

			Table 2:	Specim	nen Tree Ta	ble				Tabl	e 3: Histo	oric Tree	Table		106	Southern Red Oak	Quercus falcata	3	Fair		Retained
No	Common Name	Scientific Name	DBH (inches)	Condition Score		Condition Comments	Disposition	No.	Common Name	Scientific Name	DBH (inches)	Condition Rating	Condition Comments	Disposition	107	Red Mulberry	Morus rubra	7	Poor		Retained
A	Willow Oak	Quercus phellos	31	12	Very Poor	Severe trunk rot, broken off main	Retained	1	Eastern Red Cedar	Juniperus virginiana	16	Poor	Crown dieback, broken limbs	Retained	108	Sweet Gum	Liquidambar styraciflua	10	Fair		Retained
	M# 11 O I			10		leader, declining health	B	3	Eastern Red Cedar White Oak	Juniperus virginiana  Quercus alba	18 12	Poor Good	Split trunk, broken limbs	Retained Retained	109	Black Cherry	Prunus serotina	10	Poor		Retained
В	White Oak	Quercus alba	38	10	Very Poor	Severe crown dieback, broken limbs, trunk decay	Retained	4	Eastern Red Cedar	Juniperus virginiana	25	Fair	Crown dieback, broken limbs	Retained	110	Black Cherry	Prunus serotina	13	Poor		Retained
С	Norway Maple	Acer platanoides	38	10	Very Poor	Trunk decay, broken limbs, declining health	Retained	5	Eastern Red Cedar	Juniperus virginiana	19, 13	Fair	Trunk damage, co-dominant leader cut at base, broken limbs	Retained	111	Bradford Pear	Pyrus calleryana	17	Poor		Retained
D	Elm sp.	Ulmus sp.	30	20	Poor	Large cavity in one leader, possible declining health	Retained	6 7	Norway Maple  Mockernut Hickory	Acer platanoides  Carya tomentosa	27 12	Good Good	Growing into a large Japanese	Retained Retained	112	Sweet Cherry	Prunus avium	7	Good		Retained
E	Yellow Poplar	Liriodendron tulipifera	57	18	Poor	Large cavity in trunk, decay	Retained	8	Mockernut Hickory	Carya tomentosa	15	Good	yew	Retained	113	Sweet Cherry  Black Cherry	Prunus avium Prunus serotina	6	Good Fair		Retained Retained
F	Red Maple	Acer rubrum	39	21	Poor	Large area of decay in trunk	Retained	9	Eastern Red Cedar	Juniperus virginiana	18	Poor	Broken off main leader	Retained	115	Black Cherry	Prunus serotina	6	Good		Retained
G		Tilia americana	39	27	Good		Retained	10	Norway Spruce  Norway spruce	Picea abies Picea abies	19,16,10 14	Fair Fair	Leaning, included bark	Retained Retained	116	Black Cherry	Prunus serotina	8	Fair		Retained
H	Elm sp. Red Maple	Ulmus sp. Acer rubrum	34	15	Very Poor Very Poor	Almost dead  Declining health	Retained Retained	12	Eastern Red Cedar	Juniperus virginiana	8	Fair		Retained	117	Southern Red Oak	Quercus falcata	6	Poor		Retained
J	Norway Maple	Acer platanoides	47	20	Poor	Trunk cavities	Retained	13	American Holly  Black Walnut	llex opaca  Juglans nigra	13 21,20	Poor Fair	Larger tree limb leaning on holly  Leaning	Retained Retained	118	Black Cherry	Prunus serotina	11	Poor		Retained
К	Black Locust	Robinia pseudo-acacia	30	15	Poor	Crown dieback, broken limbs, declining health	Retained	15	Sweet Cherry	Prunus avium	19	Fair	Broken limbs	Retained	119 120	Red Mulberry Black Cherry	Morus rubra Prunus serotina	5 12	Fair Good		Retained Retained
L	Eastern White	Pinnus strobus	30	23	Fair	Crown dieback, broken limbs	Retained	16	Black Walnut Black Locust	Juglans nigra Robinia	9 22	Fair Poor	Crown dieback, broken limbs	Retained Retained	121	Black Cherry	Prunus serotina	8, 6	Fair	Twin	Retained
M		Pinnus strobus	36	20	Poor	Broken off limbs, twin leaders split	Retained	18	American Holly	pseudo-acacia Ilex opaca	20	Good		Retained	122 123	Black Cherry Sweet Cherry	Prunus serotina Prunus avium	5	Poor Very Poor		Retained Retained
N	Pine Eastern Hemlock	Tauga ganadanaia	31	30	Excellent	at 20', large trunk cavity	Potoined	19	Black Walnut	Juglans nigra	14	Good		Retained	124	Black Cherry	Prunus serotina	7	Fair		Retained
0		Tsuga canadensis  Liriodendron tulipifera		23	Fair		Retained  To Be Removed	20	Ginko Norway Spruce	Ginko biloba Picea abies	29 23	Good Fair	Slight lean, unbalanced	Retained Retained	125	Sycamore	Platanus occidentalis	6	Good		Retained
Р	Pitch Pine	Pinus rigida	43	26	Good		To Be Removed	22	Magnolia	Magnolia Grandiflora	27	Good		Retained	126	Sweet Gum	Liquidambar styraciflua	12	Good		Retained
Q	Elm sp.	Ulmus sp.	37	20	Poor		To Be Removed	23	White Mulberry	Morus alba	9	Poor	Poor form, severe lean	Retained	127	Sweet Gum	Liquidambar styraciflua	17	Poor		Retained
R	Elm sp.	Ulmus sp.	33	21	Poor		To Be Removed To Be Removed	24	Redbud Elm sp.	Cercis canadensis Ulmus sp.	6 20	Fair Poor	Crown dieback, broken limbs vine	Retained Retained	128	Sweet Gum	Liquidambar styraciflua	13	Fair		Retained
T	Elm sp.	Ulmus sp. Ulmus sp.	35	12	Poor Very Poor	Declining health	To Be Removed	26	Mockernut Hickory	Carya tomentosa	23	Fair	cover  Broken limbs, growing on a steep	Retained	129	Sweet Gum	Liquidambar styraciflua	22	Fair		Retained
U	Elm sp.	Ulmus sp.	35	21	Poor		To Be Removed	27	Norway Spruce	Picea abies	23	Fair	slope  Leaning	Retained	130	Sweet Gum	Liquidambar styraciflua	11	Poor		Retained
V	White Ash	Fraxinus americana		19	Poor		To Be Removed	1 🗀	Eastern Red Cedar	Juniperus virginiana	24	Fair	Broken limbs	Retained	131	Sweet Gum	Liquidambar styraciflua	17	Fair		Retained
W	White Ash Elm sp.	Fraxinus americana Ulmus sp.	36	27	Good		Retained  To Be Removed	29 30	Apple Elm sp.	Malus sp. Ulmus sp.	19 10,11,5,	Poor Fair	Severe lean, large cavity  Multi-stem trunk, poor form	Retained Retained	132	Black Cherry	Prunus serotina	6	Fair		Retained
Y	Elm sp.	Ulmus sp.	32	18	Poor		To Be Removed	31	Norway Spruce	Picea abies	6,3	Fair	Leaning, heavy vine cover	Retained	133 134	Eastern Red Cedar Sweet Gum	Juniperus virginiana Liquidambar	20	Good Fair		Retained Retained
Z	Black Walnut	Juglans nigra	36	23	Fair		To Be Removed	32	Mockernut Hickory	Carya tomentosa	18	Fair	Slight lean	Retained			styraciflua				
AA		Liriodendron tulipifera		27	Good		To Be Removed	33	Mockernut Hickory  American Holly	Carya tomentosa	16	Fair	Broken limbs	Retained Retained	135	Sweet Gum	Liquidambar styraciflua	17	Fair		Retained
BB	,	Platanus occidentalis Liriodendron tulipifera		27	Good		To Be Removed  Retained	35	Mockernut Hickory	llex opaca Carya tomentosa	20 9	Good Fair	Unbalanced canopy, broken limbs	Retained	136	Sweet Gum	Liquidambar styraciflua	7	Fair		Retained
DD		Platanus occidentalis		26	Good		Retained	36	Norway Maple	Acer platanoides	9	Poor	Crown dieback, broken limbs	Retained	137	Sweet Gum	Liquidambar styraciflua	10	Fair		Retained
EE	Yellow Poplar	Liriodendron tulipifera	30	30	Excellent		Retained	38	Norway Maple Norway Maple	Acer platanoides  Acer platanoides	13	Good Fair	Unbalanced canopy, leaning	Retained Retained	138 139	Black Cherry Sweet Gum	Prunus serotina Liquidambar	4 15	Good Good		Retained Retained
FF		Liriodendron tulipifera		31	Excellent		Retained	39	Sassasfras	Sassafras albidum	8	Good	Twin	Retained	140	Sweet Gum	styraciflua Liquidambar	17	Fair		Retained
GG	<u> </u>	Liriodendron tulipifera		28	Good Excellent		Retained Retained	40	Black Walnut Black Cherry	Juglans nigra  Prunus serotina	15 6, 8	Good Poor	Twin, 6" leader diseased	Retained Retained			styraciflua	7			
II	Yellow Poplar	Liriodendron tulipifera		28	Good		Retained	42	Sassafras	Sassafras albidum	7	Poor	Large cavity at base	Retained	141	Sweet Gum	Liquidambar styraciflua	<u>'</u>	Good		Retained
JJ	Yellow Poplar	Liriodendron tulipifera	33	26	Good		Retained	43	Black Cherry	Prunus serotina	18	Poor	Large dead wood, poor form, storm damage	Retained	142	Sweet Gum	Liquidambar styraciflua	16	Good		Retained
KK	<u>'</u>	Liriodendron tulipifera		26	Good		Retained	44	Sweet Cherry Southern Red Oak	Prunus avium  Quercus falcata	12 19	Poor Good	Cavity, broken off main leader	Retained Retained	143	Southern Red Oak	Quercus falcata  Carpinus	3	Good Good		Retained Retained
LL	Yellow Poplar	Liriodendron tulipifera		21	Poor	Multi-trunk, split at base, vine cover	Retained	46	Southern Red Oak	Quercus falcata	16	Fair	One-sided, slight lean	Retained	145	Ironwood	caroliniana Carpinus	3	Fair		Retained
MM		Liriodendron tulipifera		20	Poor Fair	Declining health	Retained Retained	47	Sweet Gum	Liquidambar styraciflua	21	Good		Retained	146	Black Cherry	caroliniana Prunus serotina	5	Good		Retained
OC		Quercus alba	33	27	Good		Retained	48	Sweet Gum	Liquidambar styraciflua	16	Fair		Retained	147	Ironwood	Carpinus caroliniana	3	Good		Retained
PP	Yellow Poplar	Liriodendron tulipifera	30	18	Poor		Retained	49	Sweet Gum	Liquidambar styraciflua	17	Fair		Retained	148	Black Cherry	Prunus serotina	5	Very Poor		Retained
QC	<u> </u>	Liriodendron tulipifera	32	13	Very Poor	Severe declining health	Retained	50	Sweet Gum	Liquidambar styraciflua	15	Good		Retained	149 150	Black Cherry Black Cherry	Prunus serotina Prunus serotina	5	Fair Good		Retained Retained
RR	<u>'</u>	Liriodendron tulipifera  Quercus falcata	34	20	Poor Very Poor	Diseased, declining health, cavity	Retained Retained	51	Black Cherry	Prunus serotina	4	Fair		Retained	151	American Beech	Fagus grandifolia	5	Good		Retained
TT		Fagus grandifolia	30	23	Fair	Storm damage	Retained	52	Black Cherry Black Cherry	Prunus serotina Prunus serotina	7	Fair Fair		Retained Retained	152	Sweet Gum	Liquidambar styraciflua	20	Good		Retained
UL	Southern Red Oak	Quercus falcata	30	24	Fair	Large dead wood	Retained	54	Black Cherry	Prunus serotina	4	Fair		Retained	153	Ironwood	Carpinus caroliniana	3	Good		Retained
VV		Liriodendron tulipifera		16	Very Poor	Large cavity	Retained	55	Sweet Cherry Sweet Gum	Prunus avium Liquidambar	5 26	Poor Poor	Storm damage, broken limbs	Retained Retained	154 155	Southern Red Oak  American Beech	Quercus falcata Fagus grandifolia	3	Good Good		Retained Retained
W		Quercus falcata	35	26	Good		Retained	57	Southern Red Oak	styraciflua Quercus falcata	8	Good		Retained	156	Sweet Gum	Liquidambar	16	Good		Retained
XX	Southern Red Oak Southern Red Oak		38	26	Good		Retained Retained	58	Black Cherry	Prunus serotina	6	Fair		Retained	157	Ironwood	styraciflua Carpinus	3	Good		Retained
ZZ			32	19	Poor	Poor form, large dead wood, storm	Retained	59	Sweet Cherry  Black Cherry	Prunus avium Prunus serotina	3	Good Good		Retained Retained	158	American Beech	caroliniana Fagus grandifolia	6	Good		Retained
AA	White Oak	Quercus alba	31	23	Fair	damage  Large dead wood, storm damage	Retained	61	Black Cherry	Prunus serotina	3	Good		Retained	159	Sweet Gum	Liquidambar styraciflua	17	Good		Retained
A				26				62	Black Cherry Black Cherry	Prunus serotina Prunus serotina	3	Good Good		Retained Retained	160	Black Cherry	Prunus serotina	3	Fair		Retained
B		Quercus falcata  Liriodendron tulipifera	41	26	Good	Minor storm damage  Broken limbs	Retained Retained	64	Black Cherry	Prunus serotina	3	Fair		Retained	161	Ironwood  Vallow Poplar	Carpinus caroliniana	5	Good		Retained
С		,					, totallicu	65	Ironwood	Carpinus caroliniana	3	Good		Retained	162	Yellow Poplar	Liriodendron tulipifera	5	Good		Retained
RE0 201	QUIREMENTS OF 7 FOR THE REMO	OVAL OF TWELVE	ROVED B	Y THE PI	LANNING BO	E STRICT DARD ON MARCH 9, 25-122(b)(1)(c)): ST- O,		66	Sweet Gum	Liquidambar styraciflua	21	Poor	Storm damage, narrow crown, heavy vine cover	Retained	163	American Beech American Beech	Fagus grandifolia Fagus grandifolia	5	Good Good		Retained  Retained
	, R, S, T, U, V, Y,							67	Black Gum Sweet Gum	Nyssa sylvatica Liquidambar	8 14	Good Fair	Broken limbs	Retained Retained	165	Ironwood	Carpinus caroliniana	4	Good		Retained
								69		styraciflua Fagus grandifolia	7	Good	<del></del>	Retained		Southern Red Oak	Quercus falcata	3	Good		Retained
								70	Sweet Gum	Liquidambar styraciflua	15	Fair	Narrow crown	Retained		American Beech Ironwood	Fagus grandifolia  Carpinus	3	Good		Retained Retained
								71	Sassasfras	Sassafras albidum	3	Good		Retained		Ironwood	Caroliniana  Carpinus	4	Good		Retained
								72 73	Red Mulberry Black Cherry	Morus rubra Prunus serotina	9 5	Poor Poor		Retained Retained		Ironwood	caroliniana Carpinus	3	Fair		Retained
								73	Black Cherry  Black Cherry	Prunus serotina  Prunus serotina	12	Good		Retained		Southern Red Oak	caroliniana Quercus falcata	4	Fair		Retained
								75 76	Black Cherry	Prunus serotina	6	Good		Retained		Southern Red Oak	Quercus falcata	4	Good		Retained
								76	Black Cherry Black Cherry	Prunus serotina Prunus serotina	6	Fair Fair		Retained Retained		Eastern Red Cedar Southern Red Oak	Juniperus virginiana Quercus falcata	5	Good		Retained Retained
								78	Sweet Gum	Liquidambar styraciflua	23	Good		Retained	175	Ironwood	Carpinus caroliniana	3	Good		Retained
								79	Southern Red Oak	Quercus falcata	5	Good		Retained		Southern Red Oak	Quercus falcata	3	Good		Retained
								80	Black Cherry  Eastern Red Cedar	Prunus serotina  Juniperus virginiana	3	Good Good		Retained Retained		Southern Red Oak  American Beech	Quercus falcata Fagus grandifolia	6	Good Fair		Retained Retained
								82	Black Cherry	Prunus serotina	5	Good	<del>-</del> ·	Retained		Eastern Red Cedar	Juniperus virginiana		Good		Retained
								83	Black Cherry Black Cherry	Prunus serotina Prunus serotina	6, 4	Fair Good	Twin	Retained Retained		Eastern Red Cedar Ironwood	Juniperus virginiana Carpinus	3	Good		Retained Retained
								85	Black Cherry	Prunus serotina	4	Fair		Retained		Southern Red Oak	caroliniana  Quercus falcata	4	Good		Retained
								86	Red Mulberry Black Cherry	Morus rubra Prunus serotina	5 12, 6	Poor Fair	Twin	Retained Retained	183	American Beech	Fagus grandifolia	4	Fair		Retained
								88	Sweet Cherry	Prunus avium	4	Fair		Retained		Ironwood	Carpinus caroliniana	3	Good		Retained
								90	Sweet Cherry Sweet Cherry	Prunus avium Prunus avium	3 4	Good Fair		Retained Retained		Southern Red Oak Sweet Gum	Quercus falcata Liquidambar	26	Good Fair		Retained  Retained
								91	Black Cherry	Prunus serotina	9	Fair		Retained		Eastern Red Cedar	styraciflua  Juniperus virginiana		Good		Retained
								92	Southern Red Oak  Black Cherry	Quercus falcata  Prunus serotina	5 6	Good Poor		Retained Retained	188	Black Cherry	Prunus serotina	4	Fair		Retained
								94	Black Cherry	Prunus serotina	7	Fair		Retained	$\perp$	Black Cherry  TE:	Prunus serotina	4	Fair		Retained
								95	Black Cherry	Prunus serotina	. 7	Fair		Retained		, I E .					

97 Black Cherry Prunus serotina

Persimmon

100 Sweet Gum

103 Yellow Poplar

104 Yellow Poplar

96 Black Cherry Prunus serotina 9 Fair

virginiana

styraciflua

tulipifera

Liriodendron

tulipifera

| 105 | Southern Red Oak | Quercus falcata | 25 | Good

99 Sweet Cherry Prunus avium 3 Good

| 101 | Sweet Cherry | Prunus avium | 4 | Fair

102 Sweet Cherry Prunus avium 4 Fair

Diospyros 9,7 Good

Liriodendron | 17,8 | Good

Retained

Retained NOTE: Retained AT THE TIME OF TCP2, APPLICANT MAY CREDIT HISTORIC TREES WITHIN THE ENVIRONMENTAL SETTING OF THE Retained | CEMETERY AS FOLLOWS:

Retained | A. PERMISSION OF THE OWNER OR OWNERSHIP OF THE PROPERTY SHALL BE DEMONSTRATED. A HISTORIC TREE INVENTORY OF THE ENVIRONMENTAL SETTING OF THE CEMETERY SHALL BE PREPARED AND INCLUDED ON THE TCP2.

A HISTORIC SETTING VEGETATION MANAGEMENT PLAN FOR THE CEMETERY SHALL BE PREPARED FOR THE PURPOSE OF IDENTIFYING VEGETATION THAT SHOULD BE REMOVED TO PROTECT THE EXISTING GRAVES ONSITE, TO IDENTIFY RECOMMENDED MAINTENANCE ACTIVITIES, AND TO PROPOSE ANY ADDITIONAL PLANTING APPROPRIATE FOR THE SITE. THE PLAN SHALL INCLUDE A MAINTENANCE PROGRAM FOR THE CEMETERY TO RETAIN AN OPEN CHARACTER OVER THE KNOWN GRAVE SITES, A COST ESTIMATE FOR IMPLEMENTATION OF THE PLAN AND FOR A MINIMUM OF FOUR YEARS OF MAINTENANCE, AND SHALL IDENTIFY THE PARTY OR PARTIES RESPONSIBLE TOR THE LONG-TERM MAINTENANCE OF THE ENVIRONMENTAL SETTING.

Woodland Conservation Worksheet for Prince George's County, Maryland Zone: Gross Tract: Include acreages only in columns for which there is a corresponding zone. Floodplain: Previously Dedicated Land: 288.38 Net Tract (NTA): 0.00 Melford OVERALL Property Description or Subdivision Name: Is this site subject to the 1989 Ordinance? Break-even Point (preservation acres) = Acres of Net Tract clearing permitted w/o refore 105.83 Woodland Conservation Requirement Calculations: Existing Woodland on Net Tract (acres) Existing Woodland in Floodplain (acres) Woodland Conservation Threshold (NTA) = 15.00% Smaller of a or c Woodland above WCT SDP-0405 | DSP-06096 | DSP-07072 | DSP-07031 | DSP-11018 DSP-17020 DSP-18007 SDP# TCPII Number TCPII-036-99 TCPII-036-99 2-025-2017 TCPII-036-99 TCPII-036-99 TCPII-036-99\* TCPII-036-99\* TCPII-036-99\* TCPII Revision # 2/28/2006 1/26/2018 9/22/2008 10/8/2009 8/21/2018 Pending Pending Approval Date Phase 1 Phase 2 Phase 3 Phase Pod 6 Pod 7 Pod 1, 5, 7, P2 Pod 1 Plan Number: (This must be completed for each phase) IMI Lot 1 Blk 2 Lot 3, Blk 2 Parcel 80-81 Plan Phase or Name: 25.19 10.05 23.49 Total area in this application (acres) Floodplain area in this application (acres) Net Tract area in the application (acres) 23.49 Woodland on the Net Tract for this phase (acres) Woodland in the Floodplain for this phase Woodland Cleared on Net Tract for this phase Woodland Cleared in Floodplain for this phase Off-site Woodland Clearing (1:1) Off-site Mitigation provided on this property 80.45 Cummulative acres of Net Tract Woodland cleared 80.45 Cummulative acres of Floodplain woodland cleared 0.07 0.23 Smaller of d or e 113.95 78.76 80.45 80.45 80.88 101.08 113.72 0.00 Woodland Clearing below WCT 0.00 19.66 19.69 20.11 20.11 20.22 28.43 Replacement for clearing above the WCT (0.25 : 1) 0.00 0.00 0.00 0.00 0.00 0.00 Replacement for clearing below the WCT (2:1) 0.00 0.00 0.00 Afforestation Threshold (AFT) = 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Cumulative Woodland Conservation Required 62.99 63.02 63.44 63.44 63.55 71.92 Latest phase indicates cumulative requirement through that phase of work Woodland Conservation Provided: Preservation Reforestation- Afforestation Landscape Credits Specimen & Historic Tree Credit (CRZ x 2) Forest Enhancement Credit (25% of enhanced area)

License Number: Note: The above Phased Worksheet was revised with DSP-06096-02 Marriott Hotels @ Bowie-Melford, when a separated TCP2 number (TCP2-025-2017) was established for Lot 1, Block 2 (Phase 3). \* - Area of this DSP is previously accounted for in columns 1-6 of this table.

0.00

36.61 48.88 50.86 52.98 54.42

0.00 0.00

0.00

0.00

0.00

#### \*\* - This addresses specific requirements of Mass Grading DSP (DSP-17020) and The Aspen (DSP-18007) revisions. \*\*\* - Historic cemetery woodland conservation credits are reflected in future revisions to meet all on-site requirements.

Area approved for fee-in-lieu

Revised 9/1/04

Prepared by:

Credit for Off-site Mitigation on another property

Woodland saved on this phase but not counted Existing Net Tract Woodland in later phases

Off-site Mitigation provided on this property

Total Woodland Conservation Provided

### Individual TCP2 with Previously Approved TCP1 or TCP2 **Woodland Conservation Worksheet for Prince George's County**

- 1	Zone:	M-X-T				
2	Gross Tract:	6.62				
3	Floodplain:	0.00				
4	Previously Dedicated Land:	0.00				
	Net Tract (NTA):	6.62	0.00	0.00		
6	Property Description or Subdivision Name:	The Aspen at	Melford Tow	vn Center		
7	Current TCP Number:	2-036-99	Rev#	12		
8	Previous TCP Number:	2-036-99	Rev#	11		
	Site subject to the 2010 Ordinance (Y or N)	N	1			
	Is this a priority funding area? (Y or N)	Υ	]			
	SECTION II - Determining Woodland Conse	rvation Require	ments (En	ter acres in	corresponding	g column)
9	Woodland Conservation Calculations:			Net tract		Flood
11	Acreage of Existing Woodland			6.62		
	Woodland Conservation Required for per TCP	l or TCP2	34.59%	2.29		
	Area of Woodland Cleared per previous TCP1			2.29		
	Area of Woodland Cleared per current TCP2			2.29		
	Area of Woodland above WCT not cleared by	nrevious TCP1 c	r TCP2	0.00		
	Additional Woodland Cleared by current TCP2		-	0.00		
	Does the TCPI show 2:1 replacement?	N	1			
	Clearing above WCT (1/4:1 Replacement)		Poplosomo	ont required —		
				ent required =		
	Clearing below WCT (2:1 Replacement)  Total Woodland Conservation Required :	0.00	Replaceme	ent required = 2.29		
21	SECTION III-Meeting the Requirement (Entel Woodland Conservation Provided:	r acres in corres	sponding co	lumn) (acres)		
	Woodland Preservation			0.00		
	Reforestation / Afforestation				ond amount:	¢
	Natural Regeneration			0.00	oriu arriourit.	Ψ
	_			0.00		
	Landscape Credits					
	Area approved for fee-in-lieu	(1			ee amount:	
	Credits Received for Off-site Mitigation on ano	ther property		2.29		
	Off-site Mitigation provided on this property			0.00		
29	Total Woodland Conservation Provided			2.29		
_	Area of net tract woodland not cleared		acres			
30	Woodland retained not part of requirements:	0.00	acres			
31	Prepared by:			Date:		
	Qualifications:					

THE QUANTITY OF HISTORIC TREE CREDITS IN THE ENVIRONMENTAL SETTING SHALL BE CALCULATED AND ADDED TO THE WOODLAND CONSERVATION WORKSHEET. PRIOR TO THE ISSUANCE OF GRADING PERMITS FOR MELFORD VILLAGE WHICH CREDIT WOODLAND CONSERVATION WITH THE CEMETERY ENVIRONMENTAL FOR HISTORIC TREE CREDIT, A HAWP FOR IMPLEMENTATION OF THE HISTORIC SETTING VEGETATION MANAGEMENT PLAN SHALL BE APPROVED, AND A BOND FOR IMPLEMENTATION OF THE PLAN SHALL BE SUBMITTED. BONDING SHALL BE HELD UNTIL THE REQUIREMENTS OF THE PLAN IS FULLY IMPLEMENTED, AND FOUR YEARS OF MAINTENANCE HAS BEEN

	TYPE 2 TR	REE CONSERVAT TCPII-030		ROVAL
	Approved by	Date	DRD#	Reason for Revision
00	J.P. MARKOVICH	10/30/00	4-98076	
01	R. PORTER INGRUM	02/20/03	SDP-0203	REVISED LAYOUT
02	LORI SHIRLEY	04/07/05	SDP-0203-01	REVISED LAYOUT
03	LORI SHIRLEY	06/17/05		REVISED LAYOUT
04	K. I. FINCH	08/09/05	SDP-0405	PARCEL 2E
05	LORI SHIRLEY	02/28/06	SDP-0402	LOT 5 BLOCK 5
06	K. SHOULARS	03/04/09	DSP-06096	LOT 1 BLOCK 2
07	K. SHOULARS	09/22/08	DSP-07072	BLOCK 3 LOTS 1-2
08	K. SHOULARS	10/08/09	DSP-07031	MELFORD POD 6 LOTS 1-6
09	K. SHOULARS	10/17/11	DSP-11018	MELFORD PONDS 1-2
10	K. I. FINCH	6/21/13	DSP-11018-01/ DSP-11018-02	REVISED LAYOUT
11	K. I. FINCH	04/14/17	DSP-17020	INFRASTRUCTURE
12	Kim A. Finch	1/21/2019	DSP-18007	ASPEN

Prince George's County Planning Department, M-NCPPC

Environmental Planning Secion

TCPII-036-99							
Approved by	Date	DRD#	Reason for Revision				
J.P. MARKOVICH	10/30/00	4-98076					
R. PORTER INGRUM	02/20/03	SDP-0203	REVISED LAYOUT				
LORI SHIRLEY	04/07/05	SDP-0203-01	REVISED LAYOUT				
LORI SHIRLEY	06/17/05		REVISED LAYOUT				
K. I. FINCH	08/09/05	SDP-0405	PARCEL 2E				
LORI SHIRLEY	02/28/06	SDP-0402	LOT 5 BLOCK 5				
K. SHOULARS	03/04/09	DSP-06096	LOT 1 BLOCK 2				
K. SHOULARS	09/22/08	DSP-07072	BLOCK 3 LOTS 1-2				
K. SHOULARS	10/08/09	DSP-07031	MELFORD POD 6 LOTS 1-6				
K. SHOULARS	10/17/11	DSP-11018	MELFORD PONDS 1-2				
K. I. FINCH	6/21/13	DSP-11018-01/ DSP-11018-02	REVISED LAYOUT				
K. I. FINCH	04/14/17	DSP-17020	INFRASTRUCTURE				
Kim A Finch	1/21/22/2	DSP_18007	ASDEN				

0.00

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0.00

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: THE ASPEN AT MELFORD TOWN CENTER PROJECT NUMBER: DSP-18007

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

REVISIONS REV DATE COMMENT



NOT APPROVED FOR CONSTRUCTION

DRAWN BY:

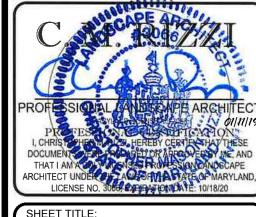
MELFORD

VILLAGE THE ASPEN AT MELFORD TOWN CENTER LOCATION OF SITE THE MELFORD VILLAGE **BOWIE**, MD 20715

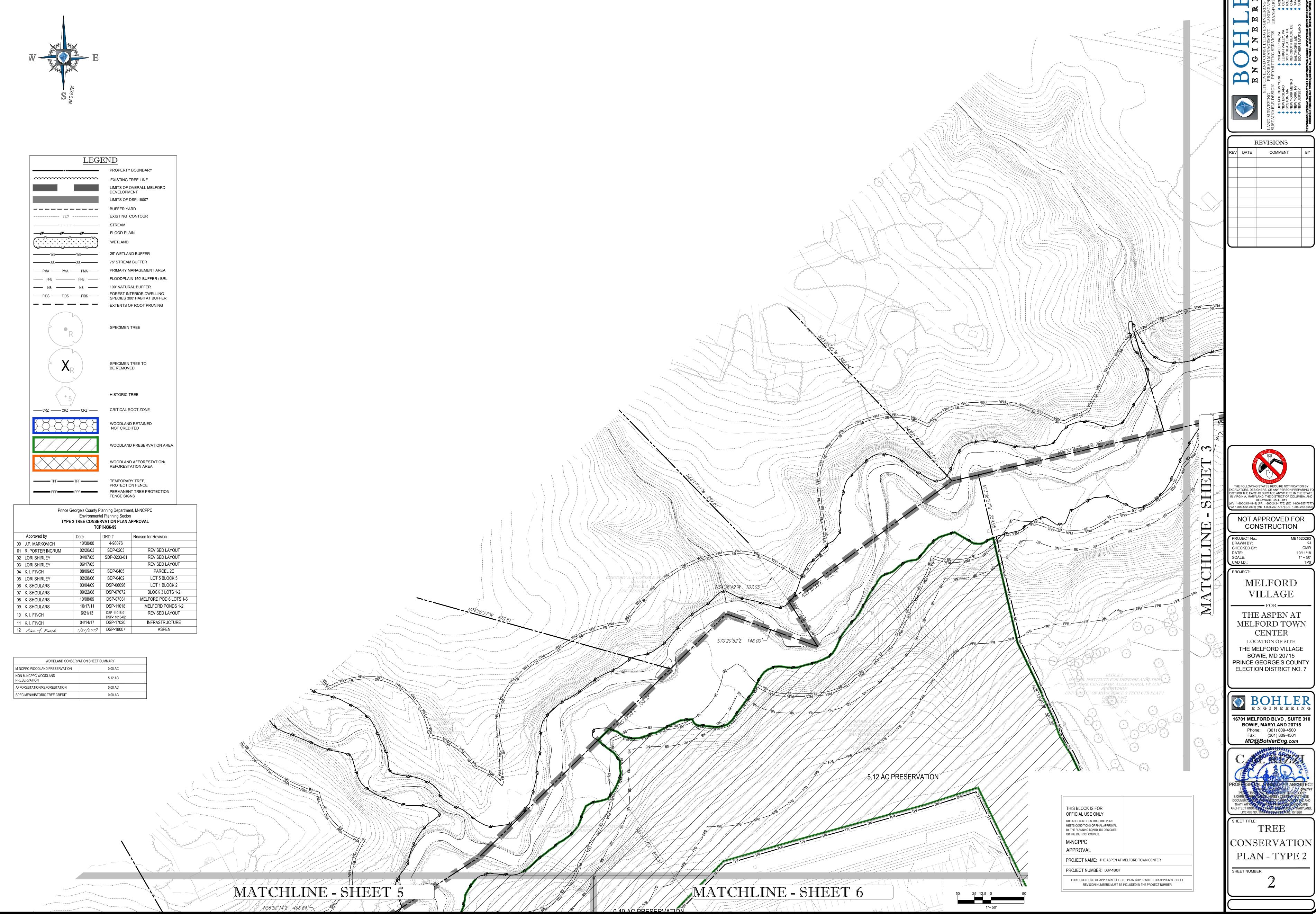
PRINCE GEORGE'S COUNTY ELECTION DISTRICT NO. 7



Phone: (301) 809-4500 Fax: (301) 809-4501 MD@BohlerEng.com

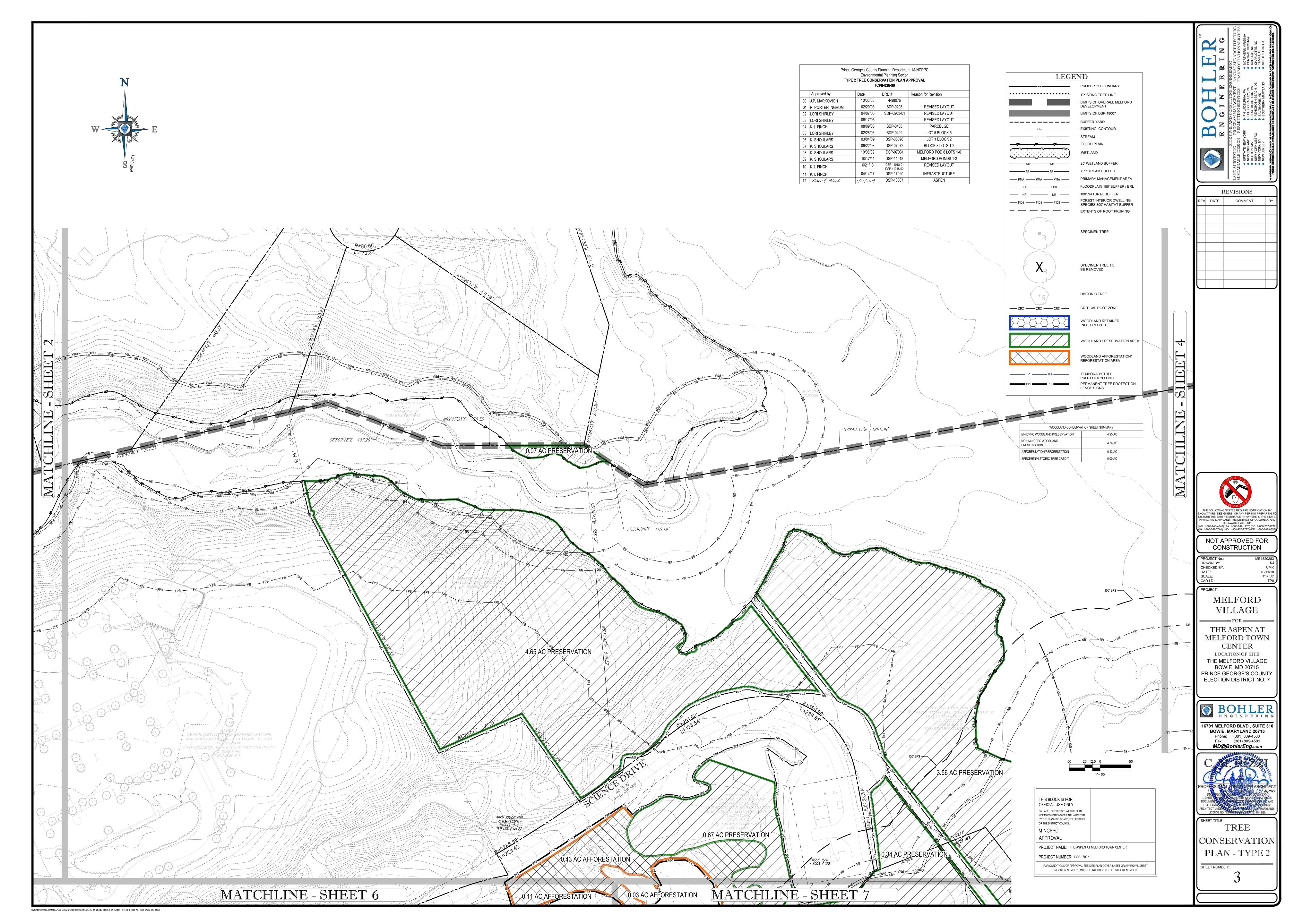


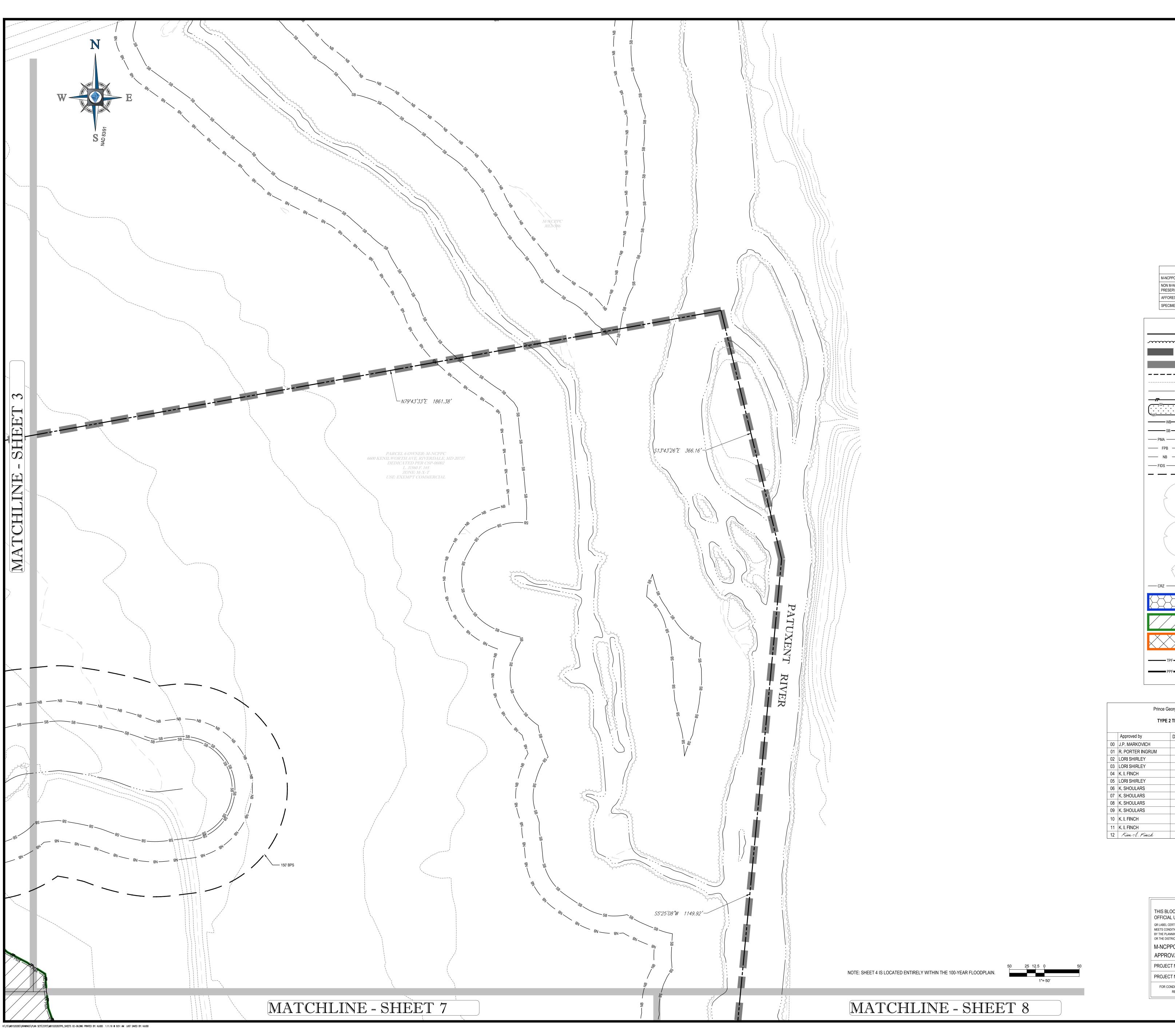
INVENTORY

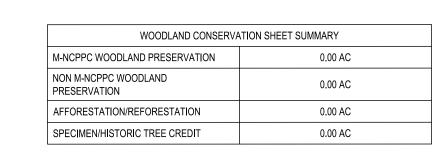


H:\15\MB1520283\DRAWINGS\PLAN SETS\TCP2\MB1520283TPO\_SHEETS 02-06.DWG PRINTED BY: KJUDD 1.111.19 • 8:50 AM LAST SAVED BY: KJUDD









LEGEND

	PROPERTY BOUNDARY
	EXISTING TREE LINE
	LIMITS OF OVERALL MELFO
	LIMITS OF DSP-18007
	BUFFER YARD
110	EXISTING CONTOUR
	STREAM
	FLOOD PLAIN
( <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	WETLAND
	25' WETLAND BUFFER
SBSB	75' STREAM BUFFER
—— РМА ——— РМА ———	PRIMARY MANAGEMENT AR
— FPB — FPB —	FLOODPLAIN 150' BUFFER /
—— NB ——— NB ———	100' NATURAL BUFFER
—— FIDS —— FIDS ——	FOREST INTERIOR DWELLIN SPECIES 300' HABITAT BUFF
	EXTENTS OF ROOT PRUNIN
• R	SPECIMEN TREE
$X_{R}$	SPECIMEN TREE TO BE REMOVED
* 5	HISTORIC TREE
—— CRZ —— CRZ ——	CRITICAL ROOT ZONE
	WOODLAND RETAINED NOT CREDITED

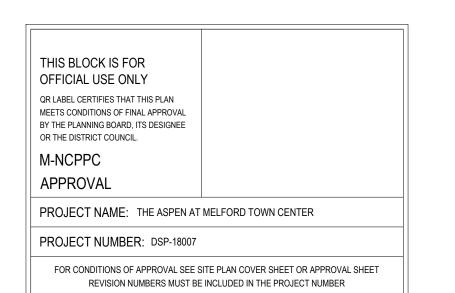
WOODLAND PRESERVATION AREA

WOODLAND AFFORESTATION/ REFORESTATION AREA

PERMANENT TREE PROTECTION FENCE SIGNS

TEMPORARY TREE PROTECTION FENCE

		Environmer 2 TREE CONSE	Planning Departme ntal Planning Secior ERVATION PLAN A PII-036-99	1
	Approved by	Date	DRD#	Reason for Revision
00	J.P. MARKOVICH	10/30/00	4-98076	
01	R. PORTER INGRUM	02/20/03	SDP-0203	REVISED LAYOUT
02	LORI SHIRLEY	04/07/05	SDP-0203-01	REVISED LAYOUT
03	LORI SHIRLEY	06/17/05		REVISED LAYOUT
04	K. I. FINCH	08/09/05	SDP-0405	PARCEL 2E
05	LORI SHIRLEY	02/28/06	SDP-0402	LOT 5 BLOCK 5
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11	K. I. FINCH	04/14/17	DSP-17020	INFRASTRUCTURE
12	Kim A. Finch		DSP-18007	ASPEN



ENGRAM MANAGEMENT LANDSCAPE ARCHITECTU

SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

NEW YORK METRO

SUSTAINABLE DESIGN PARMET OF THE REAL VALLEY PARMET OF THE NORTHERN VIRGINIA

SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

NEW YORK METRO

SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES T

REV	DATE	COMMENT	BY



NOT APPROVED FOR CONSTRUCTION

PROJECT No.: MB1520283
DRAWN BY: K.
CHECKED BY: CMF
DATE: 10/11/18
SCALE: 1" = 50

JECT:

MELFORD

VILLAGE

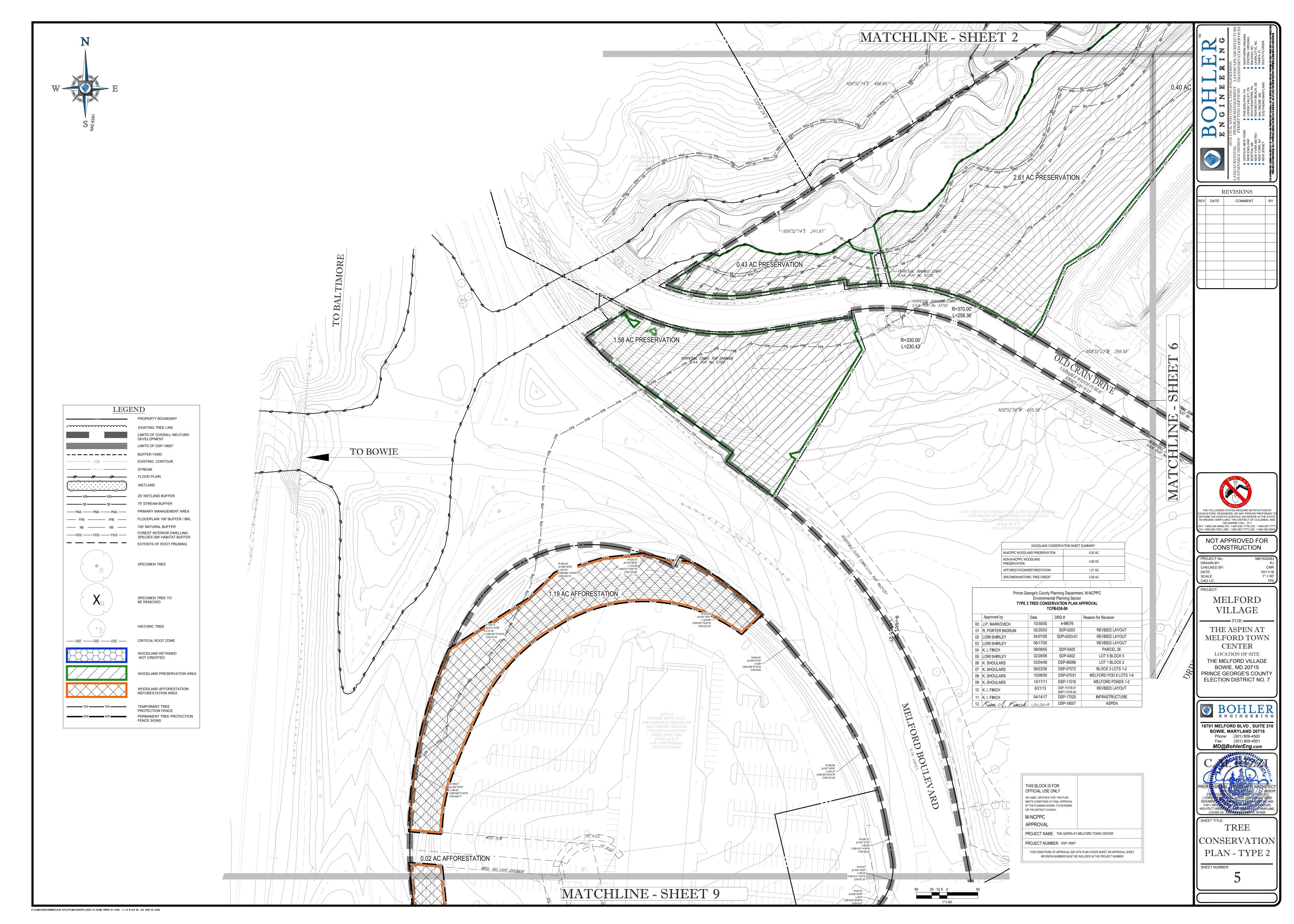
THE ASPEN AT
MELFORD TOWN
CENTER
LOCATION OF SITE
THE MELFORD VILLAGE
BOWIE, MD 20715
PRINCE GEORGE'S COUNTY
ELECTION DISTRICT NO. 7

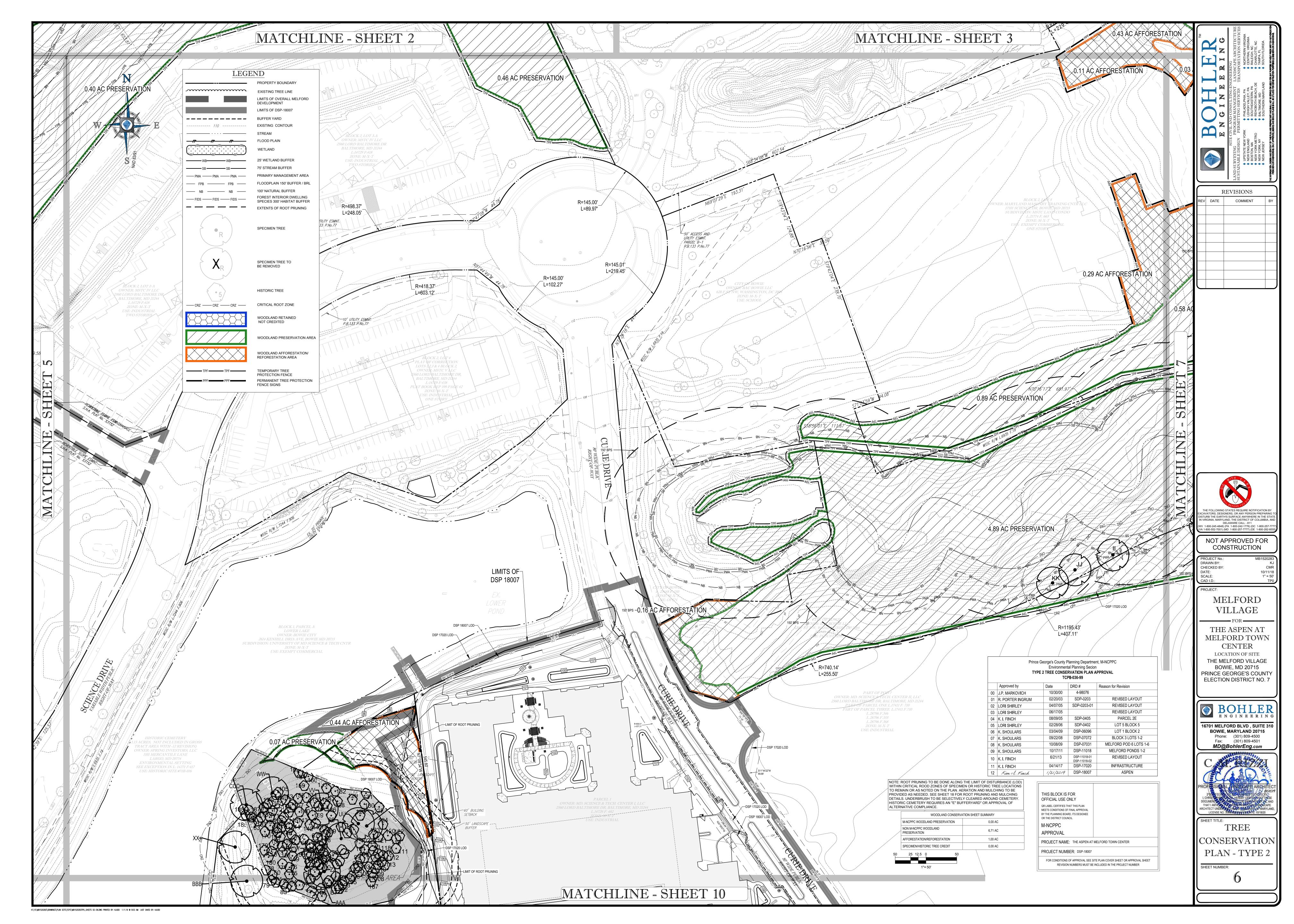


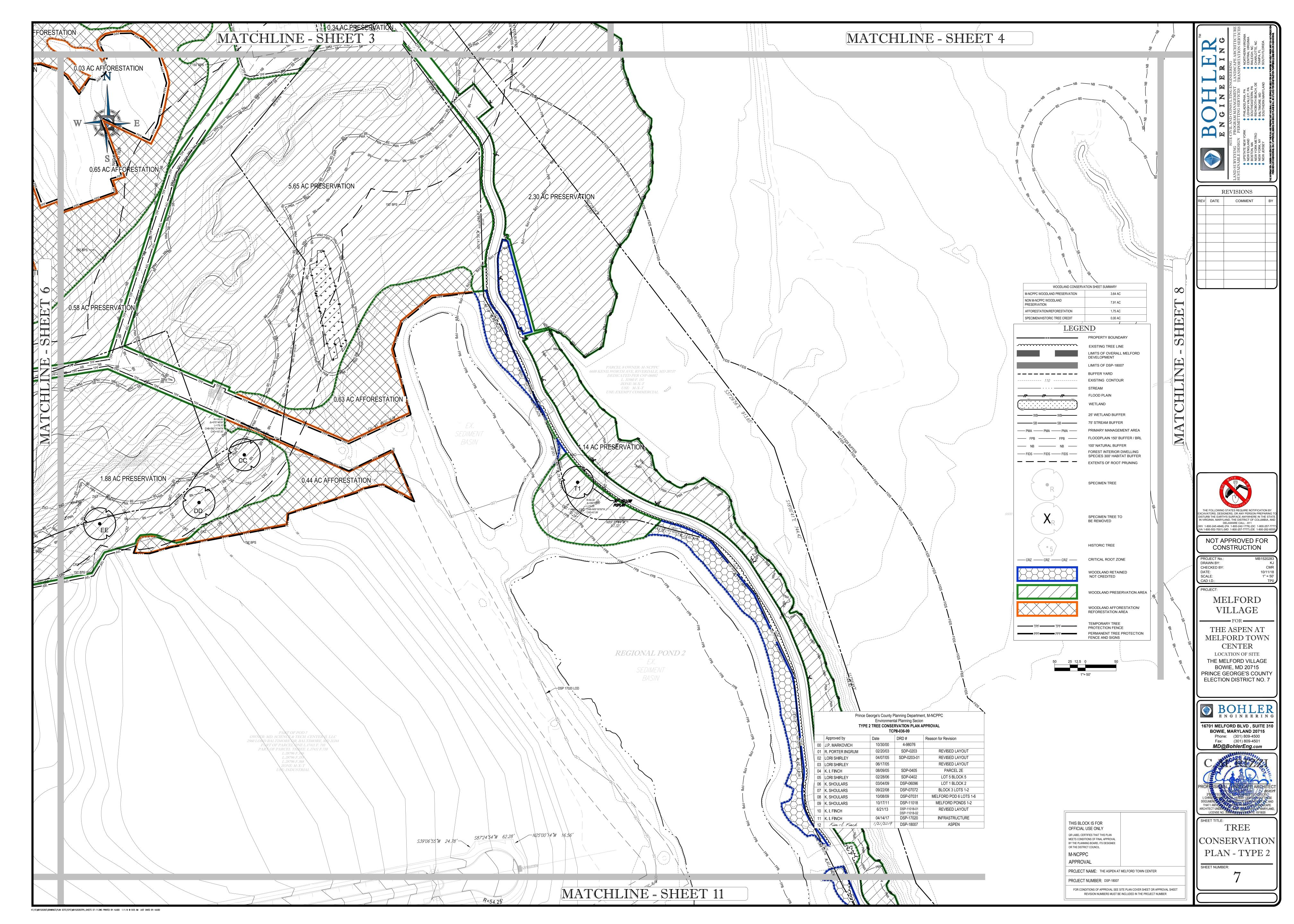


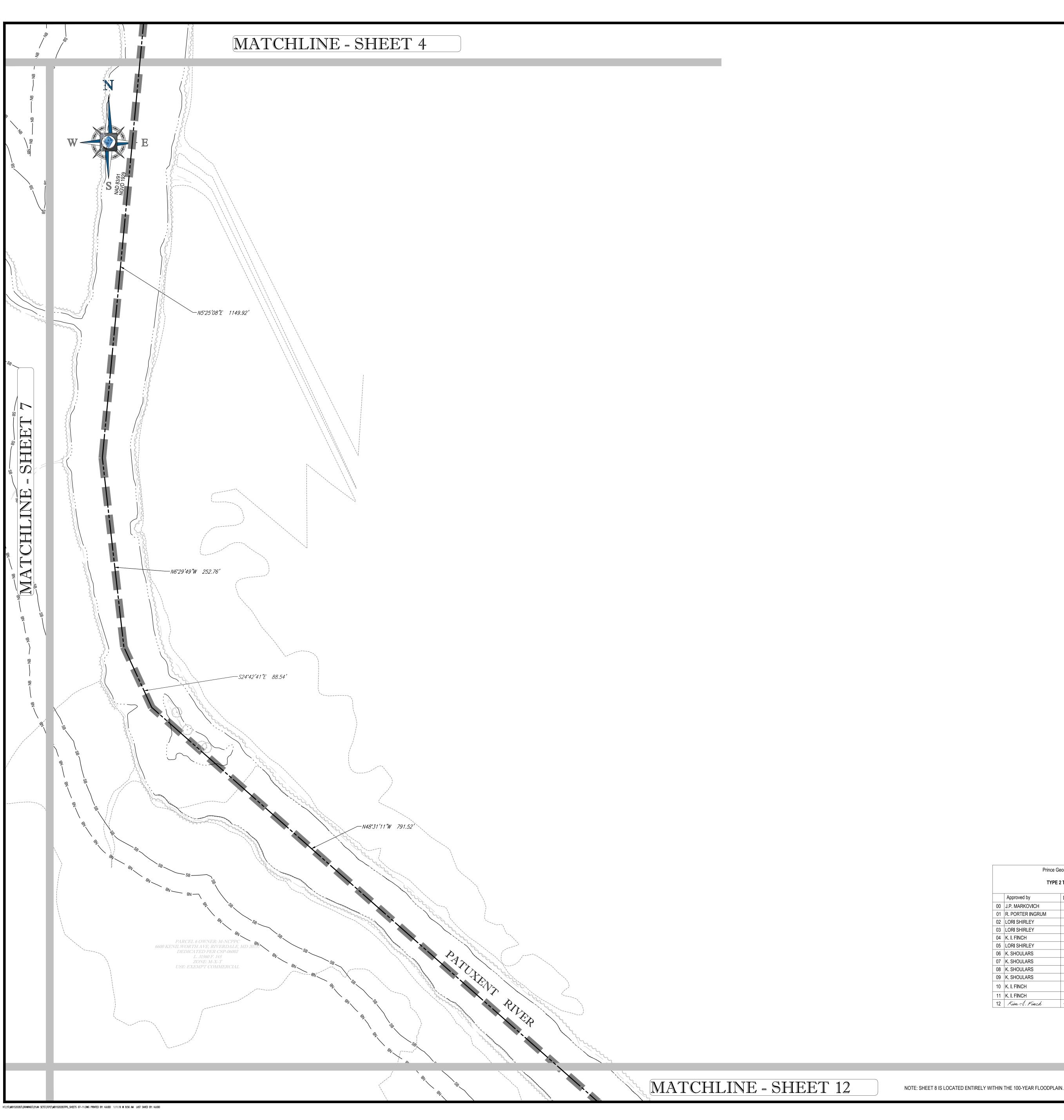
TREE
CONSERVATION
PLAN - TYPE 2

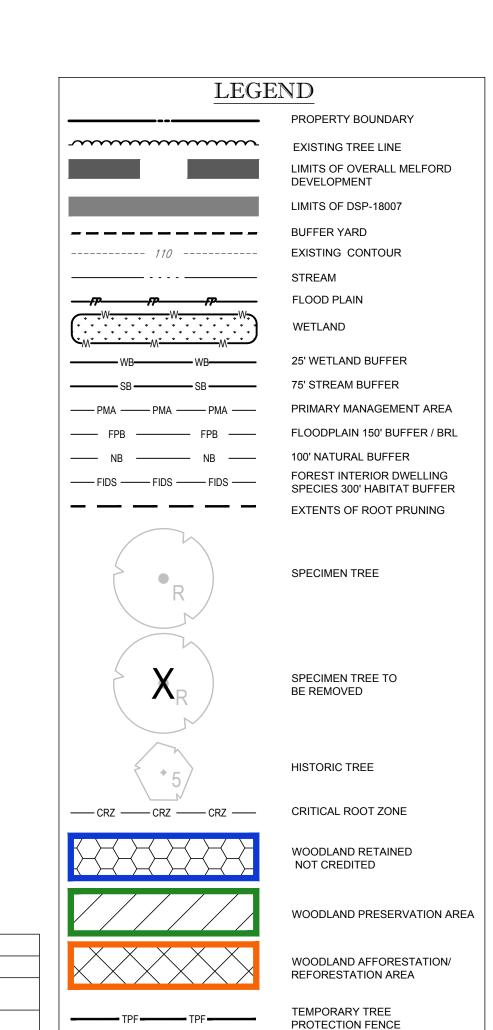
SHEET NUMBER:











	E 2 TREE CONSE	tal Planning Secior	1
Approved by	Date	DRD#	Reason for Revision
00 J.P. MARKOVICH	10/30/00	4-98076	
01 R. PORTER INGRUM	02/20/03	SDP-0203	REVISED LAYOUT
02 LORI SHIRLEY	04/07/05	SDP-0203-01	REVISED LAYOUT
03 LORI SHIRLEY	06/17/05		REVISED LAYOUT
04 K. I. FINCH	08/09/05	SDP-0405	PARCEL 2E
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11 K. I. FINCH	04/14/17	DSP-17020	INFRASTRUCTURE
12 Kim A. Finch	1/21/2019	DSP-18007	ASPEN

M-NCPPC WOODLAND PRESERVATION

AFFORESTATION/REFORESTATION

SPECIMEN/HISTORIC TREE CREDIT

NON M-NCPPC WOODLAND

PRESERVATION

_		
	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: THE ASPEN AT	MELFORD TOWN CENTER
	PROJECT NUMBER: DSP-18007	

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

PERMANENT TREE PROTECTION

FENCE AND SIGNS

WOODLAND CONSERVATION SHEET SUMMARY

0.00 AC

0.00 AC

0.00 AC

REVISIONS



NOT APPROVED FOR CONSTRUCTION DRAWN BY: CHECKED BY:

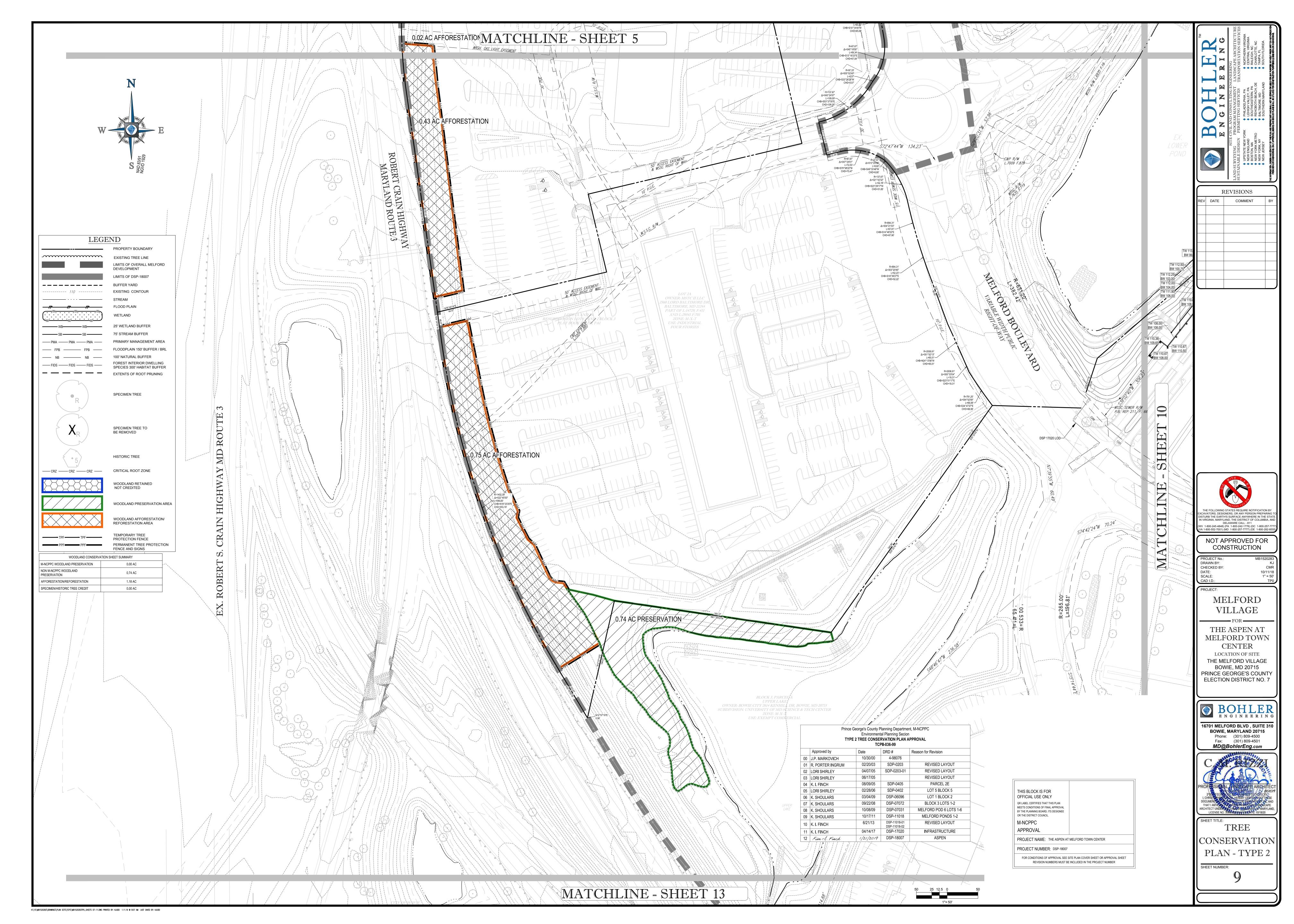
THE ASPEN AT MELFORD TOWN CENTER LOCATION OF SITE

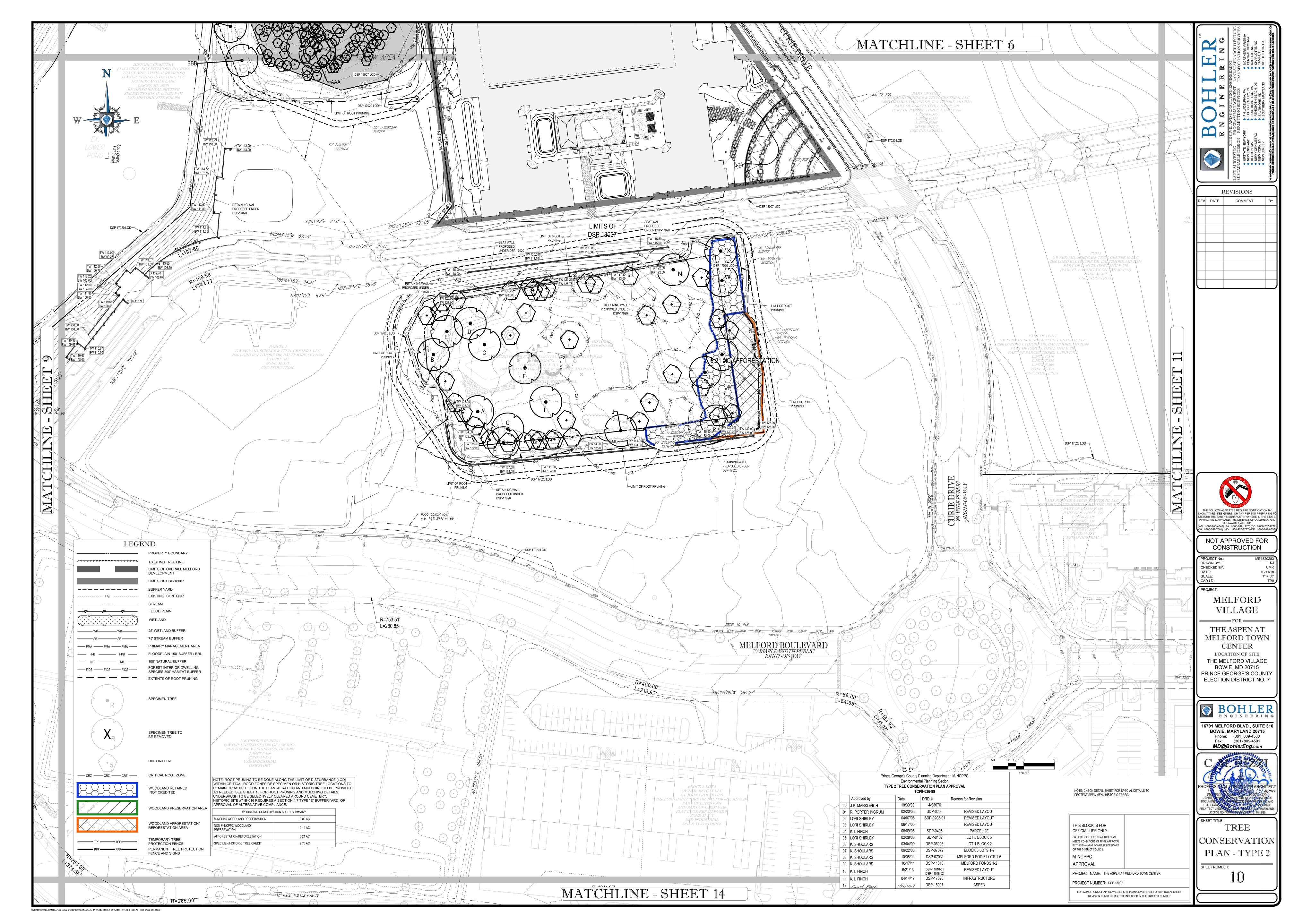
THE MELFORD VILLAGE BOWIE, MD 20715 PRINCE GEORGE'S COUNTY **ELECTION DISTRICT NO. 7** 

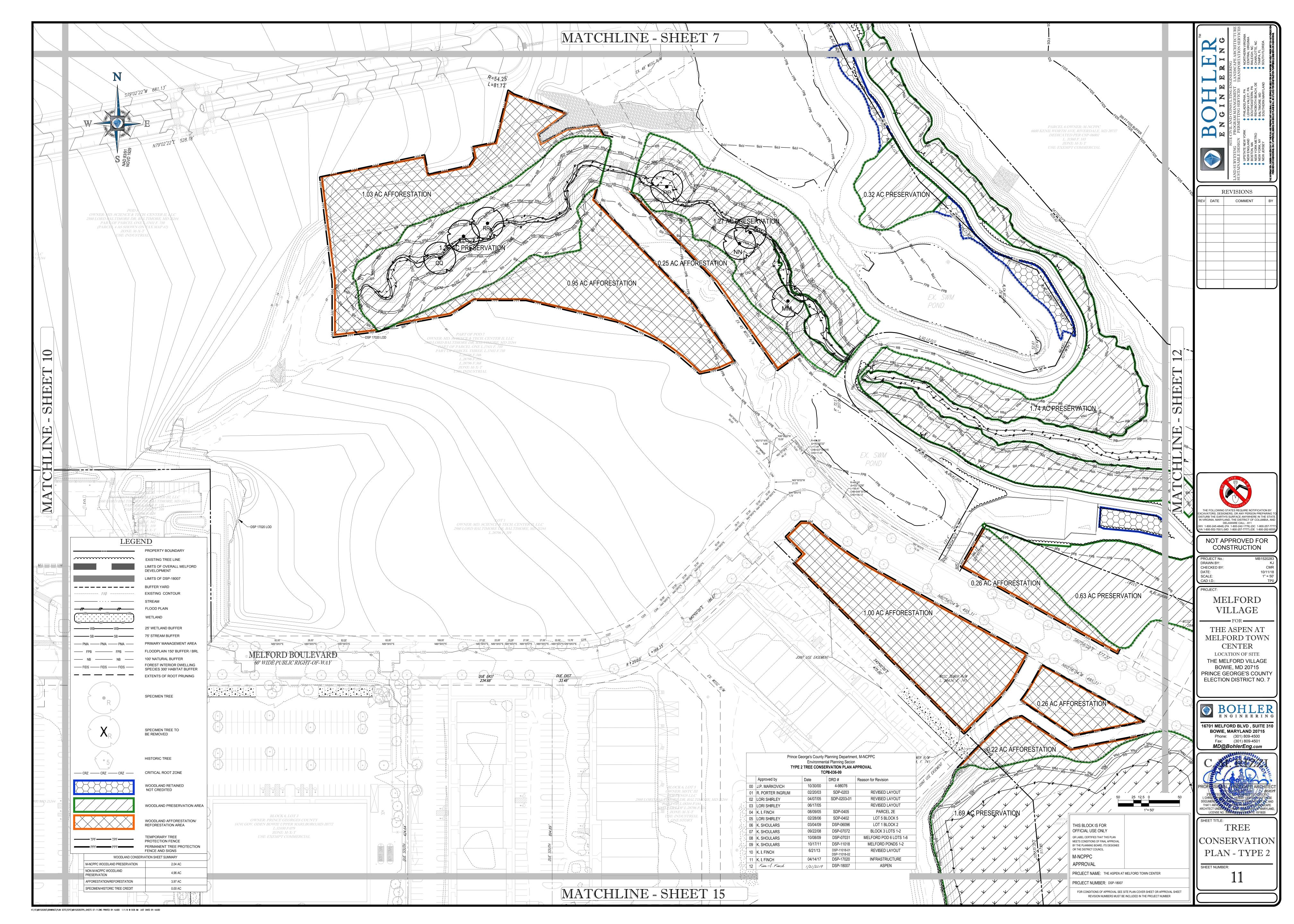
BOHLER ERING 16701 MELFORD BLVD , SUITE 310 **BOWIE, MARYLAND 20715** 

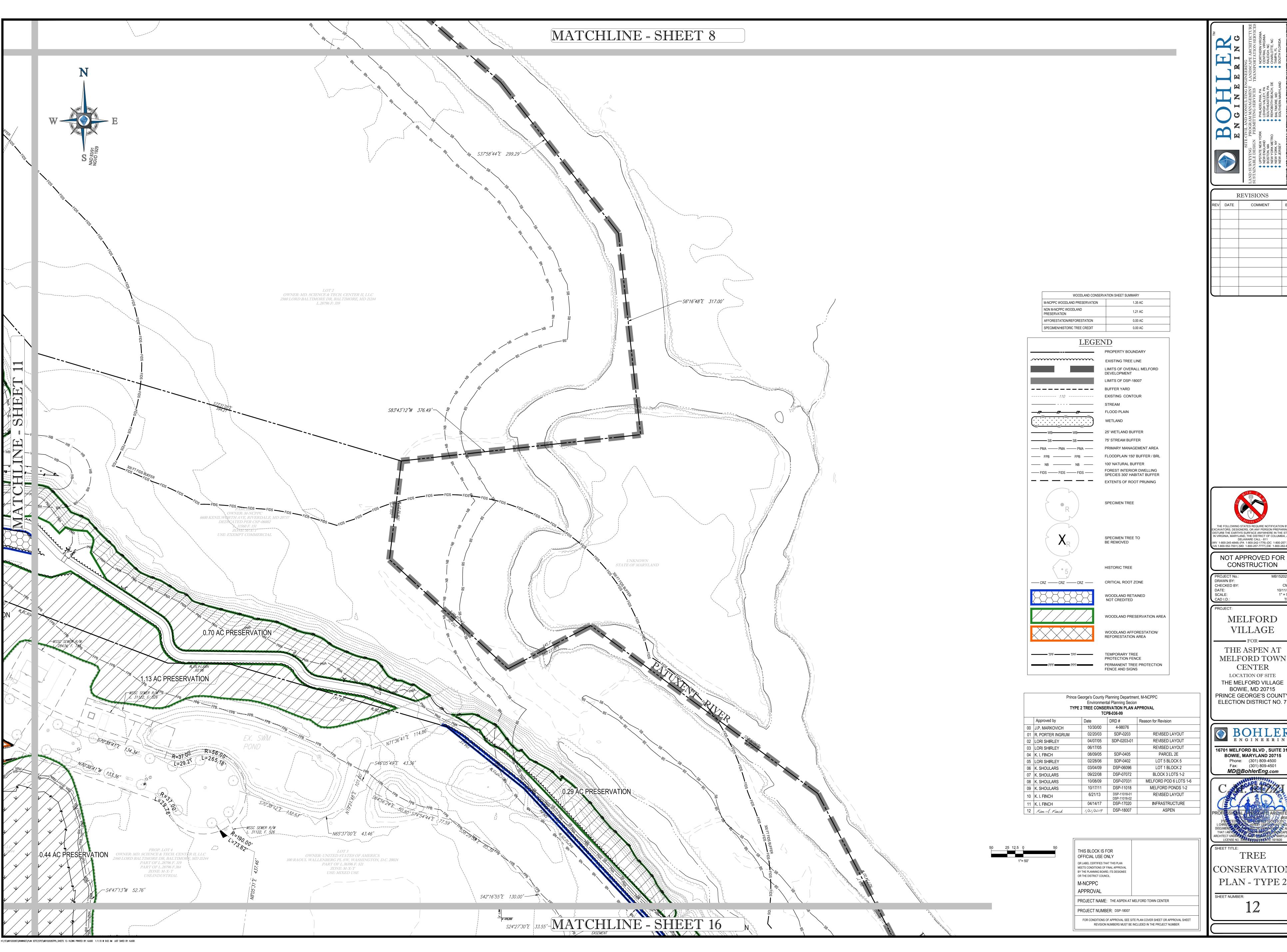
Phone: (301) 809-4500 Fax: (301) 809-4501 MD@BohlerEng.com

CONSERVATION PLAN - TYPE 2









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/	DATE	COMMENT	BY	
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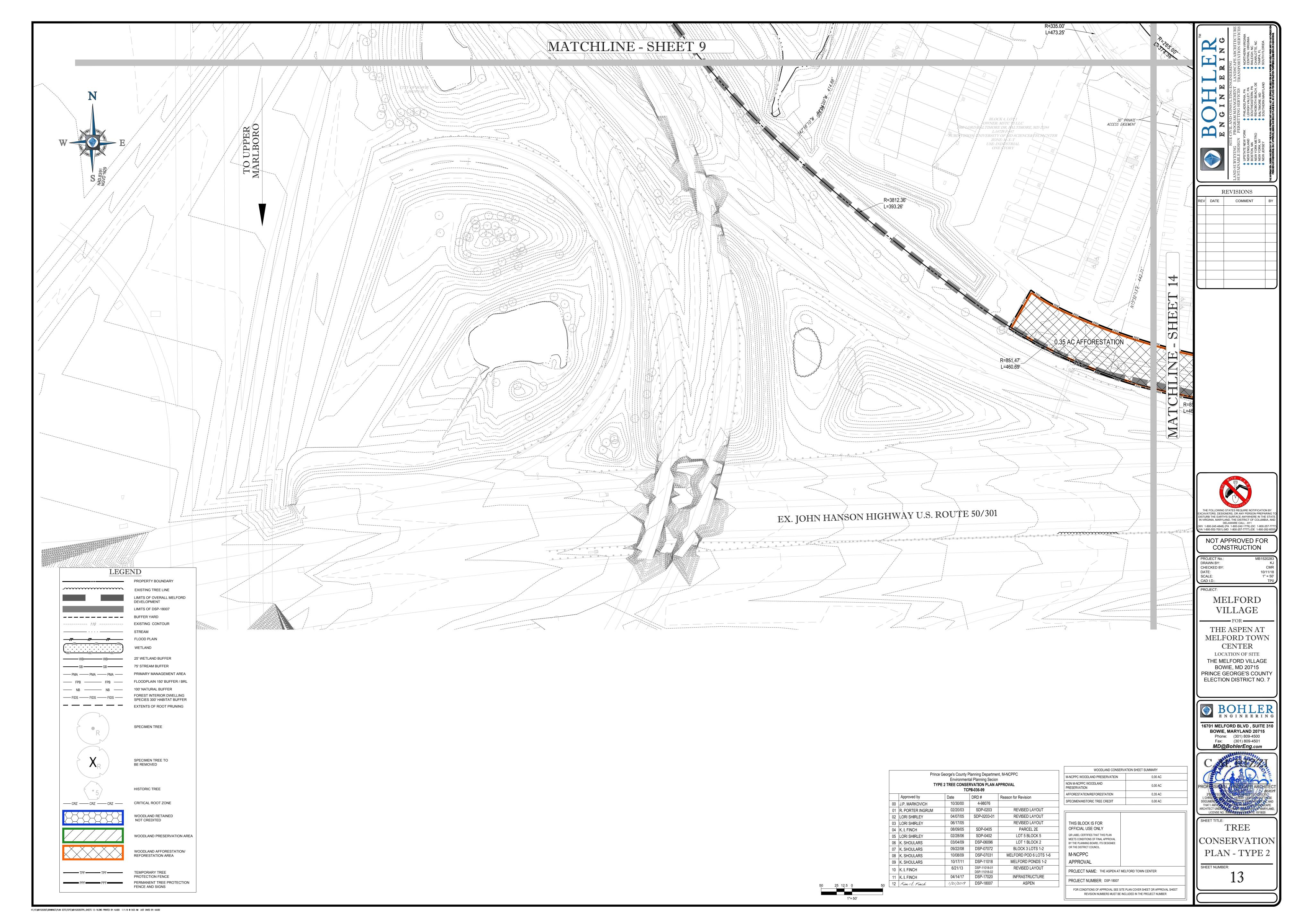
MELFORD VILLAGE

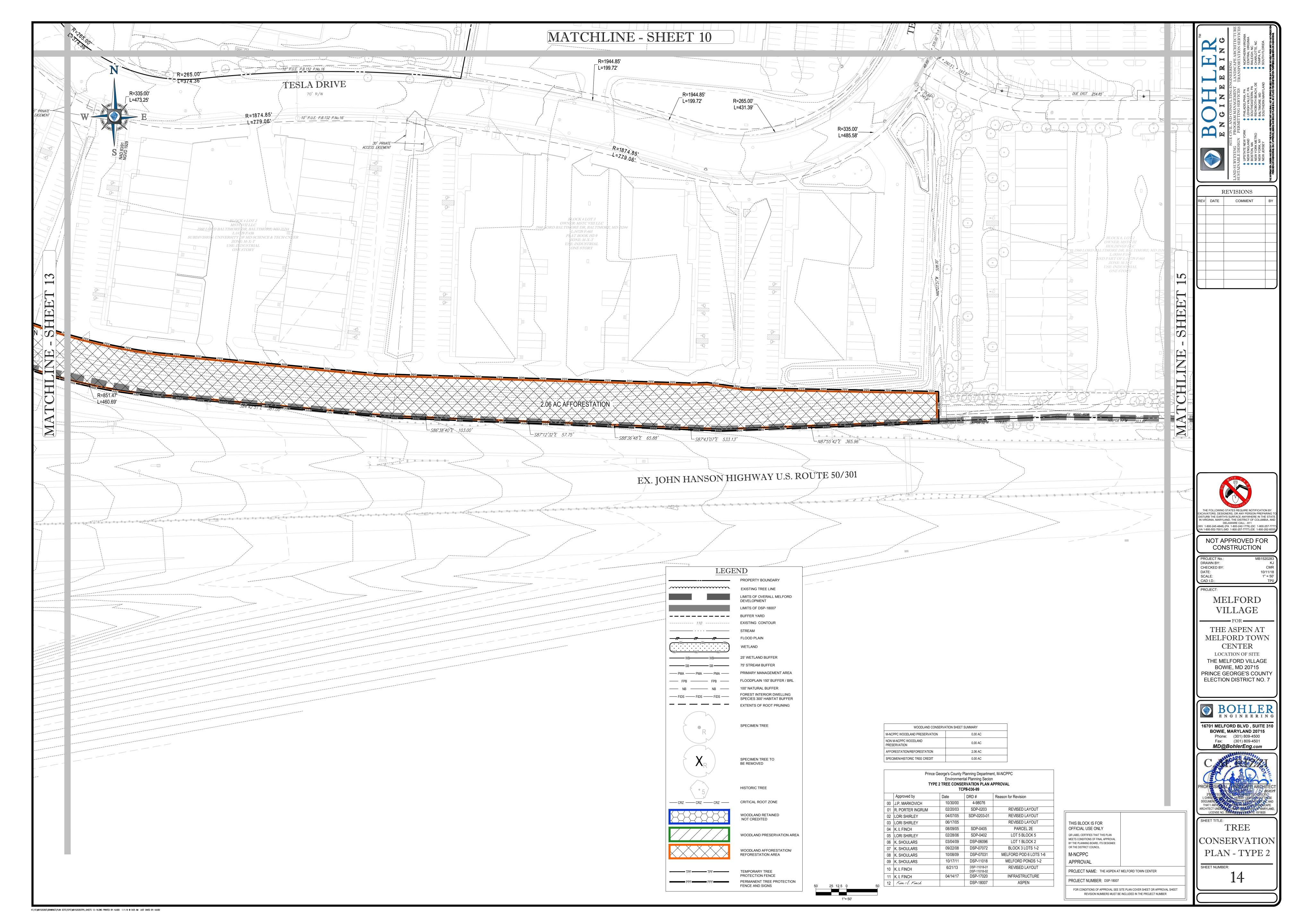
CENTER LOCATION OF SITE THE MELFORD VILLAGE BOWIE, MD 20715 PRINCE GEORGE'S COUNTY

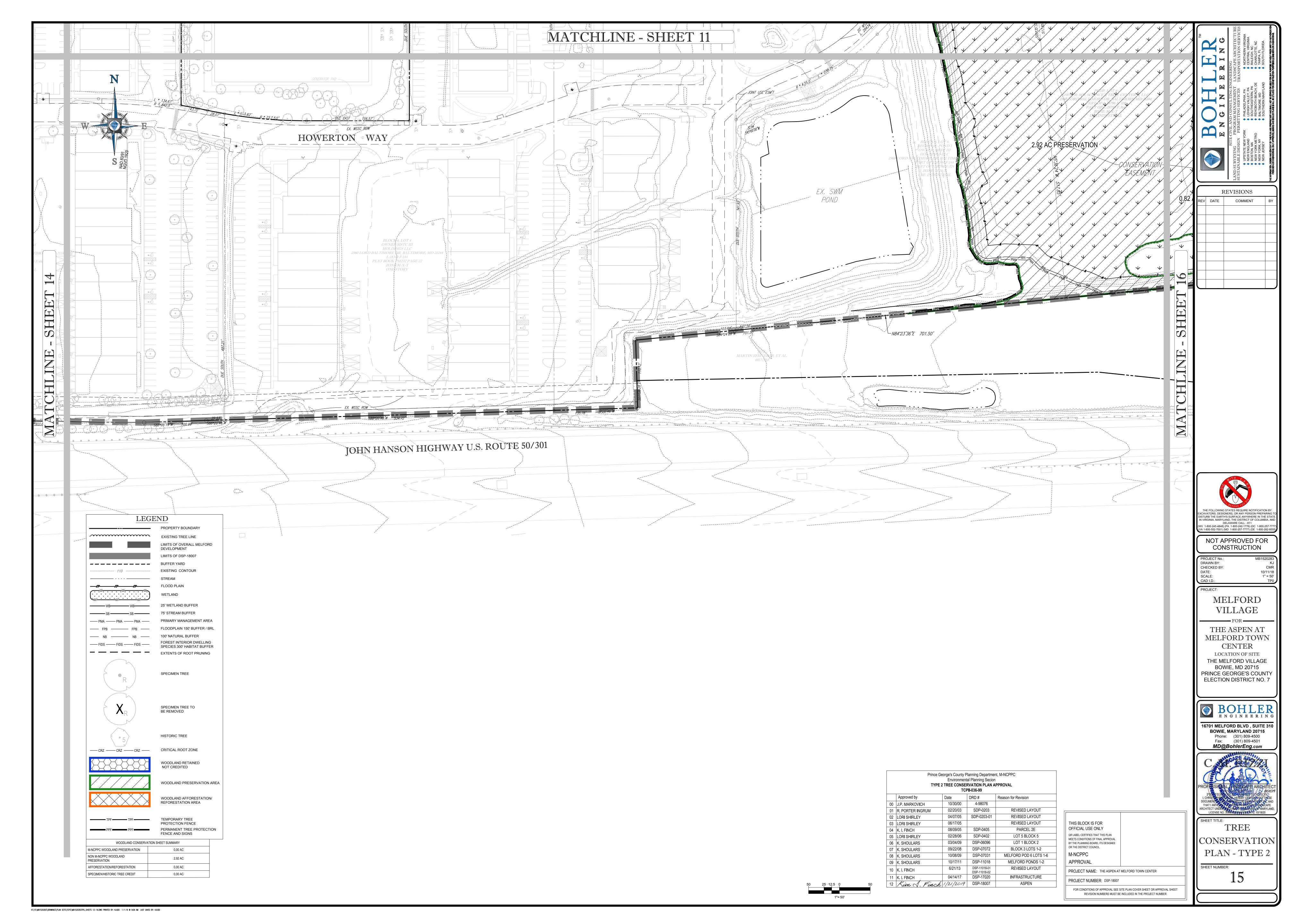
BOHLER ENGINEERING 16701 MELFORD BLVD, SUITE 310 **BOWIE, MARYLAND 20715** Phone: (301) 809-4500

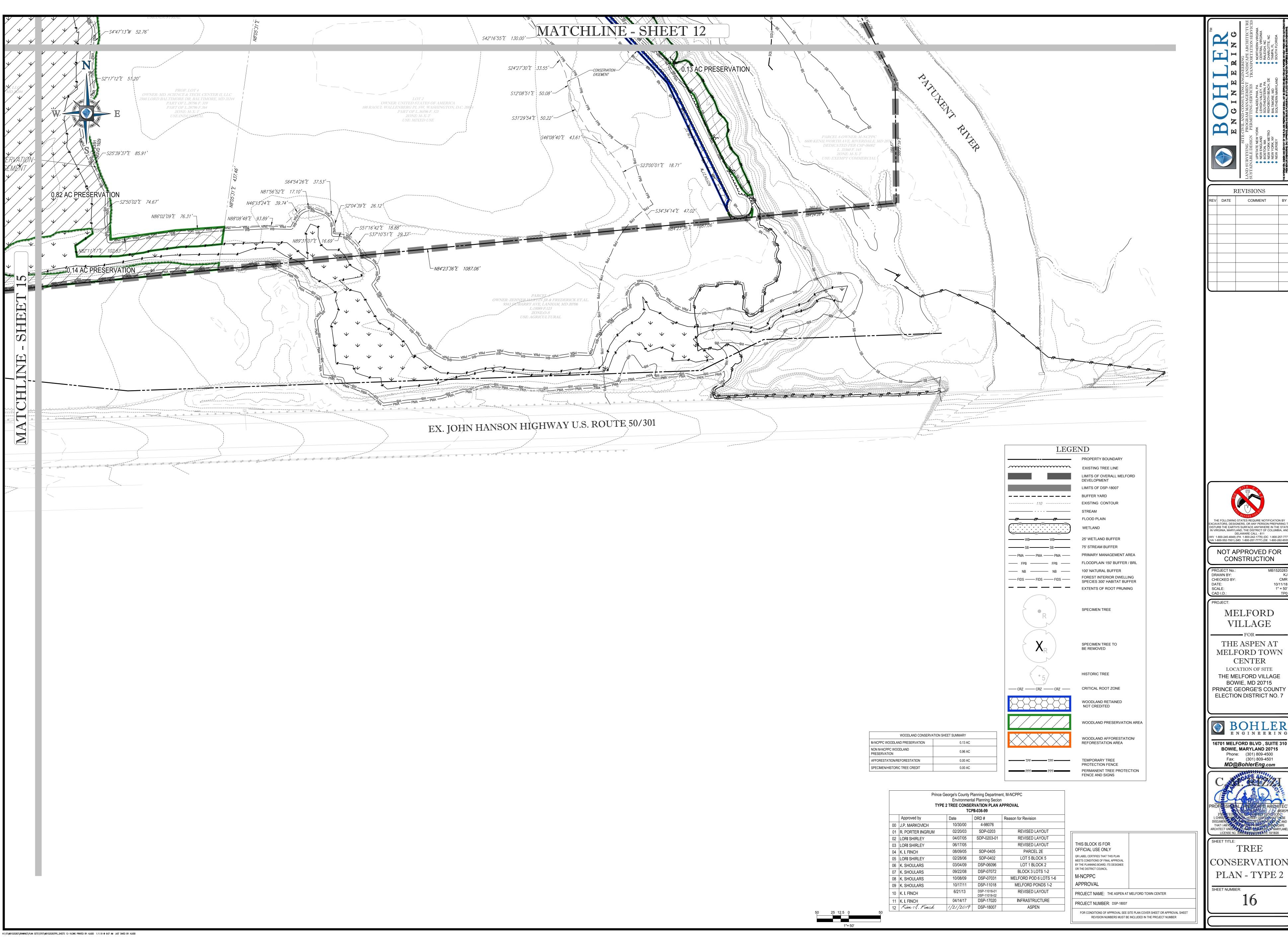


CONSERVATION PLAN - TYPE 2









REVISIONS



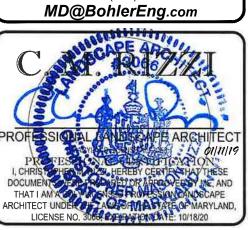
NOT APPROVED FOR CONSTRUCTION

MELFORD VILLAGE

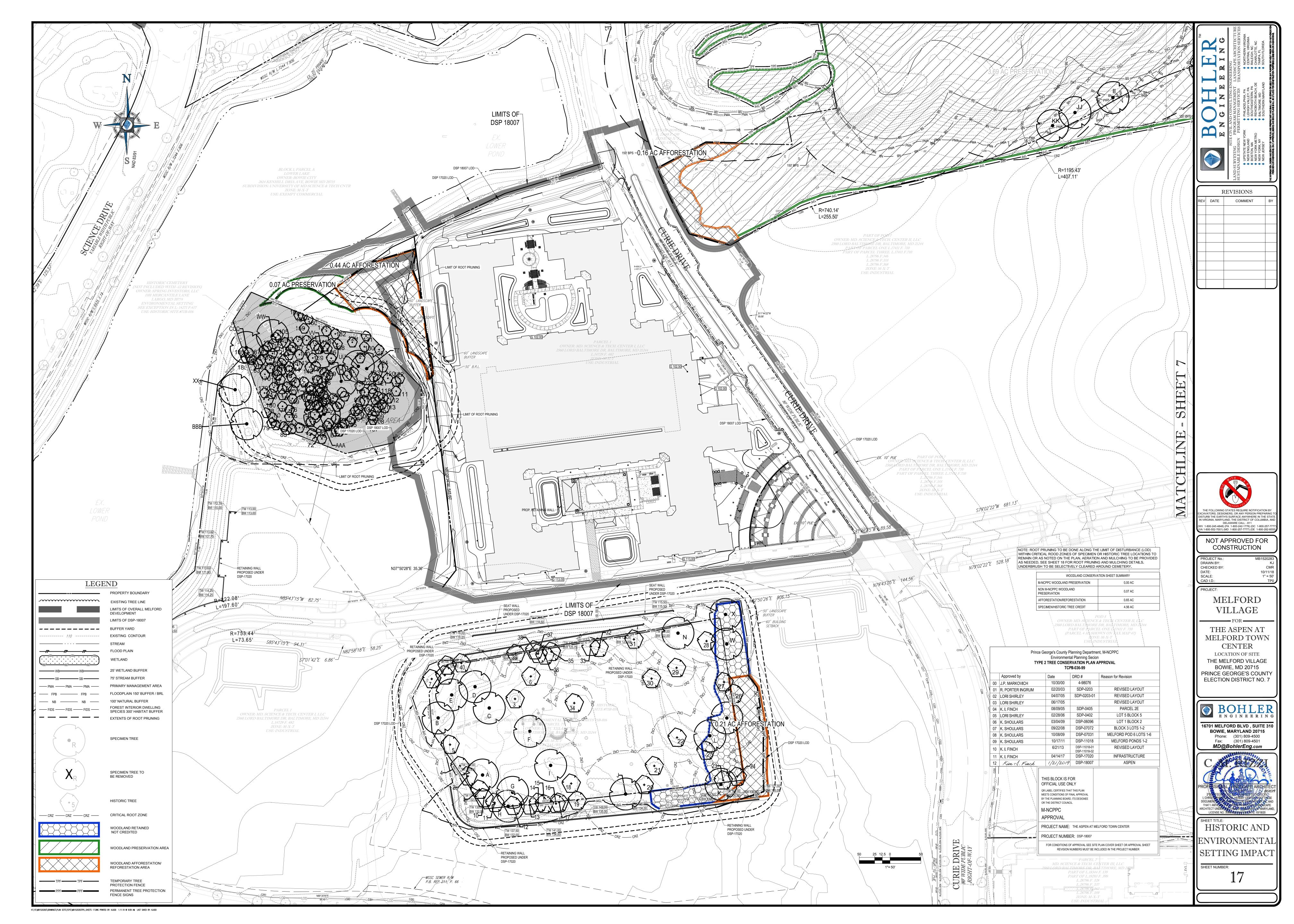
THE ASPEN AT MELFORD TOWN CENTER LOCATION OF SITE THE MELFORD VILLAGE BOWIE, MD 20715

BOHLER ENGINEERING 16701 MELFORD BLVD, SUITE 310

**BOWIE, MARYLAND 20715** Phone: (301) 809-4500 Fax: (301) 809-4501 MD@BohlerEng.com



PLAN - TYPE 2



To be provided when appropriate. Must be numbered in sequence starting with number 10.

When preservation or retention of existing woodlands is proposed:

Tree Preservation and Retention Notes

devices is a violation of this TCP2.

- All woodlands designated on this plan for preservation are the responsibility of the property owner. The woodland areas shall remain in a natural state. This includes the canopy trees and understory vegetation. A revised tree conservation plan is required prior to clearing woodland areas that are not specifically identified to be cleared on the approved TCP2.
- Tree and woodland conservation methods such as root pruning shall be conducted as noted on this plan.
- The location of all temporary tree protection fencing (TPFs) shown on this plan shall be flagged or staked in the field prior to the pre-construction meeting. Upon approval of the
- locations by the county inspector, installation of the TPFs may begin. All temporary tree protection fencing required by this plan shall be installed prior to commencement of clearing and grading of the site and shall remain in place until the bond is released for the project. Failure to install and maintain temporary or permanent tree protective
- Woodland preservation areas shall be posted with signage as shown on the plans at the same time as the temporary TPF installation. These signs must remain in perpetuity.
- Removal of Hazardous Trees or 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 county as dead, dying, or hazardous may be removed.
- A tree is considered hazardous if a condition is present which leads a Certified Arborist or Licensed Tree Expert to believe that the tree or a portion of the tree has a potential to fall and strike a structure, parking area, or other high use area and result in personal injury or property damage.
- During the initial stages of clearing and grading, if hazardous trees are present, or trees are present that are not hazardous but are leaning into the disturbed area, the permitee shall remove said trees using a chain saw. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the county inspector, Only after approval by the inspector may the tree be cut by chainsaw to near the existing ground level. The stump shall not be removed or covered with soil, mulch or other materials that would inhibit sprouting.
- If a tree or trees become hazardous prior to bond release for the project, due to storm events or other situations not resulting from an action by the permitee, prior to removal, a Certified Arborist or a Licensed Tree Expert must certify that the tree or the portion of the tree in question has a potential to fall and strike a structure, parking area, or other high use area and may result in personal injury or property damage. If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the permitee shall take corrective action immediately. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.
- If corrective pruning may alleviate a hazardous condition, the Certified Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the appropriate ANSI A-300 Pruning Standards. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.
- 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.
- Tree work to be completed within a road right-of-way requires a permit from the Maryland Department of Natural Resources unless the tree removal is shown within the approved limits of disturbance on a TCP2. The work is required to be conducted by a Licensed Tree Expert.
- Work on this project will be initiated in several phases. All temporary TPFs required for a given
- phase shall be installed prior to any disturbance within that phase of work.

f existing trees are proposed for use as protection for preservation areas:

Tree protection fencing (TPFs) is not required for all or portions of this plan because an undisturbed 100-foot buffer of open land /or a 50-foot forested buffer is being maintained between the limit of disturbance (LOD) and the woodland preservation areas. If the LOD changes and the change impacts these buffers, the county inspector shall be contacted to evaluate the

change to determine if a revision to the tree conservation plan is necessary or if installation of

f debris piles are noted on the FSD and located in preservation areas:

f development is proposed to be completed in phases:

Debris piles shown in woodland preservation areas shall be removed by hand without the use of mechanical equipment within the preservation area. Chains may be used to pull debris out of the preservation areas. Caution must be used not to damage remaining vegetation.

# When afforestation/reforestation is proposed:

# Afforestation and Reforestation Notes

TPFs will be required.

- All afforestation and reforestation bonds, based on square footage, shall be posted with the county prior to the issuance of any permits. These bonds will be retained as surety until all required activities have been satisfied or the required timeframe for maintenance has passed, whichever is longer.
- The planting of afforestation or reforestation areas shall be completed prior to the issuance of the first building permit. (This standard note may be modified as necessary to address which building permits are adjacent to the proposed planting area.) Seedling planting is to occur from November through May only. No planting shall be done while ground is frozen. Planting with larger caliper stock or containerized stock may be done at any time provided a detailed maintenance schedule is provided.
- 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 2 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 or builder 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
- Reforestation areas shall not be mowed. The management of competing vegetation around individual trees and the removal of noxious, invasive, and non-native vegetation within the reforestation areas is acceptable.
- All required temporary tree protection fencing shall be installed prior to the clearing and grading of the site and shall remain in place until the permanent tree protection fencing is installed with the required planting. The temporary fencing is not required to be installed if the permanent fencing is installed prior to clearing and grading of the site. Failure to install and maintain temporary or permanent tree protective fencing is a violation of this TCP2.
- Afforestation/reforestation areas shall be posted with notification signage, as shown on the plans, at the same time as the permanent protection fencing installation. These signs shall remain in perpetuity.
- The county inspector shall be notified prior to soil preparation or initiation of any tree planting on this site.
- At time of issuance of the first permit, the following information shall be submitted to the M-NCPPC Planning Department regarding the contractor responsible for implementation of this plan: contractor name; business name (if different); address; and phone number.

- Results of annual survival checks for each of the required four years after tree planting shall be reported to the M-NCPPC, Planning Department.
- Failure to establish the afforestation or reforestation within the prescribed time frame will result in the forfeiture of the reforestation bond and/or a violation of this plan including the associated \$9.00 per square foot penalty unless the county inspector approves a written

## Planting Specification Notes

- 2. Type: (See Plant Schedule)
- 3. Plant Quality Standards: The plants selected shall be healthy and sturdy representatives of their species. Seedlings shall have a minimum top growth of 18". The diameter of the root collar (the part of the root just below ground level) shall be at least 3/8". The roots shall be well developed and at least 8" long, No more than twenty -five percent (25%) of the root
- Plants that do not have an abundance of well developed terminal buds on the leaders and
- Plants shall be shipped by the nursery immediately after lifting from the field or removal
- If the plants cannot be planted immediately after delivery to the reforestation site, they shall be stored in the shade with their root masses protected from direct exposure to sun and wind by the use of straw, peat moss, compost, or other suitable material and shall be
- 4. Plant Handling: the quantity of seedlings taken to the field shall not exceed the quantity that can be planted in a day. Seedlings, once removed from the nursery or temporary storage area shall be planted immediately.
- 5. Timing of Planting: The best time to plant seedlings is while they are dormant, prior to spring budding. The most suitable months for planting are March and April, when the soil is moist, but may be planted from March through November. No planting shall be done while ground is frozen. Planting shall occur within one growing season of the issuance of grading
- building permits and/or reaching the final grades and stabilization of planting areas.
- contractor wishes to plant by another method, the preparer of this tree conservation plan

packed firmly around the roots. Seedlings should be planted at a depth where their roots lie

just below the ground surface. Air pockets should not be left after closing the hole which

- 7. Spacing: See Plant Schedule and/or Planting Plan for spacing requirements. Also refer to the Planting Layout detail for a description of the general planting theory.
- 8. Soil: Upon the completion of all grading operations, a soil test shall be conducted to for each area that appears to have a different soil type (if the entire area appears uniform, then only one sample is necessary), and submitted for testing to a private company. The company of choice shall make recommendations for improving the existing soil. The soil will be tested and recommended for corrections of soil texture, pH, magnesium, phosphorus, potassium, calcium and organic matter.
- 9. Soil Improvement Measures: the soil shall then be improved according to the recommendations made by the testing company.
- 10. Fencing and Signage: Final protective fencing shall be placed on the visible and/or development side of planting areas. The final protective fence shall be installed upon completion of planting operations unless it was installed during the initial stages of
- 11. Planting method: Consult the Planting Detail(s) shown on this plan.
- 12. Mulching: Apply two-inch thick layer of woodchip or shredded hardwood mulch (as noted)
- shall be seeded and stabilized with white clover seed at the rate of 5 lbs/acre.
- 14. Mowing: No mowing shall be allowed in any planting area. 15. Survival Check for Bond Release: The seedling planting is to be checked at the end of

with additional seedlings to reach the required number at time of planting. 16. Source of Seedlings: state name, address, and phone number of nursery or supplier.

# A Four-Year Management Plan for Re/Afforestation shall be added to the plan as follows:

- Site preparation and Tree Planting Survival check once annually (September-November) see Note 1) Watering is needed (2 x month) Control of undesirable vegetation as needed (1 x in June and 1 x in September
- Reinforcement planting is needed (See Note 2) Survival check once annually (September-November)

#### Year 4: Reinforcement planting if needed. (See Note 2) Survival check (September -November)

- the site and taking inventory. Plants must show vitality. Submit field data forms (Condition Check Sheets) to owner after each inspection. Remove all dead
- 2. Reinforcement Planting: Replace dead or missing plants in sufficient quantity to bring the total number of live plants to at least 75% of the number originally planted. If a particular species suffers unusually high mortality, replace with an alternative plant type.

TREE CONSERVATION SIGN SEE DETAIL #2

INSTALL WIRE AT ABOUT EQUAL SPACING

3. Miscellaneous: Fertilization or watering during years 1 through 3 will be done on an as needed basis. Special return operations or recommendations will be conducted on an as needed basis.

## When off-site woodland conservation is proposed

Prior to the issuance of the first permit for the development shown on this TCP2, all off site woodland conservation required by this plan shall be identified on an approved TCP2 plan and recorded as an off-site easement in the land records of Prince George's County. Proof of recordation of the off-site conservation shall be provided to the M-NCPPC, Planning Department prior to issuance of any permit for the associated plan.

Add the applicable invasive plan removal notes if afforestation is used on an off-site woodland

### When the use of fee-in-lieu is proposed:

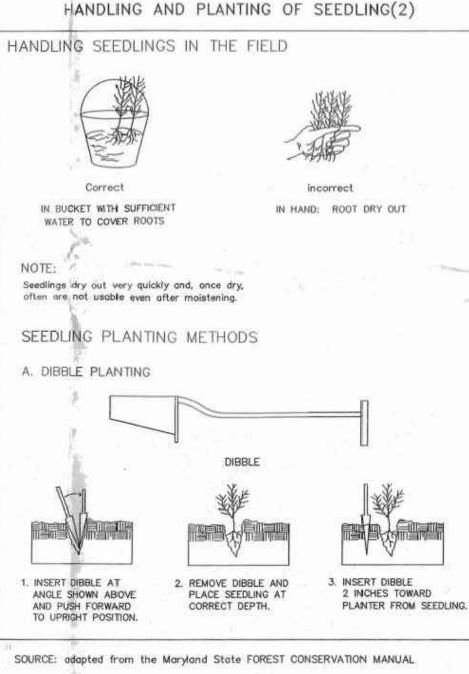
All required fee-in-lieu payments shall be made to the Woodland Conservation Fund, Proof of deposit shall be provided prior to issuance of any permits related to this TCP2 unless the project is phased. Phased projects shall pay the fee-in-lieu amount for each phase prior to the issuance of any permit for that phase and shown in the fee-in-lieu breakdown on this TCP2.

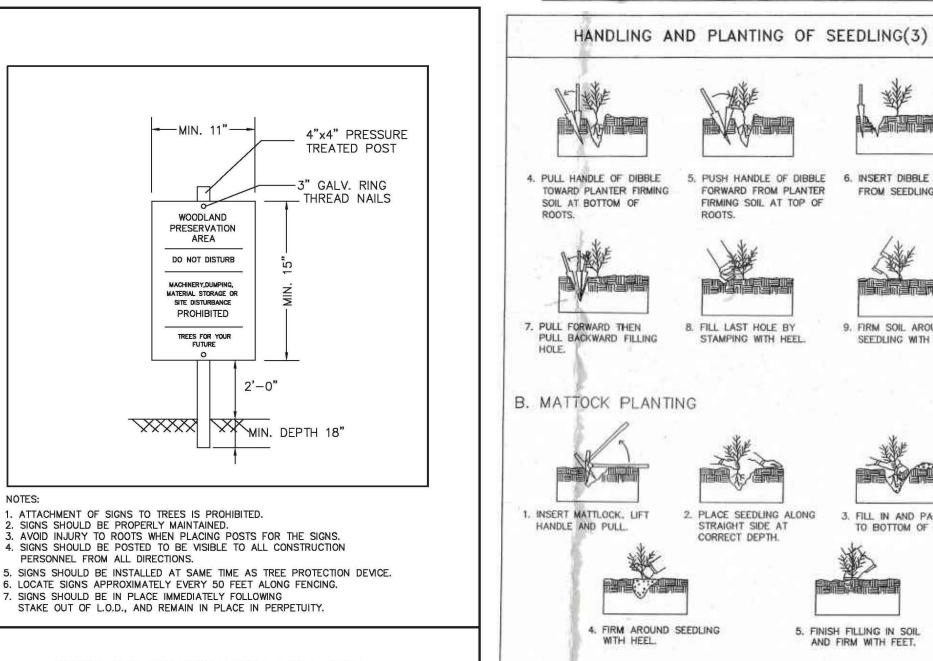
#### When invasive plant species are to be removed by the permittee: (use the applicable notes based on the invasive plant removal plan)

- Invasive plant removal shall be completed prior to \_\_\_\_\_\_ (insert timing mechanism) and conform to the recommendations of the invasive plant removal plan shown on the plan prepared by \_\_\_\_\_ (insert the qualified professional's name who prepared the invasive plant removal recommendations) dated \_\_\_\_\_\_.
- b. The removal of noxious, invasive, and non-natives plant species shall 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.
- The use of 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 and be applied by a certified pesticide applicator.

# When Virginia pines are present within 40 feet of the limits of disturbance in a

- a. The subject property contains Virginia pines (Pinus virginiana) that are subject to wind throw. All Virginia pines greater than 6 inches in diameter within 40 feet of the final proposed limit of disturbance or the boundary of the property shall be cut down by hand during the clearing of
- After the Virginia pines have been removed, the contractor responsible for implementation of this TCP2 shall submit an evaluation of the stocking levels for the residual stand, management techniques to be applied to the residual stand, and supplemental planting requirements to the M-NCPPC Planning Department. This evaluation shall be submitted prior to the issuance of the first building permit to ensure that all high risk trees have been removed. A planting schedule and/or details for the management of natural regeneration to fully restock the site must be shown on the plan.





# FROM SEEDLING. 9. FIRM SOIL AROUND SEEDLING WITH FEET

3. FILL IN AND PACK SO TO BOTTOM OF ROOTS SOURCE: adapted from the Maryland State FOREST CONSERVATION MANUAL Vertical Mulching or Fertilizing

# LANDSCAPE SPECIFICATIONS

- HE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING. FINISHED GRADING. SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.
  - A. GENERAL ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS
  - B. TOPSOIL NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS,
  - C. LAWN ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES 1.1. LAWN SEED MIXTURE SHALL BE FRESH. CLEAN NEW CROP SEED.
  - 1.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. 1.3. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
  - D. MULCH THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED BLACK CEDAR MULCH ONLY. ALL OTHER AREAS SHALL BE MULCHED WITH A 3" LAYER OF DOUBLE SHREDDED DARK BROWN HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.
  - 1.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT. ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY 1.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.
  - F. PLANT MATERIAL 1.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
  - 1.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL 1.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION
  - 1.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS. DISFIGURATION OR FRESH CUTS OF LIMBS OVER 11/8", WHICH HAVE NOT BEEN COMPLETELY CALLUSED. SHALL BE REJECTED.PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. 1.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED

BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.

- 1.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE. . SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH. 1.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.
- A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR
- B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.
- A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN. B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH
- SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.
- A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
- B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE'. OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
- . WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
- D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

. SOIL MODIFICATIONS A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON

- THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY, COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY. 1.1 TO INCREASE A SANDY SOIL'S ARILITY TO RETAIN WATER AND NUTRIENTS. THOROLIGHLY TILL ORGANIC MATTER INTO THE TOP 6-12" USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE, AVOID MATERIAL WITH A PH HIGHER THAN 7.5
- 1.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM, COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE 1.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF
- . UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.
- SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±) C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE

- D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.
- A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT
- BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION. C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.
- D. ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1.000 SQUARE FOOT AREA 1.1. 20 POUNDS 'GROW POWER' OR APPROVED EQUAL 1.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP
- E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

- A. INSOFAR THAT IT IS FEASIBLE. PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY, IN THE EVENT THAT THIS IS NOT POSSIBLE. LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL, PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.
- B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR
- C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS.
- D. ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.
- E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE
- PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS, THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS: 1.1. PLANTS: MARCH 15 TO DECEMBER 15 1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
- G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.
- H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND TA SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON PLATANUS X ACERIFOLIA ACER RUBRUM BETULA VARIETIES POPULOUS VARIETIES
- CARPINUS VARIETIES PRUNUS VARIETIES CRATAEGUS VARIETIES PYRUS VARIETIES **QUERCUS VARIETIES** KOELREUTERIA LIQUIDAMBER STYRACIFLUA TILIA TOMENTOSA

ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED

- LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME • 3 PARTS TOPSOIL BY VOLUME • 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
- A) 2 TABLETS PER 1 GALLON PLAN B) 3 TABLETS PER 5 GALLON PLANT

C) 4 TABLETS PER 15 GALLON PLANT

- D) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND
- LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL. L. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING
- M. GROUND COVER AREAS SHALL RECEIVE A 1/8" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL
- GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION. N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND
- O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS
- 10. TRANSPLANTING (WHEN REQUIRED) TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
- B, IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT. SUN AND WIND.
- C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
- D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE. E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
- F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES
- A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE
- ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED. B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE. CONTRACTOR SHALL
- SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES. C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT FLIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (109 OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A
- FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT

NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

Approved by

00 J.P. MARKOVICH

02 LORI SHIRLEY

03 LORI SHIRLEY

05 LORI SHIRLEY

06 K. SHOULARS

07 K. SHOULARS

08 K. SHOULARS

09 K. SHOULARS

10 K. I. FINCH

04 K. I. FINCH

01 R. PORTER INGRUM

- 2. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN, CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS
- D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS,
- A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.
- B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED



DRAWN BY

CHECKED BY:

\*\*\*\*\*

REVISIONS

COMMENT

**MELFORD** 

VILLAGE

CONSTRUCTION

THE ASPEN AT MELFORD TOWN CENTER LOCATION OF SITE

THE MELFORD VILLAGE

BOWIE, MD 20715

BOTILE ENGINEERING



THIS BLOCK IS FOR OFFICIAL USE ONLY OR LABEL CERTIFIES THAT THIS PLAN MEETS CONDITIONS OF FINAL APPROVA BY THE PLANNING BOARD, ITS DESIGNEE M-NCPPC **APPROVAL** PROJECT NAME: THE ASPEN AT MELFORD TOWN CENTER

FOR CONDITIONS OF APPROVAL SEE SITE PLAN COVER SHEET OR APPROVAL SHEET

REVISION NUMBERS MUST BE INCLUDED IN THE PROJECT NUMBER

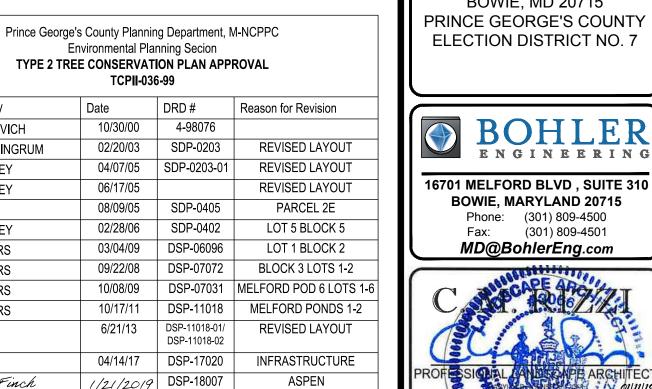
04/14/17 DSP-17020 11 K. J. FINCH 1/21/2019 DSP-18007 ASPEN 12 Kim A. Finch

PROJECT NUMBER: DSP-18007

TCPII-036-99

06/17/05

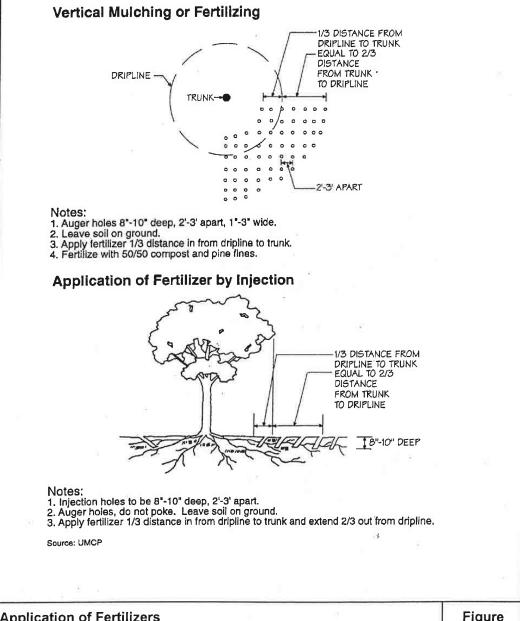
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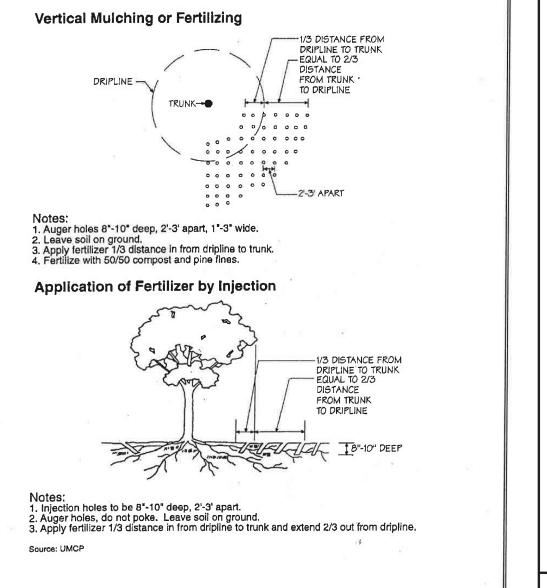


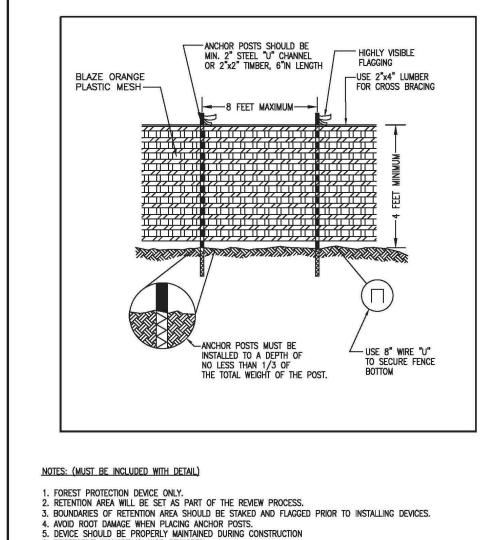


NOTES AND DETAILS

TREE PROTECTIVE DEVICES WILL BE ERECTED IMMEDIATELY AFTER TREE AND SHRUB PLANTING IS COMPLETED, AND REMOVED AFTER THE FINAL (5 YEAR) SURVIVAL CHECK. THE CONTRACTOR WILL ADVISE THE OWNER IN WRITING WHEN THIS WORK IS COMPLETED. Source: Adapted from Steve Clark & Associates/ACRT, Inc. and Forest Conservation Manual, 1991 6 TREE PROTECTION DEVICE - TYPE 2 Root Pruning Figure







DEVICE SHOULD BE PROPERLY MAINTAINED DURING CONSTRUCTION PROTECTIVE SIGNAGE IS ALSO REQUIRED.

TYPE 1 (TEMPORARY) TREE PROTECTION FENCE DETAIL FOR WOODLAND PRESERVATION AREAS

C:\USERS\KJUDD\APPDATA\LOCAL\TEMP\ACPUBLISH\_7708\MB1520283TD0.DWG PRINTED BY: KJUDD 1.111.19 @ 9:10 AM LAST SAVED BY: KJUDD

SMOOTH WIRE FENCE

- 1. Quantity: (See Plant Schedule)
- system (both primary and auxiliary/fibrous roots shall be present.
- branches shall be rejected.
- from the green house, and planted immediately upon receipt by the landscape contractor.
- maintained through periodic watering, until the time of planting.
- Seedling Planting: Tree seedlings shall be hand planted using a dibble bar or sharp-shooter shovel. It is important that the seedling be placed in the hole so that the roots can spread out naturally; they should not be twisted, balled up or bent. Moist soil should then be
- would allow the roots to dry out. See planting details for further explanation. If the must be contacted and give his approval before planting may begin.
- determine what soil preparation and soil amendments, if any, are necessary to create good tree growing conditions. Soil samples shall be taken at a rate that provides one soil sample
- development. Signs shall be posted per the signage detail on this sheet.
- to each plating site (see detail shown on this plan). 13. Groundcover Establishment: the remaining disturbed area between seedling planting sites
- each year for four years to assure that no less than 75% of the original planted quantity survives. If the minimum number has not been provided the area must be supplemented
- Four-Year Management Plan for Re/Afforestion Areas Field check the re-afforestation area according to the following schedule:

MAXIMUM 8 FEET

SMOOTH WIRE FENCE

ANCHOR POSTS SHOULD BE INSTALLED TO A DEPTH OF AT LEAST 2'.

TREE PROTECTIVE DEVICE LOCATIONS WILL CORRESPOND TO THE LOCATIONS SHOWN ON THIS TREE CONSERVATION PLAN.

SMOOTH WIRE SHOULD BE EVENLY SPACED ALONG THE HEIGHT OF THE POSTS, AND FASTENED SECURELY TO THE POSTS. MINIMUM ACCEPTABLE WIRE IS "LIGHT GUAGE, CLASS 1", GALVANIZED.

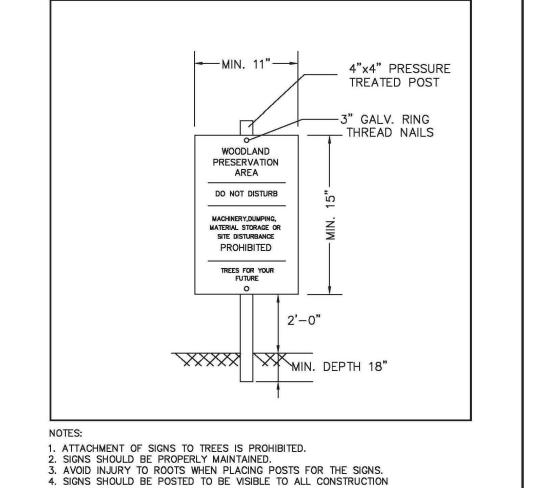
TREE CONSERVATION AREA SIGNS WILL BE SECURELY ATTACHED TO AT LEAST EVERY FIFTH POST AND SHALL REMAIN IN PLACE IN PERPETUITY.

FENCING WITH TREE CONSERVATION AREA PROTECTIVE DEVICE FENCING, IF SO

SEDIMENT AND EROSION CONTROL MEASURES WILL COMPLY WITH THE SEDIMENT CONTROL PLAN AS APPROVED BY THE PRINCE GEORGE'S COUNTY SOIL CONSERVATION DISTRICT, AND MAY INCLUDE COMBINATIONS OF SEDIMENT CONTROL

FENCE POSTS WILL BE A MINIMUM OF 1 3/4 " X 1" STEEL U-CHANNEL OR 2" X 2" LUMBER, SPACED NO MORE THAN 8 FEET APART. POSTS WILL BE INSTALLED AT LEAST 2 FEET DEEP.

- Control of undesirable vegetation if needed (1 x in May and 1 x in August min.)
  - 1. Survival Check: Check planted stock against plant list (or as-built) by walking



ERSONNEL FROM ALL DIRECTIONS.

. SIGNS SHOULD BE IN PLACE IMMEDIATELY FOLLOWING

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CRITICAL ROOT ZONE

ROOT PRUNING TRENCH

. Retention Areas to be established as part of the forest conservation plan review process.

Boundaries of Retention Areas to be staked, flagged and/or fenced prior to trenching.

Exact location of trench should be identified.

rench should be immediately backfilled with soil removed or organic soil.

Roots should be cleanly cut using vibratory knife or other acceptable equipment.

WOODLAND PRESERVATION AREA SIGN

TREE PROTECTION FENCE

-FENCE WITHIN 1' OF TRENCH LINE

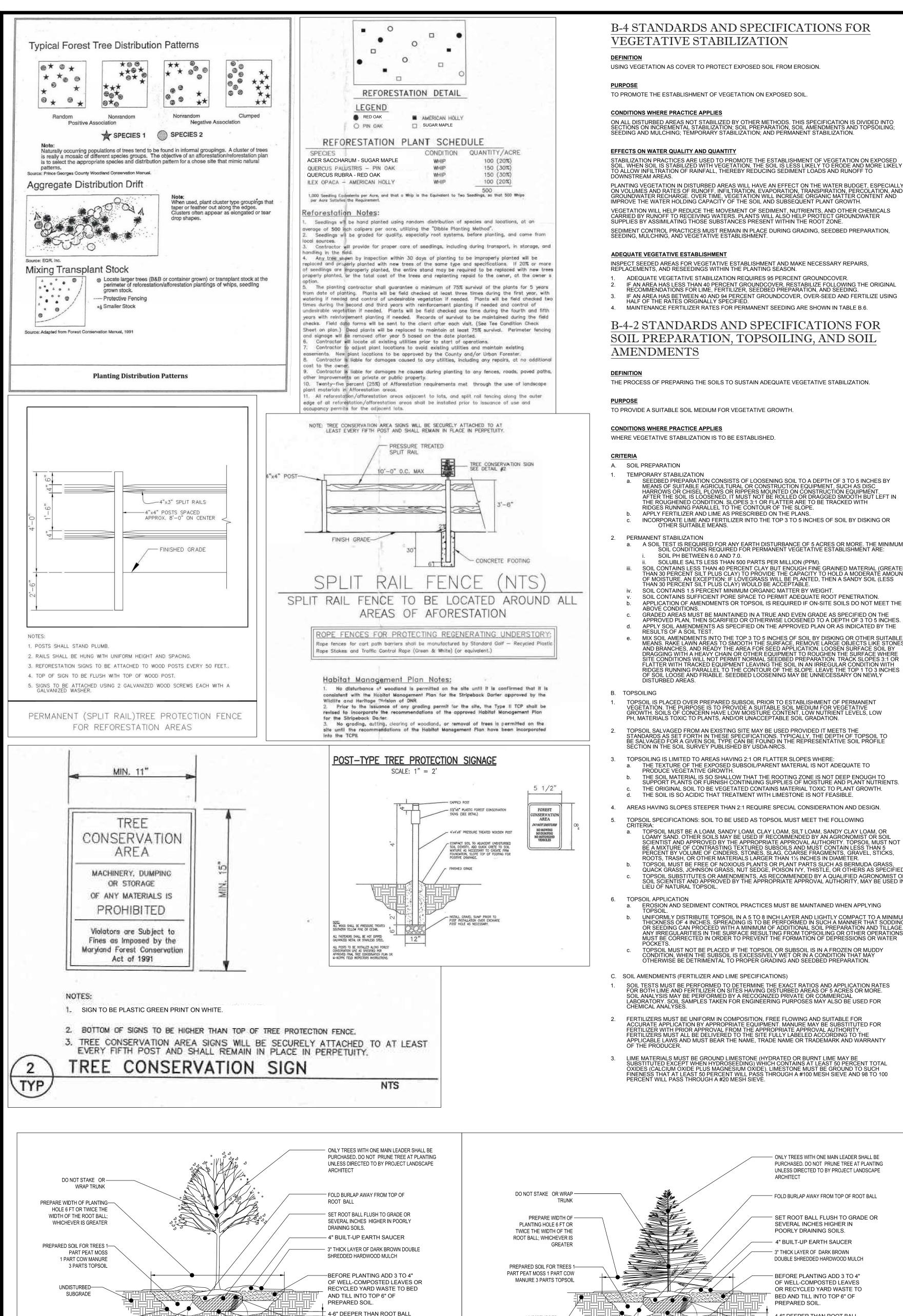
-TRENCH WITHIN I' OF LIMIT OF

LIMIT OF DISTURBANCE

DISTURBANCE LINE

Application of Fertilizers

Figure



UNDISTURBED----

DIG WIDE, SHALLOW HOLE WITH-

TAMPED SIDES

ROOT BALL

REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

SUBGRADE

TAMP SOIL SOLIDLY AROUND BASE OF-

REMOVE THE TOP 1/3 OF THE WIRE BASKET IF PRESENT,

ANY AND ALL TWINE SHALL BE REMOVED FROM THE TREE

BEFORE BACKFILLING. BURLAP SHALL BE FOLDED BACK

INTO PLANTING HOLE

REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT

DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

-SET ROOT BALL ON FIRM PAD IN

B-4 STANDARDS AND SPECIFICATIONS FOR ON ALL DISTURBED AREAS NOT STABILIZED BY OTHER METHODS. THIS SPECIFICATION IS DIVIDED INTO SECTIONS ON INCREMENTAL STABILIZATION; SOIL PREPARATION, SOIL AMENDMENTS AND TOPSOILING; SEEDING AND MULCHING: TEMPORARY STABILIZATION: AND PERMANENT STABILIZATION. STABILIZATION PRACTICES ARE USED TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, THEREBY REDUCING SEDIMENT LOADS AND RUNOFF TO

PLANTING VEGETATION IN DISTURBED AREAS WILL HAVE AN EFFECT ON THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF, INFILTRATION, EVAPORATION, TRANSPIRATION, PERCOLATION, AND GROUNDWATER RECHARGE. OVER TIME, VEGETATION WILL INCREASE ORGANIC MATTER CONTENT AND IMPROVE THE WATER HOLDING CAPACITY OF THE SOIL AND SUBSEQUENT PLANT GROWTH. VEGETATION WILL HELP REDUCE THE MOVEMENT OF SEDIMENT, NUTRIENTS, AND OTHER CHEMICALS CARRIED BY RUNOFF TO RECEIVING WATERS. PLANTS WILL ALSO HELP PROTECT GROUNDWATER SUPPLIES BY ASSIMILATING THOSE SUBSTANCES PRESENT WITHIN THE ROOT ZONE. SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE DURING GRADING, SEEDBED PREPARATION, SEEDING, MULCHING, AND VEGETATIVE ESTABLISHMENT.

INSPECT SEEDED AREAS FOR VEGETATIVE ESTABLISHMENT AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON. ADEQUATE VEGETATIVE STABILIZATION REQUIRES 95 PERCENT GROUNDCOVER. IF AN AREA HAS LESS THAN 40 PERCENT GROUNDCOVER, RESTABILIZE FOLLOWING THE ORIGINAL RECOMMENDATIONS FOR LIME, FERTILIZER, SEEDBED PREPARATION, AND SEEDING. 3. IF AN AREA HAS BETWEEN 40 AND 94 PERCENT GROUNDCOVER, OVER-SEED AND FERTILIZE USING 4. MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDING ARE SHOWN IN TABLE B.6.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL

THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT.

AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.

a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE: SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS

APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY RAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE ITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR

TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT FEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE SROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE

THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO HE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO JPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.

TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING a. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1½ INCHES IN DIAMETER. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS UACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED OPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN

EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER

TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL ABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR FERTILIZERS MUST BE UNIFORM IN COMPOSITION. FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY.

FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY

4-6" DEEPER THAN ROOT BALL

BE FOLDED BACK INTO PLANTING HOLE

- SET ROOT BALL ON FIRM PAD IN

REMOVE THE TOP 1/3 OF THE WIRE BASKET IF

PRESENT. ANY AND ALL TWINE SHALL BE REMOVED

FROM THE TREE BEFORE BACKFILLING, BURLAP SHAL

APPLICATION SEEDING SEEDING (10-20-20)SPECIES RATE (LB/AC) DATES DEPTHS **COOL SEASON** 3/1 - 5/15 0.5" RYEGRASS 8/1 - 10/15 3/1 - 5/15 BARLEY 8/1 - 10/15 436 LB/AC 3/1 - 5/15 3 OATS (10 LB/1000 SF) | (90 LB/1000 SF) 8/1 - 10/15 3/1 - 5/15 WHEAT 120 8/1 - 10/15 3/1 - 5/15 CEREAL RYE 112 8/1 - 10/15 4/1 - 7/31 SPIDERWORT 8/1 - 11/30 SNEEZEWEED 6/1 - 10/31  $3\frac{1}{2}$  - 4 BEE-BALM WARM SEASON 9 FOXTAIL MILLET 6/1 - 7/31 0.5" 436 LB/AC 2 TONS/AC (10 LB/1000 SF) | (90 LB/1000 SF) 10 PEARL MILLET 6/1 - 7/31 0.5" COMMON  $3\frac{1}{2}$  - 4 6/1 - 8/31 MILKWEED

LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

B-4-3 STANDARDS AND SPECIFICATIONS FOR

TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE

ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF

MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE

INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN

SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE

DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH

APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING

IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P2O5 (PHOSPHOROUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER

CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.

HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED

LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN

iii. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.

STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND

WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING

WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT

APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING

WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER

LENGTH OF APPROXIMATELY 10 MILLIMETERS. DIAMETER APPROXIMATELY 1. MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND

ONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.

WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM

WIDE AND 300 TO 3,000 FEET LONG

CONDITIONS WHERE PRACTICE APPLIES

TEMPORARY STABILIZATION

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED

FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.

HARDINESS ZONE (from Figure B.3): ZONE 7A

SEED MIXTURE (from Table B.1)

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

ESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING

EASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS PECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OF

WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.

WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER

UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST

COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.

WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS

PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500

POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

OSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED Y PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD:

OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR

WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER

AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER

SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY

DING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING

FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE

WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT

FERTILIZER

LIME RATE

RATE

TEMPORARY SEEDING SUMMARY

EPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS

B-4-4 STANDARDS AND SPECIFICATIONS FOR

SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II,

TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.

ANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET

a. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE

A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOS

(CESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES

iv. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

MULCH MATERIALS (IN ORDER OF PREFERENCE)

GRASS IS DESIRED.

a. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.

TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR

INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON

SEEDING AND MULCHING

CONDITIONS WHERE PRACTICE APPLIES

**CRITERIA** 

A. SEEDING

SPECIFICATIONS

APPLICATION

B. MULCHING

**APPLICATION** 

ANCHORING

THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.

SITE-SPECIFIC SEEDING SUMMARIES.

WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

A. SEED MIXTURES

 GENERAL USE SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 ½ POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY

TURFGRASS MIXTURES AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE
MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN
SHORE. RECOMMENDED CERTIFIED KENTUCKY
BLUEGRASS CULTIVARS SEEDING RATE: 1.5
TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS
CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE
MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS
CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER
1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS
CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT

KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS

PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.

KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1½ TO 3 POUNDS PER NOTES SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS

CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE c. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B,

CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B)

SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15

(HARDINESS ZONES: 7A, 7B) TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1½ INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY

IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (½ TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF ¾ INCH, PLUS OR MINUS ¼ INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.

SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

SOD INSTALLATION DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEI TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH

WOULD CAUSE AIR DRYING OF THE ROOTS. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT

SOD MAINTENANCE WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING

IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN  $\frac{1}{2}$  OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

B-4-6 STANDARDS AND SPECIFICATIONS FOR SOIL STABILIZATION MATTING

MATERIAL USED TO TEMPORARILY OR PERMANENTLY STABILIZE CHANNELS OR STEEP SLOPES UNTIL GROUNDCOVER IS ESTABLISHED.

TO PROTECT THE SOILS UNTIL VEGETATION IS ESTABLISHED.

CONDITIONS WHERE PRACTICE APPLIES ON NEWLY SEEDED SURFACES TO PREVENT THE APPLIED SEED FROM WASHING OUT; IN CHANNELS AND ON STEEP SLOPES WHERE THE FLOW HAS EROSIVE VELOCITIES OR CONVEYS CLEAR WATER; ON TEMPORARY SWALES, EARTH DIKES, AND PERIMETER DIKE SWALES AS REQUIRED BY THE RESPECTIVE DESIGN STANDARD; AND, ON STREAM BANKS WHERE MOVING WATER IS LIKELY TO WASH OUT NEW VEGETATIVE PLANTINGS

MAINTENANCE VEGETATION MUST BE ESTABLISHED AND MAINTAINED SO THAT THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE **B-3 STANDARDS AND SPECIFICATIONS** 

LAND GRADING

Reshaping the existing land surface to provide suitable topography for building facilities and other site improvements

To provide erosion control and vegetative establishment for extreme changes in grade.

Conditions Where Practice Applies

Earth disturbances or extreme grade modifications on steep or long slopes.

water removal, and vegetative treatment, etc.

Design Criteria The grading plan should be based on the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surroundings to avoid extreme grade modifications. Information submitted must provide sufficient topographic surveys and soil investigations to determine limitations that must be imposed on the grading operation related to slope stability, adjacent properties, drainage patterns, measures for

Many jurisdictions have regulations and design procedures already established for land grading that must be followed. The plan must show existing and proposed contours for the area(s) to be graded including practices for erosion control, slope stabilization, and safe conveyance of runoff (e.g., waterways, lined channels, reverse benches, grade stabilization structures). The grading/construction plans are to include the phasing of these practices and consideration of the following:

1. Provisions to safely convey surface runoff to storm drains, protected outlets or stable water courses to ensure that surface runoff will not damage slopes or other graded areas.

2. Cut and fill slopes, stabilized with grasses, no steeper than 2:1. (Where the slope is to be mowed, the slope should be no steeper than 3:1, but 4:1 is preferred because of safety factors related to mowing steep slopes.) Slopes steeper than 2:1 require special design and stabilization considerations to be shown on the plans.

Benching per Detail B-3-1 whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet; for 3:1 slopes, when it exceeds 30 feet; and for 4:1 slopes, when it exceeds 40 feet. Locate benches to divide the slope face as equally as possible and to convey the water to a stable outlet. Soils, seeps, rock outcrops, etc. are to be taken into consideration when designing benches.

Provide benches with a minimum width of six feet for ease of maintenance.

b. Design benches with a reverse slope of 6:1 or flatter to the toe of the upper slope and with a minimum of one foot in depth. Grade the longitudinal slope of the bench between 2 percent and 3 percent, unless accompanied by appropriate design and computations.

c. The maximum allowable flow length within a bench is 800 feet unless accompanied by appropriate design and computations.

 Diversion of surface water from the face of all cut and fill slopes using earth dikes or swales. Convey surface water down slope using a designed structure, and:

a. Protect the face of all graded slopes from surface runoff until they are stabilized.

b. Do not subject the slope's face to any concentrated flow of surface water such as from natural drainage ways, graded swales, downspouts, etc.

 Protect the face of the slope by special erosion control materials to include, but not be limited to, approved vegetative stabilization practices, riprap or other approved stabilization methods.

5. Serrated slope as shown in Detail B-3-2. The steepest allowable slope for ripable rock is 1.5:1. For non rock surfaces, the slopes are to be 2:1 or flatter. These steps will weather and act to hold moisture, lime, fertilizer and seed thus producing a much quicker and longer lived vegetative cover and better slope stabilization.

Subsurface drainage provisions. Provide subsurface drainage where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.

7. Proximity to adjacent property. Slopes must not be created close to property lines without adequate protection against sedimentation, erosion, slippage, settlement, subsidence, or other related damages.

Quality of fill material. Fill material must be free of brush, rubbish, logs, stumps, building debris, and other objectionable material. Do not place frozen materials in the fill nor place the fill material on a frozen foundation.

Stabilization. Stabilize all disturbed areas structurally or vegetatively in compliance with Section B-4 Standards and Specifications for Stabilization Practices.

The line, grade, and cross section of benching and serrated slopes must be maintained. Benches and serrated slopes must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization.

B-4-8 STANDARDS AND SPECIFICATIONS

STOCKPILE AREA

A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns

Conditions Where Practice Applies

Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan 2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material

and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.

3. Runoff from the stockpile area must drain to a suitable sediment control practice.

Access the stockpile area from the upgrade side

5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.

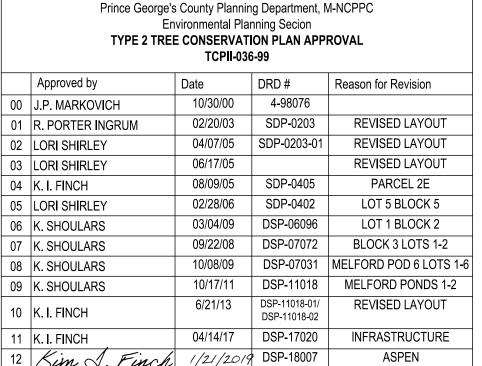
6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as

Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.

8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

B.43



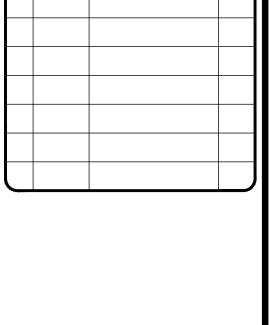
12 Kim J. Finch 1/21/2019 DSP-18007

THIS BLOCK IS FOR OFFICIAL USE ONLY OR LABEL CERTIFIES THAT THIS PLAN MEETS CONDITIONS OF FINAL APPROV BY THE PLANNING BOARD, ITS DESIGNEE M-NCPPC **APPROVAL** PROJECT NAME: THE ASPEN AT MELFORD TOWN CENTER PROJECT NUMBER: DSP-18007 FOR CONDITIONS OF APPROVAL SEE SITE PLAN COVER SHEET OR APPROVAL SHEET

REVISION NUMBERS MUST BE INCLUDED IN THE PROJECT NUMBER

\*\*\*\*\* REVISIONS COMMENT DATE

\*\*\*\*\*





NOT APPROVED FOR CONSTRUCTION

DRAWN BY CHECKED BY 10/11/18 AS SHOWN SCALE

MELFORD

THE ASPEN AT MELFORD TOWN CENTER LOCATION OF SITE THE MELFORD VILLAGE BOWIE, MD 20715

PRINCE GEORGE'S COUNTY

**ELECTION DISTRICT NO. 7** 

ENGINEERIN 16701 MELFORD BLVD, SUITE 310 **BOWIE, MARYLAND 20715** 



AND DETAILS

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DIG WIDE, SHALLOW HOLE WITH-

TAMP SOIL SOLIDLY

AROUND BASE OF ROOT

TAMPED SIDES