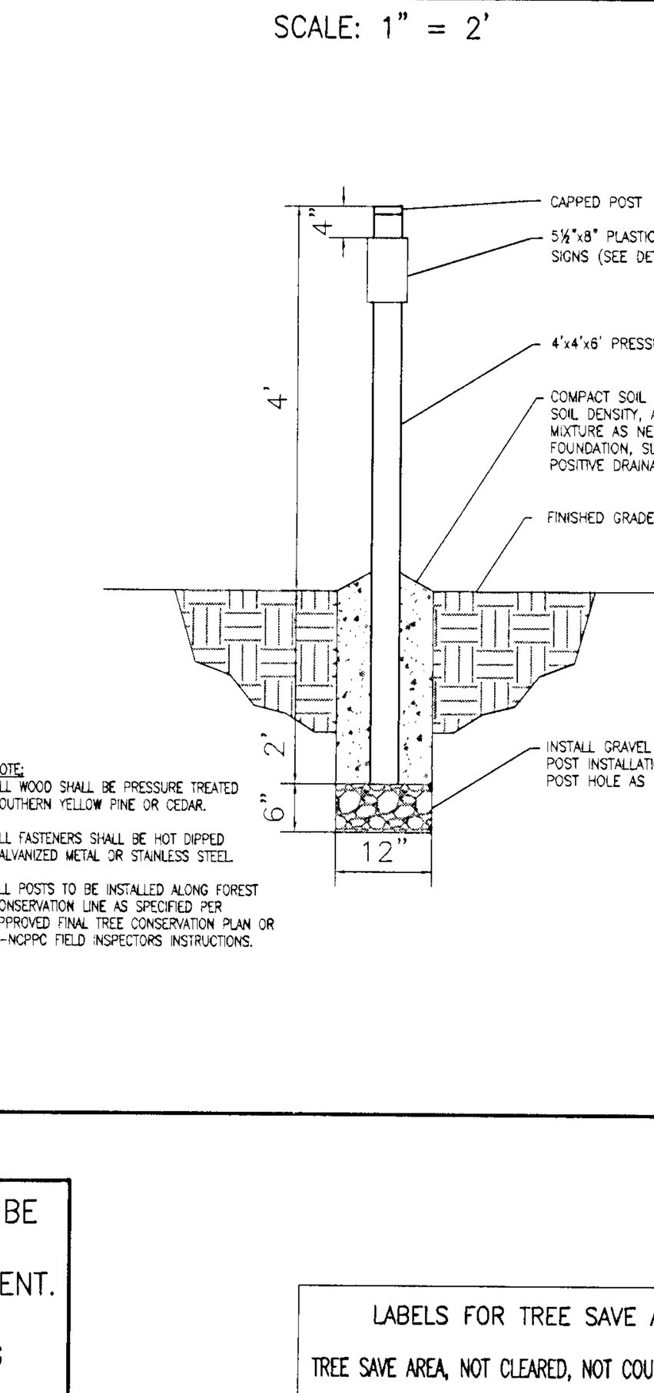
- LOCATION OF WETLANDS
- LOCATION OF WATERS OF THE USA
- FOREST SAVE AREA (WOODLAND CONSERVATION CREDIT)
- EXISTING TREE LINE
- PROPOSED TREE LINE
- DISTURBED AREAS CONVERTED TO SCRUB/SHRUB AREA
- UPLAND AFFORESTATION/REFORESTATION
- BOTTOM LAND AFFORESTATION/REFORESTATION
- LARGE STOCK AFFORESTATION/REFORESTATION
- FOREST CLEAR AREA
- SELECT CLEAR/TREE SAVE AREA (SEE NOTE, THIS SHEET)
- WOODLAND CONSERVATION SIGN
- REFORESTATION/AFFORESTATION SIGN
- POST-TYPE TREE PROTECTION SIGN
- EXISTING 100 YEAR FLOODPLAIN
- 25' 100 YEAR FLOODPLAIN BRL
- 25' WETLAND BUFFER
- LIMIT OF DISTURBANCE
- PATUXENT MANAGEMENT AREA BUFFERS
- TREE PROTECTION FENCE - TEMPORARY
- TREE PROTECTION FENCE - PERMANENT (SPLIT RAIL FENCE)

NOTE: PRIOR TO CONSTRUCTION OF ANY TRAIL ON LAND TO BE DEDICATED TO MNCPPC, THE PROPOSED LOCATION SHALL BE FIELD LOCATED AND APPROVED BY MNCPPC PARKS DEPARTMENT. FOR ALL OTHER TRAILS THE PROPOSED LOCATION SHALL BE FIELD LOCATED AND APPROVED BY ENVIRONMENTAL PLANNING SECTION AND THE DER INSPECTOR.

NOTE: ALL UNDISTURBED AREAS MUST BE FIELD INSPECTED WITH MNCPPC AND THE CONTRACTOR PRIOR TO PLANTING TO DETERMINE BOTH THE NEED FOR AND METHODS OF INVASIVE SPECIES CONTROL, AND THE POSSIBILITY OF REDUCTION IN THE NUMBER OF TREES TO BE PLANTED BASED UPON ANY NATURAL REGENERATION WHICH MAY HAVE OCCURRED WITHIN THE PLANTING AREAS.

POST-TYPE TREE PROTECTION SIGNAGE

SCALE: 1" = 2'



NOTE:
ALL WOOD SHALL BE PRESSURE TREATED SOUTHERN YELLOW PINE OR CEDAR.
ALL FASTENERS SHALL BE HOT DIPPED GALVANIZED METAL OR STAINLESS STEEL.
ALL POSTS TO BE INSTALLED ALONG FOREST CONSERVATION LINE AS SPECIFIED PER APPROVED FINAL TREE CONSERVATION PLAN OR M-NCPPC FIELD INSPECTORS INSTRUCTIONS.

LABELS FOR TREE SAVE AREAS OUTSIDE WOODLAND CONSERVATION AREAS:

TREE SAVE AREA, NOT CLEARED, NOT COUNTED	EXISTING FOREST NOT BE CLEARED BUT NOT COUNTED AS WCA.
TREE SAVE, NOT FOREST, NOT CLEARED	EXISTING TREES THAT DO NOT MEET FOREST CRITERIA TO BE SAVED.
SELECT CLEAR/TREE SAVE AREA	EXISTING FOREST WILL BE SAVED, HOWEVER, OWNER HAS RIGHT TO CLEAR THESE TREES IN THE FUTURE. AREA COUNTED AS CLEARED EVEN THOUGH THE TREES WILL REMAIN AT THIS TIME.
TREES WITHIN RIGHT OF WAY TO BE SAVED	EXISTING TREES WILL BE RETAINED WITHIN RIGHT-OF-WAY AS SHOWN. TREES WITHIN THE WSSC RIGHT-OF-WAY ON THE EAST SIDE OF CHURCH ROAD WILL BE RETAINED EXCEPT WHERE DISTURBANCE IS NECESSARY FOR THE CONSTRUCTION OF THE WATER LINE.

TREE CONSERVATION PLAN CERTIFIED BY:

2/8/17 [signature]
Date: Sallie P. Stewart, RLA, ASLA
MD Registered Landscape Architect #612
Seal not valid without signature

Prince George's County Planning Department, M-NCPPC Environmental Planning Section **TYPE 2 TREE CONSERVATION PLAN APPROVAL** TCPII - 109-03				
	Approved by	Date	DRD #	Reason for Revision
00	JOHN MARKOVICH	04/15/04	SDP-0308	Approval of Landbays A, B, C, I & J
NA		03/18/15	SDP-0308-01	Fencing, tot lots; staff level approval
01	K. FINCH	10/10/06	SDP-0308-02	Remove A-44 R/W, Malboro clay
02	K. FINCH	07/10/07	SDP-0308-03	Revise PMA in Landbay "J"
NA		04/17/08	SDP-0308-04	Architectural revision; staff level
NA		02/04/09	SDP-0308-05	Urban Design revisions; staff level
03	K. FINCH	10/07/10	SDP-0610	Add Landbays D and E
04	K. FINCH	07/11/13	SDP-0308-06	Slip lane to GC, Sewer outfall in D & E
05	K. Finch	2/28/17	SDP-0308-07	Revisions to LOD for Trail & bridge

THIS BLOCK IS FOR OFFICIAL USE ONLY
QR LABEL CERTIFIES THAT THIS PLAN MEETS CONDITIONS OF FINAL APPROVAL BY THE PLANNING BOARD, ITS DESIGNEE OR THE DISTRICT COUNCIL.
M-NCPPC APPROVAL

PROJECT NAME:	OAK CREEK CLUB-PH 1
PROJECT NUMBER:	SDP-0308-07

FOR CONDITIONS OF APPROVAL SEE SITE PLAN COVER SHEET OR APPROVAL SHEET REVISION NUMBERS MUST BE INCLUDED IN THE PROJECT NUMBER.

UPDATES/REVISIONS :
08/20/03 ADDRESSED P&P COMMENTS MLB
09/23/03 ADDRESSED REFERRAL COMMENTS SPS
11/20/03 ADDRESSED SDP APPROVAL COMMENTS. MLB
02/09/04 SUBMIT DRAFT SIGNATURE SET MLB
3/8/04 ADDRESSED MNCPPC COMMENTS. MLB
5/24/06 UPDATED TO REFLECT REVISIONS TO SDP. SPS

UPDATES/REVISIONS :
12/14/06 UPDATE WOODLAND CONSERVATION WORKSHEET SPS
10/15/07 ADD LANDBAY D & E TO TCP 109/03 RPI
10/30/08 ADJUST FOR FIELD LOCATED TRAIL, ADD UP-21, REMOVE BO-10. SPS
06/15/10 UPDATE ALL SHEETS FOR PHASE 4 APPROVALS SPS
08/31/10 SUBMIT FOR FINAL REVIEW OF TCPII/109/03-03 SPS
09/21/10 SUBMIT FOR CERTIFICATION OF TCPII/109/03-03 SPS

UPDATES/REVISIONS :
05/07/13 UPDATE ALL CALCULATOINS TO REFLECT FIELD CONDITIONS AT NEW CLUBHOUSE AND SLIP-LANE SPS
06/7/13 SUBMIT FOR CERTIFICATION OF SDP-0308/06, APPROVAL OF THE SLIP-LANE SPS
02/23/15 REVISE PER CONDITIONS OF SDP-0610/01 APPROVAL SPS
07/25/16 UPDATE TO REFLECT CHURCH ROAD DESIGN SPS
01/03/17 REMOVE PARK PARCEL I SPS

TCP II - 109-03 - DETAILS SHEET
OAK CREEK CLUB
QUEEN ANNE (7TH) ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

CPJ Associates
Charles P. Johnson & Associates, Inc.
PLANNERS • ENGINEERS • LANDSCAPE ARCHITECTS • SURVEYORS
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Phone:(301)434-7000 E-mail:ss@cpja.com Fax:(301)434-9394
FREDERICK, MD FAIRFAX, VA

CLIENT: NVR MS CAVALIER OAK CREEK OWNER, LLC
11700 PLAZA AMERICA DR.
SUITE 310
RESTON, VA 20190

PRELIMINARY PLAN NO:	4-01032
SITE PLAN NO:	SDP 0308 & 0610
DESIGN	MLB
DRAFT	MLB
DATE	MAY 2003
SCALE	AS SHOWN
SHEET	2 OF 35
FILE NO:	31-102-22.5 D

PLANTING PROCEDURES FOR REFORESTATION AREAS (LANDSCAPE AND SEEDLING STOCK)

All tree planting for woodland replacement, reforestation will be completed within 6 months of the completion of final grading, provided that it can be done within the specified planting window. An additional 6 months may be necessary in order to plant during the planting window. Failure to establish the woodland replacement, reforestation or afforestation for the golf course within the described time frame will result in a failure to receive a Use Permit for the golf course and/or a violation of this Plan including the associated $1.50 per square foot penalty unless a written extension is approved the DER.

DER shall be notified prior to soil preparation or initiation of any tree planting on this site.

Results of survival checks for all tree planting shall be reported to DER.

Prior to the issuance of any permits, the contractor responsible for soil preparation, site preparation, tree planting and tree maintenance must be identified.

Name ______________________
Business Name ______________________
Address ______________________
Phone Number ______________________

* Planting window for bare root seedlings – December 1st – April 30th . Planting window for landscape stock – March 1st – December 30th. No planting will occur while the ground is frozen.

* Species List – Based on the native forest association of the area in which Oak Creek Club Community is located (see "Reforestation Plant Lists").

* Seeding size to be 1/4" to 1/2" caliper with roots not less than 8' long. Landscape stock to range from 1" – 2 1/2" caliper.

* Spacing and Quantity – See "Reforestation Plant Lists".

* Layout – For seedlings see "Planting Layout" detail. For landscape stock – see TCP-II planting plan.

* The designated regulatory agency shall inspect site.

* No tree shelters are to be used for seedlings unless excessive deer browse is evident or adjacent infestations of invasive species are present. Tree shelters increase native cavity nesting bird mortality and inhibit plants' ability to establish root systems.

* Each individual seedling is to be flagged with florescent flagging tape and mulched with 2" of composted wood chips or shredded hardwood mulch for maintenance and monitoring purposes.

* Each landscape tree should be mulched with 2-3" of composted shredded hardwood mulch unless they are in a planting bed where mulch will be spread throughout.

SITE PREPARATION (EXPOSED AND NEWLY GRADED SOILS)

1) Contractor is to perform soil tests in proposed planting areas prior to site preparation, to identify potential nutrient and pH deficiencies.

2) Soils shall be free of contaminants (oil products, concentrated soluble salts, ferrous iron, soluble aluminum and soluble manganese).

3) Apply soil amendments, if specified, prior to tilling, discing, raking, final grading, etc. Soil amendments are to be determined by the University of Maryland Cooperative Extension Service or a qualified Ecologist based on soil test results.

4) Flat areas and slopes up to 3:1 shall be loose and friable to a depth of at least 6 inches. The top layer of soil shall be loosened by raking, discing or other acceptable means before seeding.

5) Slopes steeper than 3:1 grade shall have the top 1-3 inches of soil loose and friable before seeding.

6) Seed and fertilizer. Seed with a hydroseeder for sites larger than one half acre. Dry seed with a manual centrifugal spreader for sites less than one half acre or that are inaccessible to hydroseeding equipment (see seeding specifications to follow for either method used). Fertilizer is to be incorporated into the hydroseed mix if hydroseeding is performed, or it is to be applied with a manual centrifugal spreader if dry seeding is the method used. Fertilizer type, analysis, and application rate to be determined by University of Maryland Cooperative Extension Service or a qualified Ecologist based on soil test results.

7) Herbicide applications for the control of invasive species after planting will be done as part of the maintenance agreement, only with written permission from Environmental Planning. There will be no use of herbicides within the PMA.

PLANT INSTALLATION METHODS

* Auger planting method is preferred for level areas, as it creates better soil porosity by drilling a hole much larger than the root system and producing tilled backfill, see "Method for Auger Tree Planting" detail.

* Hand digging is acceptable in situations where the auger cannot be applied (slopes, wet areas, confined spaces, etc.) See "Planting Methods" detail.

PLANT CRITERIA FOR REFORESTATION AREAS (LANDSCAPE AND SEEDLING STOCK)

* Plants supplied shall conform in all respects to the current edition of the American Standard for Nursery stock (ANSI Z60.1). They shall be nursery grown in accordance with good horticultural practice and grown under climatic conditions similar to those in the locality of the project. Plant names shall be those given in the edition of Standard Plant Names, American Joint committee on Horticultural Nomenclature.

* Prior to planting, protect plants at all times from sun and drying winds. Plants that cannot be planted immediately shall be kept in the the shade, and kept well watered. Plants shall not remain unplanted for more than three (3) calendar days unless adequate irrigation and protection from the elements is provided on site.

* Plants shall not be bound with wire or rope at any time so as to damage the bark or break branches or twigs.

* Plants shall be sound, vigorous and healthy. They shall be free of disease and insect pests and shall have healthy, well developed root systems. Trunks and branches shall be free of cuts and abrasions over one inch (1") in any dimension.

* Container-grown plants shall not have roots that encircle the rootball.

* All plants shall be certified pest-free by the Department of Agriculture of the state of origin.

SPECIFICATIONS FOR HYDROSEEDING ALL REFORESTATION AREAS WITH A STABILIZATION SEED MIX (SWM POND AREA EXCLUDED)

* Timing
Apply seed upon the completion of site preparation (herbicide application, topical or incorporated soil amendment applications grading, etc.)

* Stabilization seed mix to consist of a non-turf building ground cover.
I. State certified weed free seed (labeled) graded.
II. Rate – 50 lbs/acre (for disturbed, exposed or newly graded soils and overseeding existing vegetation with less than 60% cover).
Note: For best success rates under drought conditions i.e.; unusually dry seasons, S/W facing slopes, sandy soils etc., the application rate should be reduced to 25-30 lbs/acre
III. Apply seed uniformly with a hydroseeder. The slurry includes seed, fertilizer, mulch binder (where applicable) on a firm, moist seedbed. Note: The seed and fertilizer will be mixed on site and the seeding shall be immediate without interruption.

* Mulch Binder (for 20% or greater exposed soils only).
Utilize only wood cellulose fiber mulch as manufactured by Conwed, or an approved equal. Mulch at the rate of 35 pounds per 1000 square feet. Do not use on sites which have more than 80% existing ground cover as seed will adhere to the vegetation causing it to dry out. On sites where exposed soils and existing ground cover exists, apply mulch binder to exposed soils only after seed has been applied to the entire site.

* Fertilizer
Type, analysis and application rates previously listed as specified by University of Maryland Cooperative Extension Service and/or a qualified ecologist based on the soil test results.

* Gel
As necessary provide a water absorbing co-polymer which can absorb up to 400 times its own weight to aid in fluffing the surface soil during application and to provide a lubricant coating to protect the plant when passing through the hydroseeder nozzle.

* Irrigation
If soil moisture is deficient, supply new seeding with adequate water for plant growth until they are firmly established. This is especially true when seeding is made in abnormally dry or hot seasons, or on adverse sites.

REFORESTATION MANAGEMENT PLAN

* REFORESTATION SHOULD BE COMPLETED WITHIN ONE (1) YEAR OF FINAL GRADING.

* The Contractor implementing the reforestation plan is subject to a binding maintenance agreement for the length of 5 years. IPM practices will be employed as needed to control diseased, insects and weeds. The contractor is responsible for the following:

I. Field check the planting area according to the following schedule:

Year 1: 3 times (March-April), (July-August), (October-November)

Year 2-3: Twice annually (April-May), (September-October).

Years 4-5: Once annually (May-September). If appropriate, remove temporary tree protection fencing at this time.

Field Data Forms (Condition check sheets) will be sent to the client after each visit.

II. Watering is dependent on rainfall and the mount and frequency will vary. Plants will be watered as needed, during years 1-3, depending on rainfall, time of season, and installation timing.

III. Control of invasive species will be achieved by annually mulching individual trees with composted wood chips or shredded hardwood mulch, re-flagging them as needed and spot applications of herbicide applied directly to target species competing with reforestation plants. Be careful not to spray herbicide onto or inside the critical root zone of desirable plants.

IV. Fertilizing within the first 3 years of the maintenance period may not be necessary and will be based on the soil test results and the UMCP Ext. Service Recommendations.

V. Pest control is to be accomplished by identifying insect and disease, problems and applying appropriate integrated pest management practices as needed.

VI. Perimeter fencing and signage will be removed after five years based on the planting date.

VII. The Warranty service obligations are such that at the end of the 5-year period, at (1,000) seedlings per acre or (500) 1" caliper trees per acre plant survivability must be above 75% and at (200) 2 1/2" caliper trees per acre, survivability must be 100%. The applicant will be charged with a mitigation fee to restock the area and it will be levied based on the square footage of the affected area.

LONG TERM PROTECTION

Protection of forest areas, as established through the forest conservation process, relies upon adherence to protection and maintenance standards during construction and preservation of these areas as undisturbed open space after construction to ensure their long-term survival. In order to provide for identification of these measures and ensure that they are carried out, refer to this Type II Tree Conservation Plan.

TREE PROTECTION MEASURES

Tree protection fence and signs are to be installed along the perimeter of existing forest and individual trees to remain. It is to be installed outside of the critical root zone of the trees and the root pruning line (if present) and will be smooth wire fencing. It is to be installed before any more grading. If possible, install before sediment control measures. Necessary signage may be determined during the pre-construction meeting. Grounds maintenance staff shall be instructed to avoid disturbance within designated Conservation areas. Root Pruning is to be performed as per TCP-II, typically outside the critical root zone of specified forest edges and specified individual trees to remain. It is to be accomplished by a vibratory plow with a serrated cutting edge or a root cutter with a 36" wheel to a depth of 8". Other stress reduction/tree protection measures for individual trees should be implemented at this time.

TREE PROTECTION SEQUENCE

1. Pre-construction meeting: After the boundaries of the limits of disturbance have been staked and flagged, but before any disturbance has taken place on-site, a pre-construction meeting at the construction site shall be held. The developer, contractor, or project manage, all construction personnel, contracted tree professional and appropriate local inspectors shall attend. The purpose of the meeting will be to field verify the limits of clearing as specified on the plan and make any necessary adjustments. They will authorize installation of protection devices and determine location and quantity of necessary signage.
Enforcement staff will also discuss the value and importance of the preservation areas, outline responsibilities and discuss violation penalties. An additional inspection may be required after installation of the protection devices before construction is authorized to begin.
2. Tree protection measures and devices shall be implemented after the pre-construcion meeting and prior to any disturbance or clearing activity including erosion control devices.
3. If pruning is specified, do so before installing fence to avoid damage to fencing.
4. Root prune all designated areas.
5. Install tree protection fence and signs (see detail this page). To be maintained at least through the construction period for retention areas, and through the 2-year maintenance period for reforestation areas unless waived by county inspector.
6. When silt fence is specified, it should be positioned outside of the tree protection fence. In areas where silt fence and tree protection fence are to be used a "combination tree protection silt fence" can be used instead. This determination can be made at the pre-construction meeting (see alternative fence detail this page).
7. Approved clearing will take place after all tree protection measures are completed and will occur outside the tree protection fence.
8. Upon completion of construction, corrective measures may include: Removal of dead or dying trees, pruning of dead or declining limbs, soil aeration, fertilization, watering of specimen tress when specified, and cleanup of retention areas.
9. Inspection and approval by regulatory agency for Prince George's County.
10. Removal of temporary protective measures, such as tree protection fence and signs.

WOODLAND CONSERVATION AREA MANAGEMENT NOTES

Removal of Hazardous Trees or Hazardous Limbs By Developers or Builders

The developer and/or builder is responsible for the complete preservation of all forested areas shown on the approved plan to remain undisturbed. Only trees or parts thereof designated by the Department of Environmental Resources as dead, or hazardous may be removed.

1. A tree is considered hazardous if a condition is present which leads a Licensed Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the ANSI A-300 Pruning Standards ("Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices").

2. If a hazardous condition may be alleviated by corrective pruning, the Licensed Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the ANSI A-300 Pruning Standards ("Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices")

3. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the building or grading inspector if there is a valid grading or building permit for the subject lost or parcels which the trees are located. Only after approval of the appropriate inspector may the tree be cut by chainsaw to near the existing ground level. The stump may not be removed or covered with soil, mulch or other materials that would inhibit sprouting.

4. Debris from the tree removal or pruning that occurs within 35 feet of the woodland edge may be removed and properly disposed of by recycling, chipping or other acceptable methods. All debris that is more than 35 feet from the woodland edge shall be cut up to allow contact with the ground, thus encouraging decomposition. The smaller materials shall be placed into brush piles that will serve as wildlife habitat.

Removal of Hazardous Trees, Hazardous Limbs, Noxious Plants, Invasive Plants or Non-Native Plants in Woodland Conservation Areas Owned by Individual Homeowners.

1. If the developer or builder no longer has an interest in the property the homeowner shall obtain a written statement from the Licensed Arborist or Licensed Tree Expert identifying the hazardous condition and the proposed corrective measures prior to having the work conducted. The tree may then be removed by the arborist or tree expert. The stump shall be cut as close to the ground as possible and left in place. The removal or grinding of the stumps in the woodland conservation areas is not permitted.

2. The removal of noxious, invasive, and non-natives plant species from the woodland conservation areas may be done with the use of hand-held equipment only such as pruners or a chain saw. These plants may be cut near the ground and the material less than two inches diameter may be removed from the area and disposed of appropriately. All material from these noxious, invasive, and non-native plants greater than two (2) inches diameter shall be cut to allow contact with the ground, thus encouraging decomposition.

3. The broadcast spraying of herbicides is not permitted. However, the use of herbicides to discourage re-sprouting of invasive, noxious, or non-native plants is permitted if done as an application of the chemical directly to the cut stump immediately following cutting of plant tops. The use of any herbicide shall be done in accordance with the label instructions.

Note: The use of chainsaws is extremely dangerous and should not be conducted with poorly maintained equipment, without safety equipment, or by individuals not trained in the use of this equipment for the pruning and/or cutting of trees.

Protection of Reforestation and Afforestation Areas by Developers or Builders

1. Reforestation and afforestation areas shall be planted prior to the occupancy of the nearest building or residence. If planting cannot occur due to planting conditions, the developer or property owner shall install the fencing and signage in accordance with the approved Type II Tree Conservation Plan. Planting shall then be accomplished during the next planting season. If planting is delayed beyond the transfer of the property title, to the homeowner, the developer shall obtain a signed statement from the purchaser indicating that they understand that the reforestation area is located on their property and that reforestation will occur during the next planting season. A copy of that document shall be presented to the Grading Inspector and the Environmental Planning Section.

2. Reforestation areas shall not to be mowed, however, the management of competing vegetation around individual trees is acceptable.

Protection of Reforestation and Afforestation Areas by Individual Homeowners

1. Reforestation fencing and signage shall remain in place in accordance with the approved Type II Tree II Tree Conservation Plan or until the trees have grown sufficiently to have crown closure.

2. Reforestation areas shall not to be mowed, however, the management of competing vegetation around individual trees is acceptable.

Woodland Areas NOT Counted as Part of the Woodland Conservation Requirements

1. A revised Tree Conservation Plan is required prior to clearing any woodland area which is not specifically identified to be cleared on the most recently approved Type II Tree Conservation (TCP) on file in the office of the M-NCPPC, Environmental Planning Section located on the 4th flood of the County Administration Building at 14741 Governor Oden Bowie Drive, Upper Marlboro, Maryland 20772, phone 301-952-3650. Additional mitigation will be required for the clearing of all woodlands beyond that reflected on the approved plans. Although clearing may be allowed, it may be subject to additional replacement requirements, mitigation, and fees which must be reflected on TCP revisions approved by the M-NCPPC Environmental Planning Section.

2. Homeowners or property owners may remove trees less than two (2) inches diameter, shrubs, and vines in woodland areas which are saved but not part of the Woodland Conservation requirements after all permits have been released for the subject property. This area may not be tilled or have other ground disturbances which would result in damage to the tree roots. Raking the leaves and overseeding with native grasses, native flowers or native groundcover is acceptable. Seeding with invasive grasses including any variety of Kentucky 31 fescue is not acceptable.

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REFORESTATION INSPECTION AND PLANTING NARRATIVE

1. REFORESTATION INSPECTION SCHEDULE: There shall be five inspections for forest conservation.
A. The first inspection shall occur after flagging/staking of the L.O.D. and/or stream buffers and prior to any clearing, grading, or sediment control measures. This inspection is to address the issues of tree protection and sediment control. The developer and representatives from M-NCPPC and MCDEP will meet to walk the proposed limits of disturbance and determine the final locations of sediment control devices and tree protection devices.

B. The second inspection shall occur after placement of sediment control devices and tree protection devices and prior to clearing and grading. This inspection is to determine the completion and adequacy of protective measures.

C. The third inspection shall occur prior to planting in reforestation areas. The pre-planting inspection is to make final decisions regarding the best implementation of the Planting Plan, including, but not limited to the final placement and selection of plant species, determination of the regeneration potential of existing plants to remain, and a determination of the best edge planting treatment. The purchase and delivery of plant materials should not be made unit after this inspection, since a determination may be made in the field to alter the choice of plant material.

D. The fourth inspection shall occur immediately following the completion of the reforestation planting. This inspection is to determine the completion and adequacy of the planting.

E. The fifth and final inspection shall occur at the completion of the two-year maintenance program. The purpose of this inspection is to determine the success and adequacy of the maintenance program (and deer management program). Final determination will be made at this time as to whether additional plantings and a further maintenance program are necessary.

2. PRE-PLANTING CONSIDERATIONS
A. In areas with substantial growth of invasive groundcover species, measures shall be taken to remove and control invasives. The infested area should be mown prior to commencement of planting. Necessary weed control measure should be determined during the pre-planting inspection, including, but not limited to mulching, periodic mowing around the reforestation plantings, and fabric coverings. The use of chemical weed controls will be limited to extreme cases, and only with prior written approval by MNCPPC staff. Where periodic mowing will occur as a weed control measure, the typical tree planting distribution pattern should be modified so as to allow access by mowing equipment without damage to plantings.

B. A soils analysis will be conducted prior to commencement of reforestation on land where extensive agricultural use has occurred in the past. Test pits will be dug in areas of undisturbed soil to determine if a gragipan layer is present. If fragipan is present, it should be pierced by auguring and planting. Holes should be dug to twice the normal diameter for the material planted.

C. Soils should be treated by incorporating natural mulch within the top 12 inches or mulch or leaf mold compost are preferred.

D. If fill material is used at the planting site, it should be clean fill with 12 inches of native soil. Stockpiling of native top soils must be done in such a way that the height of the pile does not damage the seed bank.

ADDITIONAL NOTES (FOR ALL SHEETS IN THIS SET):

1. Cutting or clearing of woodland not in conformance with this Plan or without the expressed written consent of the Planning Director or designee shall be subject to a $1.50 per square foot mitigation fee.
2. The Site Development Inspector must be contacted at (301) 731-8790 prior to the start of any work on the site to address implementation of Tree Conservation measures shown on this Plan.
3. Property owners shall be notified by the Developer or Contractor of any Forest Conservation Areas (Forest Save Areas, Reforestation Areas, Afforestation Areas, or Selective Clearing Areas) located on their lot or parcel of land and the associated fines for unauthorized disturbances to these areas. Upon the sale of the property, the owner/developer or owners representative shall notify the purchaser of the property of any Forest Conservation Areas.
4. All appropriate bonds will be posted with M-NCPPC prior to the issuance of any permits. These bonds will be retained as surety by M-NCPPC until all required activities have been satisfied.
5. All existing trash and impervious areas shown on the plan to be removed must be removed and any disturbed soil must be stabilized and seeded. It may be necessary to scarify and/or aerate the soil. Four inches of topsoil will be added if none exists after the impervious area is removed.
6. All plant installation shall follow the latest edition of the M-NCPPC publication "A Technical Manual for Woodland Conservation Development in Prince George's County".
7. Plants shall be inspected by the contractor, and any material that is either damaged or which has root ball compaction, j-rooted or kinked root systems will be replaced. No plants will be stored on site. Plants will be planted immediately once received from the nursery.
8. Stock will be planted in random order to reflect natural growth of the forest. (See planting layout detail this sheet)
9. Planting hole should be limited to 2.5 X root ball diameter. Native soil material will be used to backfill planting site and area will be packed to remove air pocket. Rake soil evenly over the planting field and cover hole with three inches of mulch. Water to settle soil and provide moisture as needed.
10. The need for deer protection and specific measures necessary to be determined as part of the pre-construction meeting.
11. The services of licensed arborist shall be retained to evaluate the appropriate measures necessary to ensure the survival of the large and specimen trees proposed to be preserved whose critical root zone will be impacted by construction.
12. The number of trees planted may be adjusted, depending on the size of stock used, during later stages of the FCP approval process.

FOREST MAINTENANCE SCHEDULE:

1. Forest planting to commence at the initial stages of development. Forest planting areas are to be covered by a five-year maintenance program, with a two-year bond. The landscape contractor will inspect all planted areas every six months after planting for two years. At the end of the two year inspection, the contractor will request M-NCPPC inspection and will ensure that 75% of the original stocking level is live and vigorous. Thereafter, maintenance measures will continue until completion of the inspections at the end of the 3rd, 4th, and 5th years, beyond the bonding period.
2. In years one and two each forest planting area will be maintained by either mowing or chemical treatment. Control of exotic and invasive species is to be done without the use of herbicides as much as possible. If use of chemical is unavoidable, contact M-NCPPC, Environmental Planning Div. at 301-952-3650 for approval prior to application of chemicals.
3. During each inspection following planting, the contractor will evaluate the need for additional watering, additional fertilizer or lime, and any additional steps to control competing vegetation. The contractor will also assess any disease potential, or if any outside influences are having a deleterious affect on the mitigation sites.

Standard Type II Tree Conservation Plan Notes

1. Cutting or clearing of woodland not in conformance with this Plan or without the expressed written consent of the Planning director or designee shall be subject to a $ 1.50 / square foot mitigation fee.
2. The Department of Environmental Resources, (DER) must be contacted prior to the start of any work on the site to address implementation of Tree Conservation measures shown on this Plan.
3. Property owners shall be notified by the Developer or Contractor of any Woodland Conservation Areas, (Tree Save Areas, Reforestation Areas, Afforestation Areas or selective Clearing Areas,) located on their lot or parcel of land and the associated fines for unauthorized disturbances to these areas. Upon the sale of the property, the Owner/Developer or Owner Representative shall notify the Purchaser of the property of any Woodland Conservation Areas.
4. All appropriate bonds will be posted with the Building Official prior to the issuance of any permits. These bonds will be posted with the Building Official until all required activities have been satisfied.
5. The location of all Tree Protective Devices, (TPDs,) shown on this Plan shall be flagged or staked in the field prior to the pre-construction meeting with the Sediment and Erosion Control Inspector from DER. Upon approval of the flagged or staked TPD locations by the Inspector, installation of the TPDs may begin. TPD installation shall be completed prior to installation of initial sediment Controls. No cutting or clearing of trees may begin before final approval of TPD installation.
6. Since work on this project will be initiated in several phase, all TPDs required for a given phase shall be installed prior to any disturbance within that phase of work.
7. Woodland conservation – Tree Save areas and/or Reforestation Areas shall be posted as shown at the same time as Tree Protective Device installation and/or start of reforestation activities.
8. The DER Inspector shall be notified prior to soil preparation or initiation of any tree planting on this site.
9. Results of survival checks for all tree plantings shall be reported to the DER Inspector for that site.
10. Prior to issuance of any permits, the Contractor responsible for soil preparation, site preparation, tree planting and tree maintenance must be identified.

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THIS BLOCK IS FOR OFFICIAL USE ONLY
QR LABEL CERTIFIES THAT THIS PLAN MEETS CONDITIONS OF FINAL APPROVAL BY THE PLANNING BOARD, ITS DESIGNEE OR THE DISTRICT COUNCIL.
M-NCPPC APPROVAL

PROJECT NAME: OAK CREEK CLUB-PH 1
PROJECT NUMBER: SDP-0308-07
FOR CONDITIONS OF APPROVAL SEE SITE PLAN COVER SHEET OR APPROVAL SHEET REVISION NUMBERS MUST BE INCLUDED IN THE PROJECT NUMBER.

M.N.C.P.P.C. APPROVALS

PROJECT NAME: OAK CREEK CLUB
PROJECT NUMBER: SDP-0308

For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet
The Revision Listed Below Apply to this Sheet

Approval or Revision #	Approval Date	Reviewer's Signature	Certification Date
	11-10-03	RUTH GROVER	05-03-04
02	10-10-06	RUTH GROVER	10-11-06
03	07-11-07	RUTH GROVER	07-11-07
06	06-26-13	EPS	07-12-13

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Signature: ______________________

Title: ______________________

M.N.C.P.P.C. APPROVALS

PROJECT NAME: OAK CREEK CLUB
PROJECT NUMBER: SDP-0610

For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet
The Revision Listed Below Apply to this Sheet

Approval or Revision #	Approval Date	Reviewer's Signature	Certification Date
	11-01-07	RUTH GROVER	10-13-10
01	01-08-15		

If this Approvals Block has been duplicated or modified in any way by digital or other methods of reproduction, the signature of a licensed engineer, architect or landscape architect below guarantees the plans are the approved certified plans:

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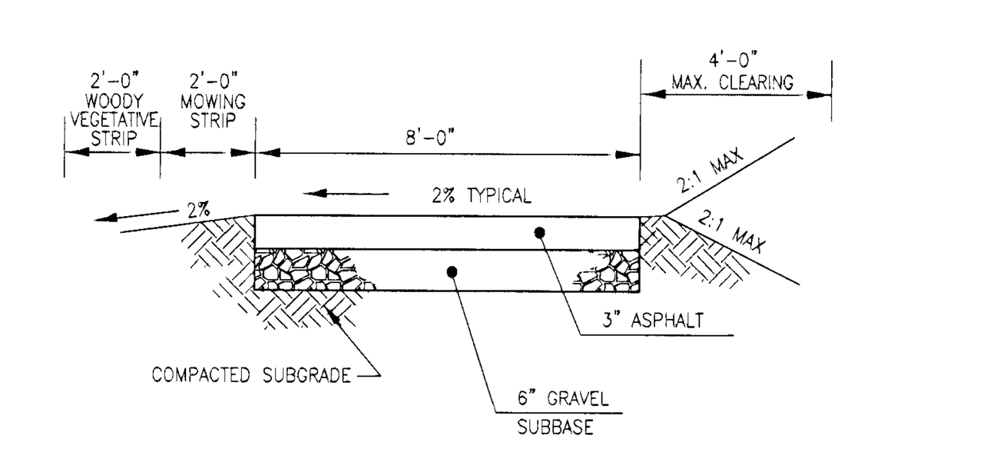


8' HIKER/BIKER TRAIL

NOTES:

INVASIVE PLANTS TO BE REMOVED FOR 10' ON BOTH SIDES OF THE TRAIL. (SEE LIST OF INVASIVE SPECIES & METHODS FOR REMOVAL). MAINTENANCE FOR THIS VEGETATIVE MANAGEMENT AREA SHALL OCCUR EVERY TWO YEARS.

ONCE CLEARING FOR PATH IS COMPLETE, HAZARDOUS TREES ALONG THE EDGE OF THE CLEARING SHALL BE REMOVED (SEE NOTE ON HAZARDOUS TREES).

SEE DETAIL FOR BOARDWALK AND BRIDGE TO BE USED ALONG HIKER/BIKER TRAIL OVER WETLANDS, WATERS OF THE US AND OTHER SENSITIVE AREAS. THE M-NCPPC PARKS DEPT. WILL APPROVE THE EXACT LOCATION AND TYPE OF STRUCTURE (EITHER BRIDGE OR BOARDWALK) FOR THESE AREAS.

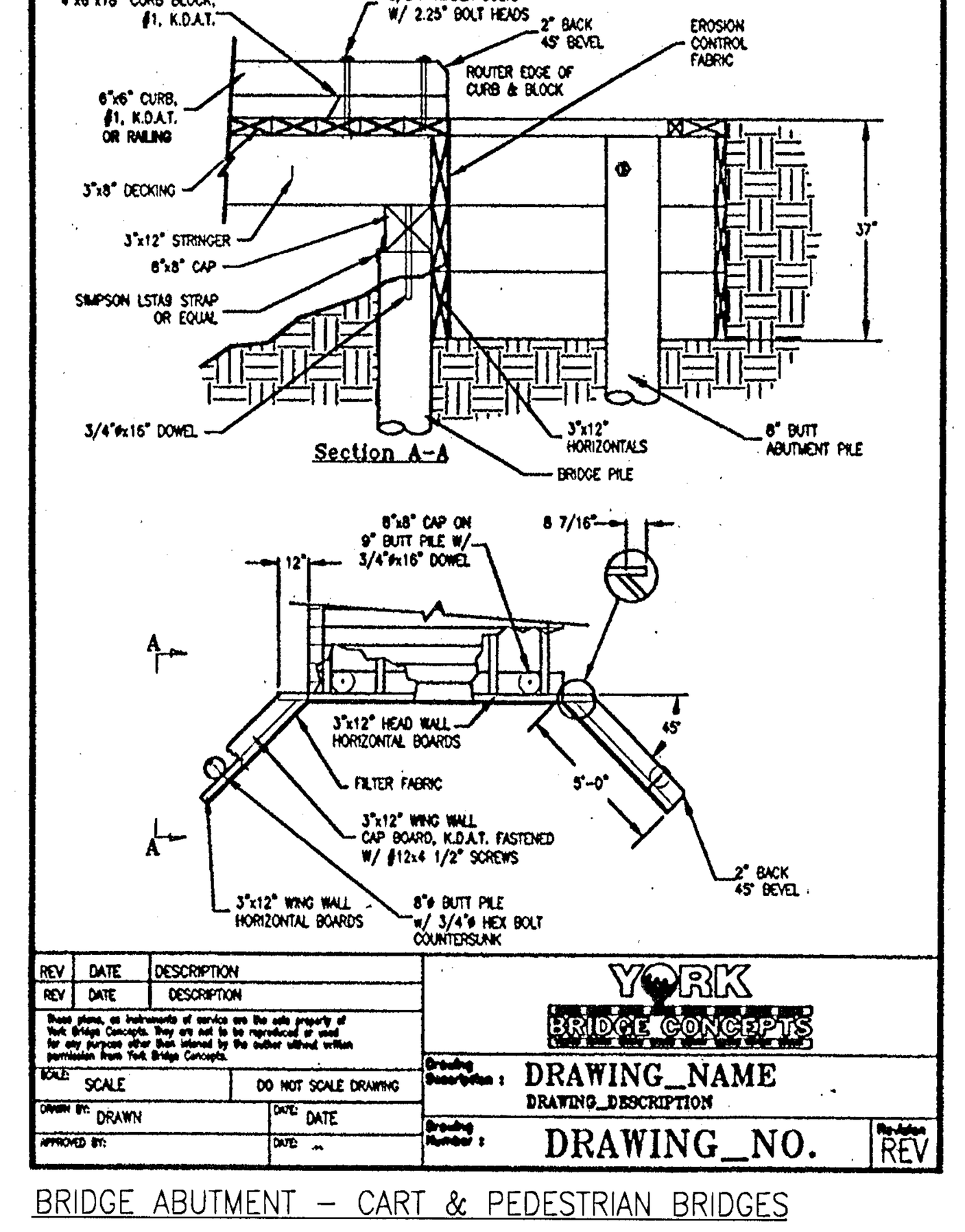
Prince George's County Planning Department, M-NCPPC
Environmental Planning Section
TYPE 2 TREE CONSERVATION PLAN APPROVAL
TCPII – 109-03

	Approved by	Date	DRD #	Reason for Revision
00	JOHN MARKOVICH	04/15/04	SDP-0308	Approval of Landbays A, B, C, I & J
NA		03/18/15	SDP-0308-01	Fencing, tot lots; staff level approval
01	K. FINCH	10/10/06	SDP-0308-02	Remove A-44 R/W, Malboro clay
02	K. FINCH	07/10/07	SDP-0308-03	Revise PMA in Landbay "J"
NA		04/17/08	SDP-0308-04	Architectural revision; staff level
NA		02/04/09	SDP-0308-05	Urban Design revisions; staff level
03	K. FINCH	10/07/10	SDP-0610	Add Landbays D and E
04	K. FINCH	07/11/13	SDP-0308-06	Slip lane to GC, Sewer outfall in D & E
05	K Finch	2/28/17	SDP-0308-07	Revisions to LOD for Trail & bridge

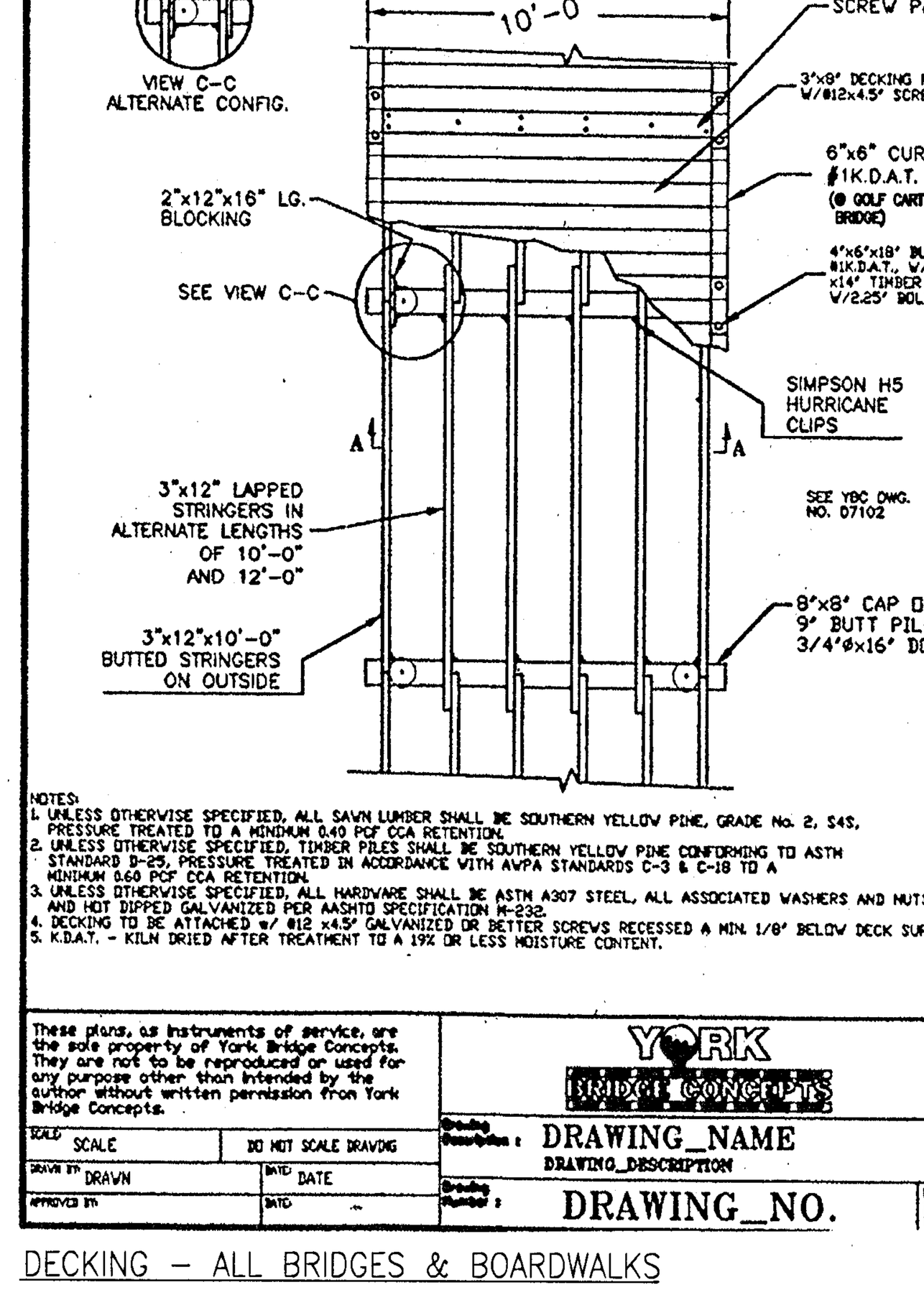
UPDATES/REVISIONS :
09/21/10 SUBMIT FOR CERTIFICATION OF TCPII/109/03-03 SPS
05/07/13 REVISIONS PER SDP-0308/06 SPS
6/7/13 - SUBMIT FOR CERTIFICATION OF SDP-0308/06, APPROVAL OF THE SLIP-LANE SPS
02/23/15 REVISE PER CONDITIONS OF SDP-0610/01 APPROVAL SPS

UPDATES/REVISIONS :
08/20/03 ADDRESSED P&P COMMENTS MLB
09/23/03 ADDRESSED REFERRAL COMMENTS SPS
02/09/04 SUBMIT DRAFT SIGNATURE SET MLB
5/24/06 UPDATED TO REFLECT SITE PLAN REVISIONS MLB
10/15/07 ADD LANDBAY D & E TO TCP 109/03 RPI
08/31/10 SUBMIT FOR FINAL REVIEW OF TCPII/109/03-03 SPS

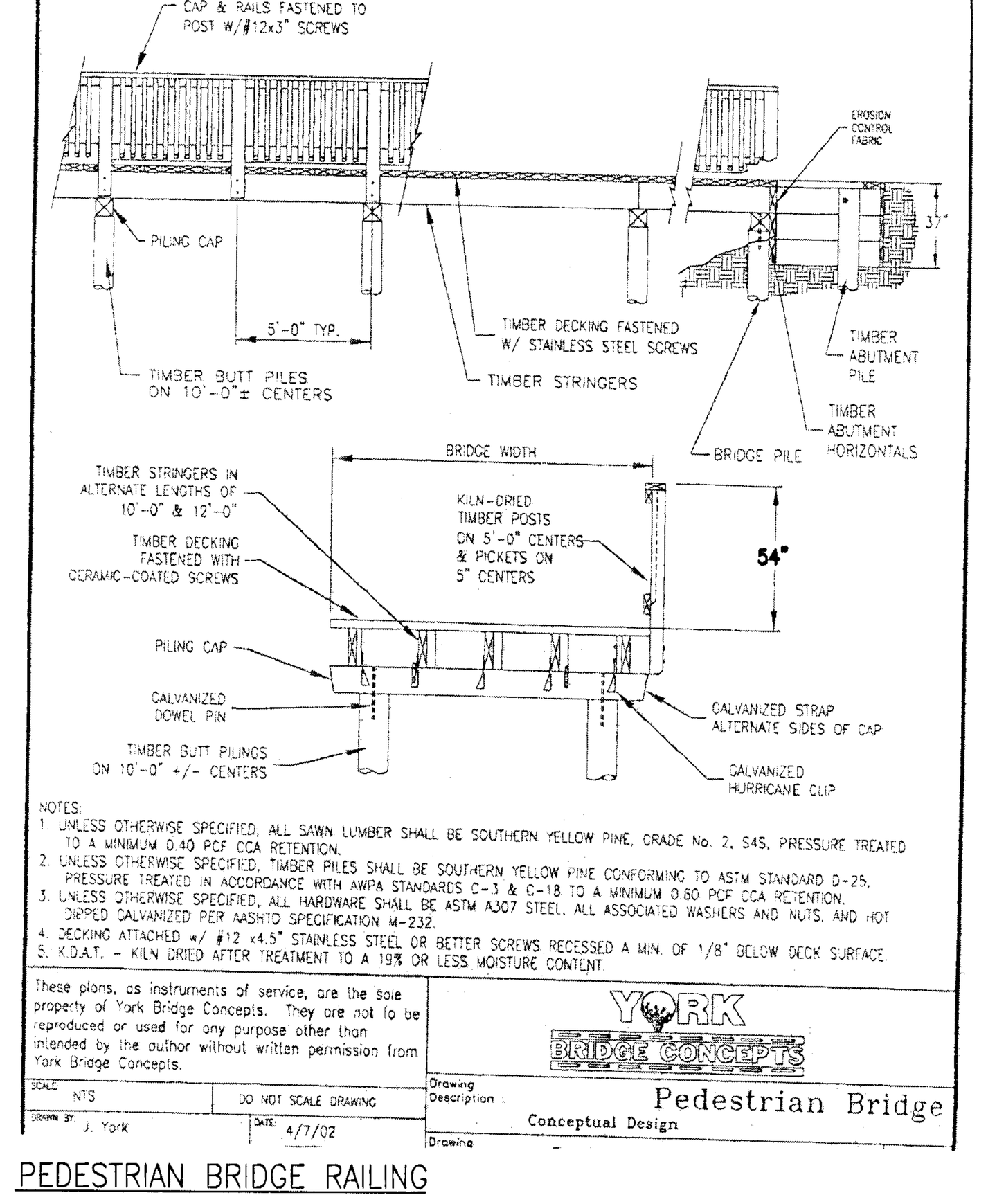
8' HIKER/BIKER TRAIL BRIDGE AND BOARDWALK DETAILS TO BE USED TO ASSURE DRY PASSAGE ON TRAILS
- PEDESTRIAN BRIDGES WILL HAVE 54" RAILINGS
- GOLF CART BRIDGES WILL HAVE ±10" CURBS



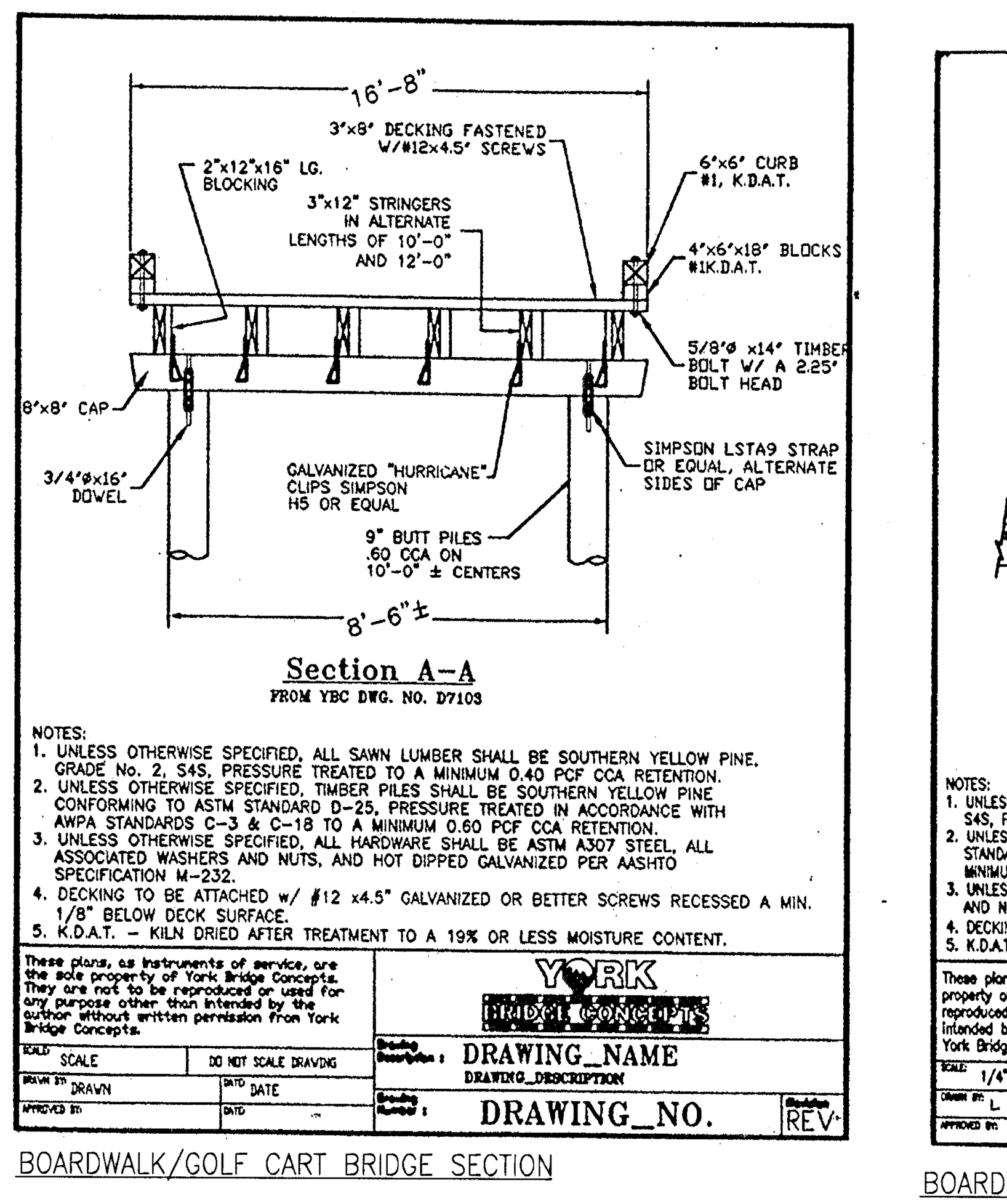
BRIDGE ABUTMENT – CART & PEDESTRIAN BRIDGES



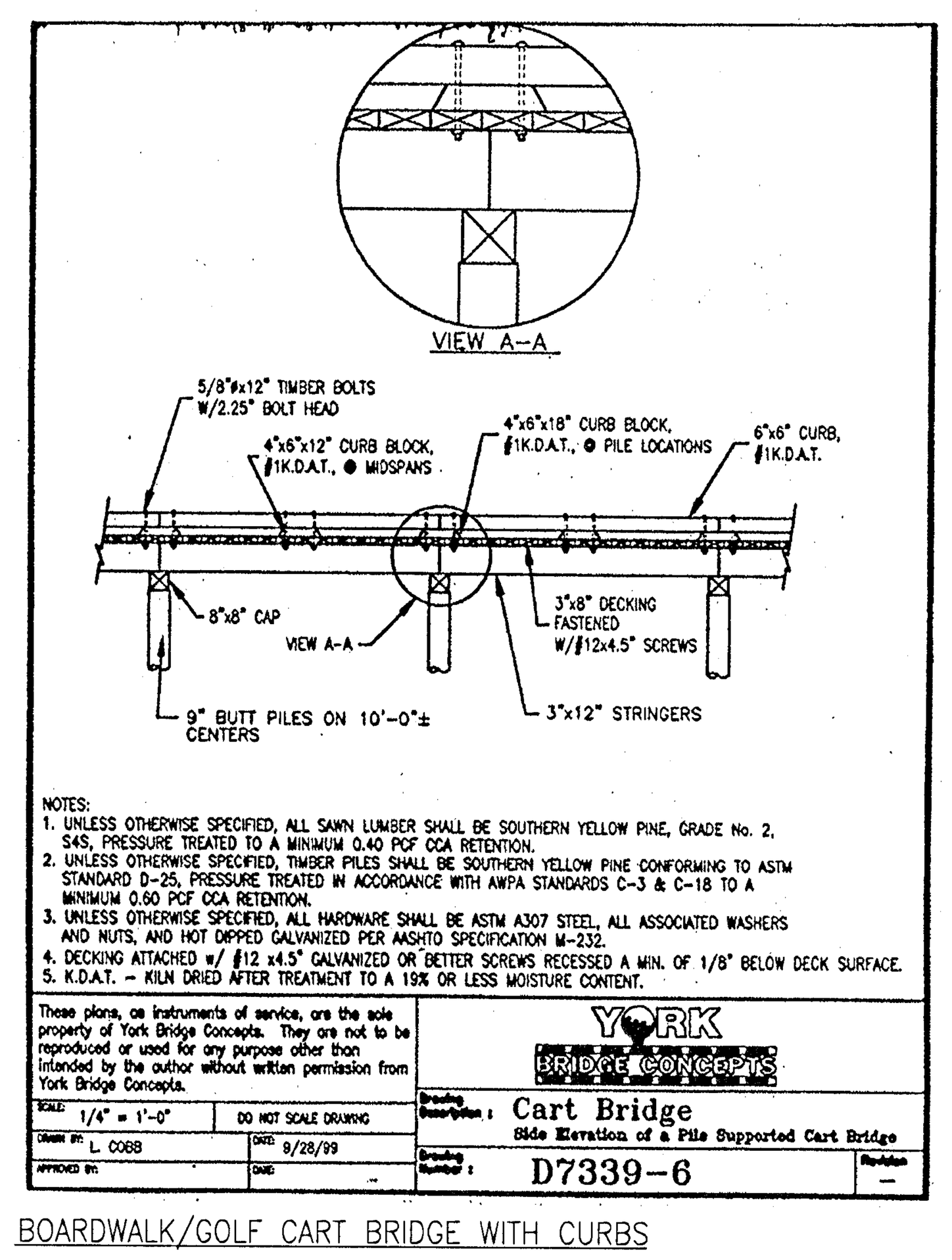
DECKING – ALL BRIDGES & BOARDWALKS



PEDESTRIAN BRIDGE RAILING



BOARDWALK/GOLF CART BRIDGE SECTION



BOARDWALK/GOLF CART BRIDGE WITH CURBS

TREE CONSERVATION PLAN CERTIFIED BY:

2/8/17
Date:
Sallie P. Stewart, RLA, ASLA
MD Registered Landscape Architect #612
Seal not valid without signature

STATE OF MARYLAND · SALLIE PHILLIPS STEWART · LICENSED LANDSCAPE ARCHITECT · 612

TCP II - 109-03 - DETAILS SHEET
OAK CREEK CLUB
QUEEN ANNE (7TH) ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

CPJ Associates
Charles P. Johnson & Associates, Inc.
PLANNERS • ENGINEERS • LANDSCAPE ARCHITECTS • SURVEYORS
1751 ELTON ROAD SUITE 300 SILVER SPRING, MARYLAND 20903
Phone:(301)434-7000 E-mail:ss@cpja.com Fax:(301)434-9394
FREDERICK, MD FAIRFAX, VA

CLIENT: NVR MS CAVALIER OAK CREEK OWNER, LLC
11700 PLAZA AMERICA DR.
SUITE 310
RESTON, VA 20190

PRELIMINARY PLAN NO: 4-01032	SITE PLAN NO: SDP 0308 & 0610		
DESIGN MLB	SHEET 3	OF	35
DRAFT MLB			
DATE MAY 2003			
SCALE AS SHOWN	FILE NO: 31-102-22.5 D		

M.N.C.P.P.C. APPROVALS	
PROJECT NAME:	OAK CREEK CLUB
PROJECT NUMBER:	SDP-0610

For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet
The Revision Listed Below Apply to this Sheet

Approval or Revision #	Approval Date	Reviewer's Signature	Certification Date
	11-01-07	RUTH GROVER	10-13-10

If this Approvals Block has been duplicated or modified in any way by digital or other methods of reproduction, the signature of a licensed engineer, architect or landscape architect below guarantees the plans are the approved certified plans:

Signature: _____

Title: _____

TCP-2 LEGEND

- LOCATION OF WETLANDS
- LOCATION OF WATERS OF THE USA
- FOREST SAVE AREA (WOODLAND CONSERVATION CREDIT)
- EXISTING TREE LINE
- PROPOSED TREE LINE
- DISTURBED AREAS CONVERTED TO SCRUB/SHRUB AREA
- UPLAND AFFORESTATION/REFORESTATION
- BOTTOM LAND AFFORESTATION/REFORESTATION
- LARGE STOCK AFFORESTATION/REFORESTATION
- FOREST CLEAR AREA
- SELECT CLEAR/TREE SAVE AREA (SEE NOTE, THIS SHEET)
- WOODLAND CONSERVATION SIGN
- REFORESTATION/AFFORESTATION SIGN
- POST-TYPE TREE PROTECTION SIGN
- EXISTING 100 YEAR FLOODPLAIN
- 25' 100 YEAR FLOODPLAIN BRL
- 25' WETLAND BUFFER
- LIMIT OF DISTURBANCE
- PATUXENT MANAGEMENT AREA BUFFERS
- TREE PROTECTION FENCE - TEMPORARY
- TREE PROTECTION FENCE - PERMANENT (SPLIT RAIL FENCE)

FOREST CALCULATIONS

LOT #	BLOCK	LOT AREA (sq.ft)	EXISTING FOREST (sq.ft.)	RETAINED FOREST (sq.ft.)	CLEARED FOREST (sq.ft.)
1	A	10,351.31	10,351	0	10,351
2	A	12,160.38	6,752	3,272	3,480
3	A	12,173.21	8,456	2,893	5,563
4	A	14,681.18	14,422	2,476	11,946
5	A	11,639.06	11,639	1,269	10,370
16	B	14,454.59	13,004	2,840	10,164
17	B	17,182.01	607	360	247
18	B	19,811.80	0	0	0
19	B	13,024.43	0	0	0
20	B	10,608.44	8,382	0	8,382
21	B	9,985.90	9,849	0	9,849
22	B	9,276.78	9,277	0	9,277
TOTALS		155,349.09	92,740	13,110	79,630

M:\31100\WPTCP II\Phase I\TCP\lot chart-PHASE1(REVISED).xls Sheet 3

GRAPHIC SCALE
SCALE : 1" = 30'

M.N.C.P.P.C. APPROVALS	
PROJECT NAME:	OAK CREEK CLUB
PROJECT NUMBER:	SDP-0308

For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet
The Revision Listed Below Apply to this Sheet

Approval or Revision #	Approval Date	Reviewer's Signature	Certification Date
	11-10-03	RUTH GROVER	05-03-04
02	10-10-06	RUTH GROVER	10-11-06
03	07-11-07	RUTH GROVER	07-11-07
06	06-26-13	EPS	07-12-13

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Signature: _____

Title: _____

THIS BLOCK IS FOR OFFICIAL USE ONLY

OR LABEL CERTIFIES THAT THIS PLAN MEETS CONDITIONS OF FINAL APPROVAL BY THE PLANNING BOARD, ITS DESIGNEE OR THE DISTRICT COUNCIL.

M-NCPPC APPROVAL

PROJECT NAME:	OAK CREEK CLUB
PROJECT NUMBER:	SDP-0308-07

FOR CONDITIONS OF APPROVAL SEE SITE PLAN COVER SHEET OR APPROVAL SHEET REVISION NUMBERS MUST BE INCLUDED IN THE PROJECT NUMBER.

NOTE: ALL UNDISTURBED AREAS MUST BE FIELD INSPECTED WITH MNCPPC AND THE CONTRACTOR PRIOR TO PLANTING TO DETERMINE BOTH THE NEED FOR AND METHODS OF INVASIVE SPECIES CONTROL, AND THE POSSIBILITY OF REDUCTION IN THE NUMBER OF TREES TO BE PLANTED BASED UPON ANY NATURAL REGENERATION WHICH MAY HAVE OCCURRED WITHIN THE PLANTING AREAS.

SEE SHEET 2 FOR FOREST CALCULATIONS TABLES.

NOTE: PRIOR TO CONSTRUCTION OF ANY TRAIL ON LAND TO BE DEDICATED TO MNCPPC, THE PROPOSED LOCATION SHALL BE FIELD LOCATED AND APPROVED BY MNCPPC PARKS DEPARTMENT. FOR ALL OTHER TRAILS THE PROPOSED LOCATION SHALL BE FIELD LOCATED AND APPROVED BY ENVIRONMENTAL PLANNING SECTION AND THE DER INSPECTOR.

LABELS FOR TREE SAVE AREAS OUTSIDE WOODLAND CONSERVATION AREAS:

TREE SAVE AREA,NOT CLEARED,NOT COUNTED	- EXISTING FOREST NOT CLEARED BUT NOT COUNTED AS WCA
TREE SAVE,NOT FOREST,NOT CLEARED	- EXISTING TREES THAT DO NOT MEET FOREST CRITERIA TO BE SAVED.
SELECT CLEAR/TREE SAVE AREA	- EXISTING FOREST WILL BE SAVED, HOWEVER, OWNER HAS RIGHT TO CLEAR THESE TREES IN THE FUTURE. AREA COUNTED AS CLEARED EVEN THOUGH THE TREES WILL REMAIN AT THIS TIME.
TREES WITHIN RIGHT OF WAY TO BE SAVED	- EXISTING TREES WILL BE RETAINED WITHIN RIGHT-OF-WAY AS SHOWN. TREES WITHIN THE WSSC RIGHT-OF-WAY ON THE EAST SIDE OF CHURCH ROAD WILL BE RETAINED EXCEPT WHERE DISTURBANCE IS NECESSARY FOR THE CONSTRUCTION OF THE WATER LINE.

TREE CONSERVATION PLAN CERTIFIED BY:

2/8/17
Date

Sallie P. Stewart, RLA, ASLA
MD Registered Landscape Architect #812

Seal not valid without signature

Prince George's County Planning Department, M-NCPPC
Environmental Planning Section
TYPE 2 TREE CONSERVATION PLAN APPROVAL
TCPII - 109-03

	Approved by	Date	DRD #	Reason for Revision
00	JOHN MARKOVICH	04/15/04	SDP-0308	Approval of Landbays A, B, C, I & J
NA		03/18/15	SDP-0308-01	Fencing, tot lots; staff level approval
01	K. FINCH	10/10/06	SDP-0308-02	Remove A-44 R/W, Malboro clay
02	K. FINCH	07/10/07	SDP-0308-03	Revise PMA in Landbay "J"
NA		04/17/08	SDP-0308-04	Architectural revision; staff level
NA		02/04/09	SDP-0308-05	Urban Design revisions; staff level
03	K. FINCH	10/07/10	SDP-0610	Add Landbays D and E
04	K. FINCH	07/11/13	SDP-0308-06	Slip lane to GC, Sewer outfall in D & E
05	KFinch	2/28/17	SDP-0308-07	Revisions to LOD for Trail & bridge

UPDATES/REVISIONS :
08/20/03 ADDRESSED P&P COMMENTS MLB
09/23/03 ADDRESSED REFERRAL COMMENTS SPS
10/20/03 ADDRESSED MNCPPC APPROVAL COMMENTS MLB
02/09/04 SUBMIT DRAFT SIGNATURE SET MLB
02/05/04 ORIG. SITNOS NV HOMES LOTS B-21,19,18/ A-1-3,4, SPS
05/24/06 REVISED TO REFLECT CHURCH ROAD EXPANSION MLB

UPDATES/REVISIONS :
10/15/07 ADD LANDBAY D & E TO TCP 109/03 RP
08/31/10 SUBMIT FOR FINAL REVIEW OF TCPI/109/03-03 SPS
09/21/10 SUBMIT FOR CERTIFICATION OF TCPII/109/03-03 SPS
07/25/16 UPDATE TO REFLECT CHURCH ROAD DESIGN SPS
01/03/17 REMOVE PARK PARCEL I SPS

TCP II - 109/03 - LANDBAY 'A'

OAK CREEK CLUB

QUEEN ANNE (7TH) ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

CPJ Associates
Charles P. Johnson & Associates, Inc.
PLANNERS • ENGINEERS • LANDSCAPE ARCHITECTS • SURVEYORS
1751 ELTON ROAD SUITE 330 SILVER SPRING, MARYLAND 20903
Phone:(301)434-7000 E-mail:asscpja.com Fax:(301)434-9594
FREDERICK, MD FAIRFAX, VA

CLIENT: NVR Mi-CAVALIER OAK CREEK OWNER, LLC
11700 PLAZA AMERICA DR.
SUITE 910
RESTON, VA 20190

PRELIMINARY PLAN NO.	4-01032
SITE PLAN NO.	0308
DESIGN	MLB
DRAFT	MEL
DATE	DEC. 2001
SCALE	1"=30'
SHEET	4
OF	35
FILE NO.	31-102-22.5 D

Plotted: Feb. 9, 2017
Dwg: N:\31100\dwg\22-109-03-s04 Xrefs: 21-ea/TOPO-EA/21-golf/44-099/46-099/22-EA/21-we