


**LEGEND**

 = Existing Tree To Remain

**Landscape Summary**

**Right-of-Way Trees: Brewster Road**  
Length of Frontage: 615.71 LF  
Required: 1 Deciduous Tree / 35 LF  
Required: 1 Ornamental Tree / 60 LF  
Required: 18 Deciduous & 11 Ornamental Trees  
Provided: 11 Deciduous Trees (7 Proposed & 4 Existing)\*  
0 Ornamental Trees\*

**West Buffer along RM-1**  
Length of Boundary: 257.86 LF  
Required: Buffer Type B  
- 10' Width Greenbelt  
- 2 Deciduous Trees per 100 LF  
- 1.5 Ornamental Trees per 100 LF  
- 2 Evergreen Trees per 100 LF  
- 4 Shrubs / 100 LF  
Required: 10' Width Greenbelt  
6 Deciduous Trees  
4 Ornamental Trees  
6 Evergreen Trees  
11 Shrubs  
Provided: 10' Width Greenbelt  
6 Deciduous Trees (3 Proposed + 3 Existing)  
4 Ornamental Trees  
6 Evergreen Trees  
12 Shrubs

\*Note: All required trees cannot fit in the required locations due to infrastructure and corner clearance conflicts. In lieu of planting, a payment of \$3,901.50 (\$216.75 per tree) shall be made to the City of Rochester Hills tree fund. A final amount shall be determined during final site plan approval.

**Tree Replacement Summary**

Total Trees Surveyed: 317  
- Total Trees Offsite: 52  
Total Onsite Trees: 265  
- Total Landmark Trees: 0  
- Total Historic Trees: 0  
Total Trees Saved: 31  
- Required: Per Sec. 126-327.2, a minimum of 37% of the total number of regulated trees on site shall be preserved and undamaged  
99 Trees  
- Provided: 11.70% Saved  
Total Trees Removed: 234  
- Exempt Trees: 9 (These trees include poor quality Elm and Ash Trees)

**Replacement Requirements:**  
Required: Equivalency of 225 Trees (1 Tree / 1 Tree Removed) per the following replacement rates:  
Deciduous Trees  
- 2" replacement caliper = 1 Tree  
- 2.5" replacement caliper = 1.5 Trees  
- 3" or greater replacement caliper = 2 Trees  
Evergreen Trees  
- 8' replacement height = 1 Tree  
- 9' replacement height = 1.5 Trees  
- 10' or greater replacement height = 2 Trees  
Provided: 225 Total Trees at the following calculations:  
Deciduous Trees  
- 83 Trees at 2" caliper  
- 24 Trees at 2.5" caliper  
Evergreen Trees  
- 106 Trees at 8' ht.

**Plant Schedule (This Sheet)**

Trees							
sym.	qty.	botanical name	common name	size	spacing	root	notes
<b>Brewster Road R.O.W. Trees</b>							
AR-S	4	<i>Acer rubrum 'Armstrong'</i>	Armstrong Red Maple	3" cal.	per plans	B&B	
LT-S	3	<i>Liriodendron tulipifera</i>	Tulip Tree	3" cal.	per plans	B&B	
<b>Buffer Screen Trees</b>							
AG-B	4	<i>Amelanchier x grandiflora 'Autumn Brilliance'</i>	Autumn Brilliance Serviceberry	2" cal.	per plans	B&B	Multistem
AR-B	3	<i>Acer rubrum 'Armstrong'</i>	Armstrong Red Maple	3" cal.	per plans	B&B	
PG-B	6	<i>Picea glauca</i>	White Spruce	10' ht.	per plans	B&B	
<b>Woodland Replacement Trees</b>							
AC-R	46	<i>Abies concolor</i>	White Fir	8' ht.	per plans	B&B	
AG-R	3	<i>Amelanchier x grandiflora 'Autumn Brilliance'</i>	Autumn Brilliance Serviceberry	2" cal.	per plans	B&B	Multistem
AR-R	14	<i>Acer rubrum 'Armstrong'</i>	Armstrong Red Maple	2.5" cal.	per plans	B&B	
GT-R	24	<i>Gleditsia triacanthos f. inermis 'Skyline'</i>	Skyline Thornless Honeylocust	2" cal.	per plans	B&B	Thornless
LT-R	12	<i>Liriodendron tulipifera</i>	Tulip Tree	2" cal.	per plans	B&B	
PA-R	5	<i>Platanus x acerifolia 'Exclamation'</i>	Exclamation London Planetree	2" cal.	per plans	B&B	
PA-R*	10	<i>Platanus x acerifolia 'Exclamation'</i>	Exclamation London Planetree	2.5" cal.	per plans	B&B	
PG-R	30	<i>Picea glauca</i>	White Spruce	8' ht.	per plans	B&B	
PS-R	30	<i>Pinus strobus</i>	Eastern White Pine	8' ht.	per plans	B&B	
QB-R	10	<i>Quercus bicolor</i>	Swamp White Oak	2" cal.	per plans	B&B	
ZS-R	29	<i>Zelkova serrata</i>	Japanese Zelkova	2" cal.	per plans	B&B	
<b>Shrubs</b>							
sym.	qty.	botanical name	common name	size	spacing	root	notes
PG-B	12	<i>Physocarpus opulifolius 'Diabolo'</i>	Diabolo Ninebark	#5	5'o.c.	cont.	

**General Notes:**

This Landscape Plan is Conceptual and further details, calculations, and enlargements shall be determined and included for Final Site Plan Approval



sheet title:  
**Overall Landscape Plan**

project title:  
**Brewster Village**

City of Rochester Hills, MI

prepared for:  
Robertson Brothers Homes  
6905 Telegraph Rd. - Suite 200  
Bloomfield Hills, MI 48301

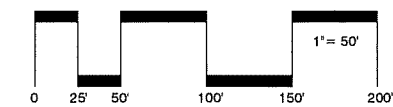
Phone: 248.644.3460

job number: 17031  
date: 08.02.2018

drawn by: EMJ  
checked by: WTK

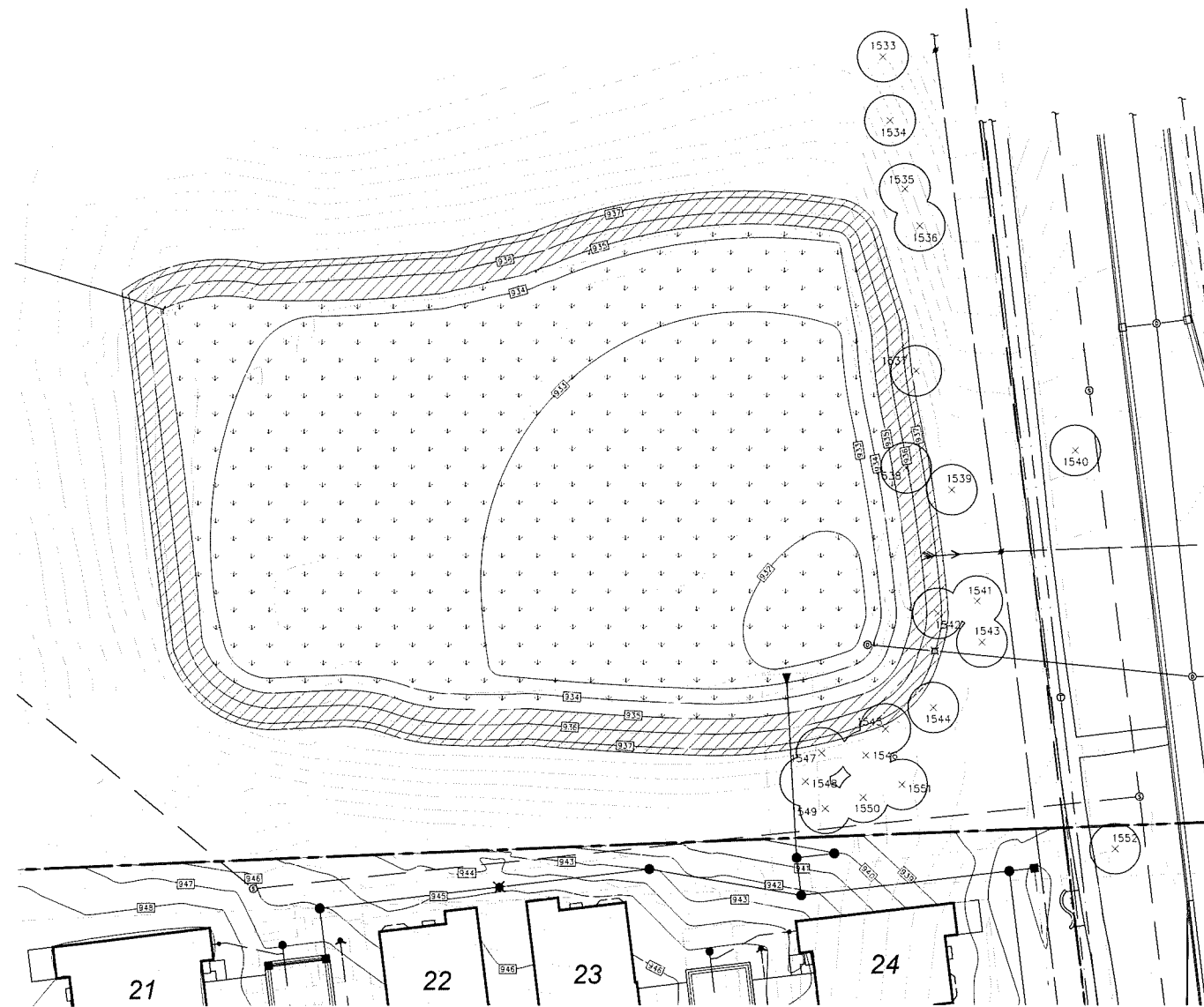


revisions:  
10.12.2018 Per Site Redesign  
11.13.2018 Per Municipal Review



**LEGEND**

⊗ = Existing Tree To Remain



**Stormwater Seed Mix - Basin Zone**

Botanical Name	Common Name	PLS Ounces/Acre	Seeds/Oz	Seeds/SQ FT
<b>Permanent Grasses/Sedges/Rushes:</b>				
<i>Bolboschoenus fluitans</i>	River Bulrush	0.25	27500	0.16
<i>Carex cristatella</i>	Crested Oval Sedge	2.00	59000	2.71
<i>Carex lurida</i>	Bottlebrush Sedge	3.00	12000	0.83
<i>Carex vulpinoidea</i>	Brown Fox Sedge	6.00	125000	17.22
<i>Elymus virginicus</i>	Virginia Wild Rye	13.50	4375	1.36
<i>Glyceria striata</i>	Foxfl Manna Grass	1.25	125000	3.59
<i>Juncus effusus</i>	Common Rush	2.00	281000	12.90
<i>Leersia oryzoides</i>	Rice Cut Grass	1.00	94500	2.17
<i>Panicum virgatum</i>	Switch Grass	2.00	28356	1.30
<i>Schoenoplectus tabernaemontani</i>	Softstem Bulrush	3.00	37813	2.6
<i>Scirpus atrovirens</i>	Dark Green Rush	2.00	187500	8.61
<i>Scirpus cyperinus</i>	Wool Grass	1.00	562500	12.91
		<b>Total</b>	<b>37.00</b>	<b>66.19</b>
<b>Temporary Cover:</b>				
<i>Avena sativa</i>	Common Oat	360.00	8125	67.15
<i>Lolium multiflorum</i>	Annual Rye	100.00	14188	32.57
		<b>Total</b>	<b>460.00</b>	<b>99.72</b>
<b>Forbs &amp; Shrubs:</b>				
<i>Alisma spp.</i>	Water Plantain (Varic)	4.25	70175	6.85
<i>Asclepias incarnata</i>	Swamp Milkweed	1.50	4540	0.16
<i>Bidens spp.</i>	Bidens (Various Mix)	2.00	14175	0.65
<i>Helenium autumnale</i>	Sneezeweed	2.00	141750	6.51
<i>Iris virginica</i>	Blue Flag	4.00	1400	0.13
<i>Lycopus americanus</i>	Common Water Hore	0.25	235000	1.35
<i>Mimulus ringens</i>	Monkey Flower	1.00	283500	6.51
<i>Oligoneuron nodosum</i>	Riddell's Goldenrod	0.50	94500	1.08
<i>Parthenium sesquipedale</i>	Ditch Stonecrop	0.50	36500	0.41
<i>Polygonum spp.</i>	Pinkweed (Various M)	4.00	4063	0.37
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Si	1.00	46000	1.06
<i>Rudbeckia triloba</i>	Brown-Eyed Susan	1.50	33000	1.14
<i>Sagittaria latifolia</i>	Common Arrowhead	1.00	56700	1.30
<i>Senna hebecarpa</i>	Wild Senna	1.00	1400	0.03
<i>Symphoricarpon novae-angliae</i>	New England Aster	1.50	76000	2.62
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue	2.00	13500	0.62
		<b>Total</b>	<b>28.00</b>	<b>30.78</b>

**Mix Statistics**

Native Component	PLS lbs /Acre	PLS Seeds/Acre	PLS Seeds/Sq Ft	% of Native Mix
Forbs	1.75	1,340,887	30.78	31.74%
Grasses	2.31	2,883,281	66.19	68.26%
Total Natives	4.06	4,224,168	96.97	100.00%
Cover	28.75	4,343,800	99.72	
Totals	32.81	8,567,968	196.69	

**Low-profile Prairie Seed Mix - Upland Zone**

Botanical Name	Common Name	PLS Ounces/Acre	Seeds/Oz	Seeds/SQ FT
<b>Permanent Grasses:</b>				
<i>Bouteloua curtipendula</i>	Side Oats Grama	16.00	9375	3.44
<i>Carex spp.</i>	Prairie Carex Mix	4.00	33422	3.07
<i>Elymus canadensis</i>	Canada Wild Rye	32.00	4258	3.13
<i>Koeleria pyramidata</i>	June Grass	1.00	150000	3.44
<i>Panicum virgatum</i>	Switch Grass	1.00	28356	0.65
<i>Schizachyrium scoparium</i>	Little Bluestem	36.00	8800	7.27
		<b>Total</b>	<b>90.00</b>	<b>21.01</b>
<b>Temporary Cover:</b>				
<i>Avena sativa</i>	Common Oat	360.00	8125	67.15
<i>Lolium multiflorum</i>	Annual Rye	100.00	14188	32.57
		<b>Total</b>	<b>460.00</b>	<b>99.72</b>
<b>Forbs:</b>				
<i>Amorpha canescens</i>	Lead Plant	0.50	17000	0.20
<i>Arenaria cylindrica</i>	Thimbleweed	0.50	20938	0.24
<i>Asclepias syriaca</i>	Common Milkweed	2.00	4000	0.18
<i>Asclepias tuberosa</i>	Butterfly Milkweed	2.00	3500	0.16
<i>Baptisia alba</i>	White Wild Indigo	2.00	1600	0.07
<i>Chamaecrista fasciculata</i>	Partridge Pea	12.00	3800	1.05
<i>Coreopsis lanceolata</i>	Sand Coreopsis	5.00	12500	1.43
<i>Coreopsis palmata</i>	Prairie Coreopsis	1.00	11500	0.26
<i>Dalea candida</i>	White Prairie Clover	1.50	26250	0.90
<i>Dalea purpurea</i>	Purple Prairie Clover	1.50	20000	0.69
<i>Desmanthus illinoensis</i>	Illinois Sensitive Plant	3.00	4888	0.34
<i>Echinacea purpurea</i>	Broad-Leaved Purple Coneflower	7.00	6600	1.06
<i>Eryngium yuccifolium</i>	Rattlesnake Master	3.00	8000	0.55
<i>Lespedeza capitata</i>	Round-Head Bush Clover	2.00	10000	0.46
<i>Liatris aspera</i>	Rough Blazing Star	0.50	13000	0.15
<i>Lupinus perennis</i>	Wild Lupine	4.00	1000	0.09
<i>Monarda fistulosa</i>	Wild Bergamot	0.75	78000	1.34
<i>Oligoneuron agidium</i>	Stiff Goldenrod	1.00	46000	1.06
<i>Parthenium integrifolium</i>	Wild Quinine	1.00	6800	0.16
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	0.50	115000	1.32
<i>Penstemon hirsutus</i>	Hairy Beard Tongue	0.50	125000	1.43
<i>Pycnanthemum virginianum</i>	Common Mountain Mint	1.00	331250	7.60
<i>Ratibida pinnata</i>	Yellow Coneflower	4.00	25250	2.32
<i>Rudbeckia hirta</i>	Black-Eyed Susan	5.00	110000	12.63
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan	1.00	46000	1.06
<i>Siphium terribinthaceum</i>	Prairie Dock	0.50	1100	0.01
<i>Solidago speciosa</i>	Showy Goldenrod	0.50	105000	1.21
<i>Symphoricarpon ericoides</i>	Heath Aster	0.25	140000	0.80
<i>Symphoricarpon laeve</i>	Smooth Blue Aster	1.00	48000	1.10
<i>Symphoricarpon novae-angliae</i>	New England Aster	0.50	76000	0.87
<i>Tradescantia ohioensis</i>	Common Spiderwort	0.75	8000	0.14
<i>Verbena stricta</i>	Hoary Vervain	1.00	32000	0.73
<i>Veronica spp.</i>	Ironweed (Various Mix)	1.75	24000	0.56
<i>Veronicastrum virginicum</i>	Culvers Root	0.25	750000	4.30
		<b>Total</b>	<b>68.75</b>	<b>48.89</b>

**Mix Statistics**

Native Component	PLS lbs /Acre	PLS Seeds/Acre	PLS Seeds/Sq Ft	% of Native Mix
Forbs	4.30	2,042,608	46.89	69.06%
Grasses	5.63	915,100	21.01	30.94%
Total Natives	9.92	2,957,708	67.90	100.00%
Cover	28.75	4,343,800	99.72	
Totals	38.67	7,301,508	167.62	

**General Notes:**

Should the Storm System Improvement result in the removal of any tree(s), replacement trees shall be installed.

**Detention Pond Seeding Summary**

Basin Zone - Elev. 932'-935'	Upland Zone - Elev. 935'-937'
Seeding Area: 48,505 s.f.	Seeding Area: 13,476 s.f.
Application Rate: 32.81 lbs /Ac	Application Rate: 38.67 lbs /Ac
Required Quantity: 36.54 lbs of Stormwater Seed Mix	Required Quantity: 11.98 lbs of Low-profile Prairie Seed Mix
Notes: - Install 3"-6" of Topsoil or Wetland Mulch prior to seeding - Use Seed Mat	Notes: - Install 3"-6" of Topsoil or Wetland Mulch prior to seeding - Use Seed Mat

Seed Mixes available from Cardno JFNew  
- www.camonalveplantnursery.com  
- (574) 586-2412  
All Seed shall be protected with mulch blanket

**Native Seeding Maintenance**

During the first growing season, native areas should be mowed two to four times to a height of about 4"-6" when the growth reaches 10"-12". Selective herbicide applications or hand pulling may be needed to control unwanted weed populations. If a mower cannot be set high enough, a string trimmer can be used.

During the second growing season, native areas should be mowed a few times to a height of about 8" when the growth reaches 10"-18". Selective herbicide applications or hand pulling may be needed to control unwanted weed populations.

By the second growing season it should be apparent if some areas need reseeding. Reseed or overseed as needed.

Long term management may include prescribed burning, mowing, hand pulling, and selective herbicide applications. If burning is not allowed or feasible, the planting may be moved to a short height and the clippings removed in the early spring before ground-nesting birds begin nesting.

sheet title:  
**Detention Pond Seeding Plan**

project title:  
**Brewster Village**  
City of Rochester Hills, MI

prepared for:  
Robertson Brothers Homes  
6905 Telegraph Rd. - Suite 200  
Bloomfield Hills, MI 48301

Phone: 248.644.3460

job number: 17031  
date: 10.12.2018




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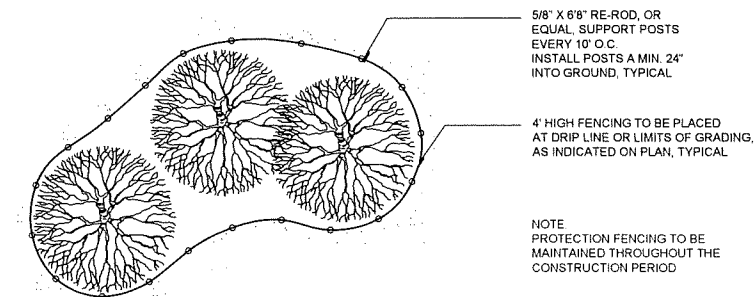
revisions:  
11.13.2018 Per Municipal Review



sheet no.  
**L-2**

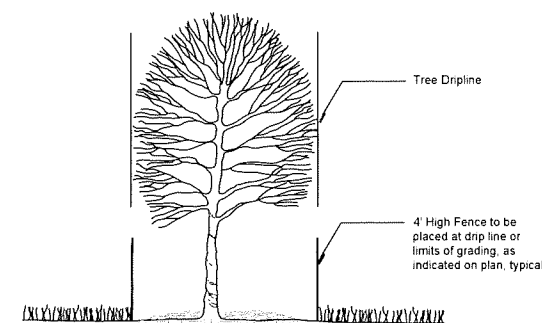
**LEGEND**

-  = Existing Tree To Remain
-  = Existing Tree To Be Removed
-  = Approximate Location of Proposed Tree Protection Fence



Tree Protection Detail - Plan

Scale: NTS



Tree Protection Detail - Section

Scale: NTS



sheet title:

**Tree Preservation Plan**

project title:

**Brewster Village**

City of Rochester Hills, MI

prepared for:

Robertson Brothers Homes  
6905 Telegraph Rd. - Suite 200  
Bloomfield Hills, MI 48301

Phone: 248.644.3460

job number:

17031

date:

08.02.2018

drawn by:

EMJ

checked by:

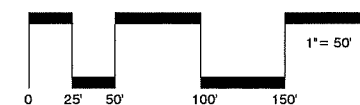
WTK

revisions:

- 10.12.2018 Per Site Redesign
- 11.13.2018 Per Municipal Review



Know what's below.  
Call before you dig.



sheet no.

**L-3**



**LEGEND**

Note: This Tree Survey was prepared by Nowak & Fraus Engineers



sheet title:

**Tree Survey**

project title:

**Brewster Village**

City of Rochester Hills, MI

prepared for:

Robertson Brothers Homes  
6905 Telegraph Rd. - Suite 200  
Bloomfield Hills, MI 48301

Phone: 248.644.3460

job number:

17031

date:

08.02.2018

drawn by:

EMJ

checked by:

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revisions:

10.12.2018 Per Site Redesign  
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Know what's below.  
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sheet no.

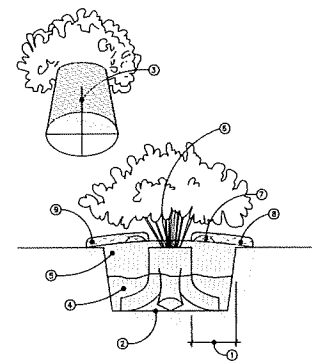
**L-4**

Tree #	Botanical Name	Common Name	To be Saved/Removed	Landmark/Historic	Exempt	Dia.	Type	Other Dia.	Condition	Comments
1533	Acer rubrum	RED MAPLE	Offsite	-	-	13	FAIR		SEAMS, MECHANICAL DAMAGE, EXPOSED ROOTS	
1534	Gleditsia triacanthos	HONEYLOCUST	Offsite	-	-	13	GOOD			
1535	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	8	POOR	MULTI 7, 8, 6, 6	THIN CROWN, DIEBACK, FUNGUS	
1536	Gleditsia triacanthos	HONEYLOCUST	Offsite	-	-	15	GOOD			
1537	Gleditsia triacanthos	HONEYLOCUST	Offsite	-	-	15	FAIR	TWIN	EXPOSED ROOTS, MECHANICAL DAMAGE	
1538	Acer rubrum	RED MAPLE	Offsite	-	-	11	FAIR		EXPOSED ROOTS, MECHANICAL DAMAGE	
1539	Acer rubrum	RED MAPLE	Offsite	-	-	11	FAIR		EXPOSED ROOTS, MECHANICAL DAMAGE	
1540	Tilia cordata	LITTLE LEAF LINDEN	Offsite	-	-	6	GOOD			
1541	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	15	POOR		GIRDLING ROOTS, FUNGUS, BIRD PEAK, THIN CROWN	
1542	Acer rubrum	RED MAPLE	Offsite	-	-	11	FAIR		EXPOSED ROOTS, MECHANICAL DAMAGE	
1543	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	14	POOR		LEAN, UTILITY TRIM, EXPOSED ROOTS, MECHANICAL DAMAGE	
1544	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	15	POOR		BIRD PEAK, DIEBACK, EXPOSED ROOTS, MECHANICAL DAMAGE	
1545	Gleditsia triacanthos	HONEYLOCUST	Offsite	-	-	7	GOOD			
1546	Gleditsia triacanthos	HONEYLOCUST	Offsite	-	-	6	FAIR		EXPOSED ROOTS	
1547	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	9	POOR		THIN CROWN, DIEBACK, INSECT	
1548	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	11	FAIR	MULTI 9	COMPETITION, INSECT	
1549	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	10	POOR		THIN CROWN, DIEBACK, INSECT	
1550	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	10	POOR		THIN CROWN, DIEBACK, COMPETITION, INSECT	
1551	Acer rubrum	RED MAPLE	Offsite	-	-	6	POOR		FUNGUS, ROT, EXPOSED ROOTS, MECHANICAL DAMAGE	
1552	Acer saccharum	SUGAR MAPLE	Offsite	-	-	13	POOR		MECHANICAL DAMAGE, ROT, EXPOSED ROOTS	
1553	Thuja occidentalis	NORWAY MALE	Offsite	-	-	21	GOOD		EXPOSED ROOTS, MECHANICAL DAMAGE	
1554	Thuja occidentalis	NORWAY MALE	Offsite	-	-	21	GOOD			
1555	Thuja occidentalis	NORWAY MALE	Offsite	-	-	20	FAIR		EROSION, SEAM, MECHANICAL DAMAGE, EXPOSED ROOTS	
1556	Thuja occidentalis	NORWAY MALE	Offsite	-	-	13	FAIR		EXPOSED ROOTS, MECHANICAL DAMAGE	
1557	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	21	GOOD			
1558	Ulmus pumila	SIBERIAN ELM	Remove	-	Yes	18	TWIN 10		FUNGUS, DIEBACK	
1559	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	26	POOR		FUNGUS, ROT, DIEBACK	
1560	Malus spp.	APPLE	Offsite	-	-	6	MULTI		ROT, DIEBACK, EPICORMIC BRANCHING	
1561	Tilia americana	BASSWOOD	Offsite	-	-	11	GOOD			
1562	Picea abies	NORWAY SPRUCE	Offsite	-	-	10	GOOD			
1563	Picea abies	NORWAY SPRUCE	Offsite	-	-	6	FAIR		LEAN, UTILITY TRIM, EXPOSED ROOTS, MECHANICAL DAMAGE	
1564	Abies balsamea	BALSAM FIR	Offsite	-	-	13	GOOD			
1565	Picea abies	NORWAY SPRUCE	Offsite	-	-	13	GOOD			
1566	Picea abies	NORWAY SPRUCE	Offsite	-	-	12	GOOD			
1567	Picea abies	NORWAY SPRUCE	Offsite	-	-	15	GOOD			
1568	Picea abies	NORWAY SPRUCE	Offsite	-	-	13	GOOD			
1569	Picea abies	NORWAY SPRUCE	Remove	-	-	11	GOOD			
1570	Picea abies	NORWAY SPRUCE	Offsite	-	-	13	GOOD			
1571	Picea abies	NORWAY SPRUCE	Offsite	-	-	12	GOOD			
1572	Picea abies	NORWAY SPRUCE	Offsite	-	-	11	FAIR		COMPETITION	
1573	Picea abies	NORWAY SPRUCE	Offsite	-	-	13	GOOD			
1574	Picea abies	NORWAY SPRUCE	Offsite	-	-	12	GOOD	TWIN 10		
1575	Picea abies	NORWAY SPRUCE	Offsite	-	-	14	GOOD			
1576	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	17	FAIR		BIRDPECK, DIEBACK	
1577	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	15	FAIR		BIRDPECK, DIEBACK	
1578	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	17	GOOD			
1579	Pinus strobus	EASTERN WHITE PINE	Offsite	-	-	9	POOR		UTILITY TRIM, THIN CROWN	
1580	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	13	POOR		UTILITY TRIM, INSECT	
1581	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	15	POOR		UTILITY TRIM, INSECT	
1582	Pinus strobus	EASTERN WHITE PINE	Offsite	-	-	6	POOR		UTILITY TRIM, DIEBACK, THIN CROWN	
1583	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	16	POOR		UTILITY TRIM, THIN CROWN	
1584	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	7	POOR		UTILITY TRIM, INSECT, BIRD PECK	
1585	Pinus strobus	EASTERN WHITE PINE	Offsite	-	-	7	POOR		UTILITY TRIM, ONE BRANCH LEFT	
1586	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	16	POOR		LEAN, BIRD PECK, UTILITY TRIM	
1587	Pinus nigra	AUSTRIAN PINE	Offsite	-	-	18	POOR		UTILITY TRIM, INSECT, BIRD PECK	
1588	Malus spp.	APPLE	Save	-	-	9	TWIN		FAIR UTILITY TRIM, VINES	
1589	Malus spp.	APPLE	Remove	-	-	8	MULTI		FAIR UTILITY TRIM, VINES	
1590	Acer negundo	BOXELDER	Remove	-	-	9	FAIR		LEAN, UTILITY TRIM	
1591	Rhamnus cathartica	COMMON BUCKTHORN	Save	-	-	6	FAIR		VINES, COMPETITION	
1592	Rhamnus cathartica	COMMON BUCKTHORN	Save	-	-	6	MULTI		POOR VINES, DIEBACK	
1593	Acer negundo	BOXELDER	Remove	-	-	7	FAIR		LEAN, DIEBACK	
1594	Populus deltoides	EASTERN COTTONWOOD	Save	-	-	33	TWIN 32		Remove ROT, DIEBACK, VINES	
1595	Catalpa spp.	NORTHERN CATALPA	Remove	-	-	12	MULTI 11, 6		FAIR ROT, VINES, TREE STAND	
1596	Catalpa spp.	NORTHERN CATALPA	Remove	-	-	6	FAIR		SUPPRESSION	
1597	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	10	FAIR		COMPETITION	
1598	Acer negundo	BOXELDER	Remove	-	-	8	POOR		LEAN, SUPPRESSION	
1599	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	20	TWIN 16		POOR FUNGUS, ROT, DIEBACK	
1600	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	11	POOR		BROKEN TOP, ROT, DIEBACK	
1601	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	11	POOR		LEAN, SUPPRESSION, DIEBACK	
1602	Rhamnus cathartica	COMMON BUCKTHORN	Remove	-	-	6	POOR		ROT, DIEBACK, SUPPRESSION	
1603	Malus spp.	APPLE	Save	-	-	7	MULTI 7, 6, 6		POOR UTILITY TRIM, ROT	
1604	Prunus serotina	BLACK CHERRY	Remove	-	-	10	FAIR		COMPETITION	
1605	Crataegus spp.	HAWTHORN	Remove	-	-	6	MULTI 7		FAIR DIEBACK, ROT	
1606	Rhamnus cathartica	COMMON BUCKTHORN	Remove	-	-	8	MULTI 7		POOR BROKEN TOP, ROT, DIEBACK	
1607	Prunus serotina	BLACK CHERRY	Remove	-	-	7	FAIR		VINES	
1608	Malus spp.	APPLE	Save	-	-	6	MULTI 8		FAIR VINES, UTILITY TRIM	
1609	Prunus serotina	BLACK CHERRY	Remove	-	-	15	TWIN 8		POOR SEAMS, METAL FENCE, VINES, DIEBACK	
1610	Prunus serotina	BLACK CHERRY	Remove	-	-	13	POOR		VINES, LIGHTING, METAL FENCE, ROT	
1611	Acer negundo	BOXELDER	Remove	-	-	16	TWIN		POOR VINES, ROT, DIEBACK	
1612	Salix spp.	WILLOW	Remove	-	-	22	MULTI 16, 8		POOR DIEBACK, ROT, VINES	
1613	Salix spp.	WILLOW	Remove	-	-	17	TWIN 10		POOR VINES, ROT, DIEBACK	
1614	Salix spp.	WILLOW	Remove	-	-	24	MULTI 16, 15		POOR ROT, DIEBACK	
1615	Salix spp.	WILLOW	Remove	-	-	20	POOR		ROT, DIEBACK, SUPPRESSION	
1616	Salix spp.	WILLOW	Remove	-	-	19	POOR		VINES, ROT, DIEBACK	
1617	Acer negundo	BOXELDER	Remove	-	-	11	MULTI		POOR DIEBACK, LEAN, ROT, MECHANICAL DAMAGE	
1618	Acer negundo	BOXELDER	Remove	-	-	7	FAIR		MECHANICAL DAMAGE	
1619	Carya cordiformis	BITTERNUT HICKORY	Remove	-	-	9	GOOD			
1620	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	28	GOOD			
1621	Acer negundo	BOXELDER	Remove	-	-	7	FAIR		SUPPRESSION	
1622	Acer negundo	BOXELDER	Remove	-	-	6	FAIR		LEAN, SUPPRESSION	
1623	Acer negundo	BOXELDER	Remove	-	-	6	GOOD			
1624	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	11	FAIR		COMPETITION	
1625	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	18	TWIN 11		GOOD	
1626	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	12	FAIR		COMPETITION	
1627	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	6	FAIR		COMPETITION	
1628	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	11	POOR		DEAD TOP	
1629	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	7	POOR		LEAN, SUPPRESSION	
1630	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	11	FAIR		COMPETITION	
1631	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	11	FAIR		DIEBACK, COMPETITION	
1632	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	6	POOR		SUPPRESSION	
1633	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	9	GOOD			
1634	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	14	GOOD			
1635	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	12	GOOD			
1636	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	10	FAIR		COMPETITION	
1637	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	8	POOR		HOLLOW, ROT, SUPPRESSION	
1638	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	9	GOOD			
1639	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	8	FAIR			
1640	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	8	POOR		LEAN SUPPRESSION	
1641	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	9	POOR		LEAN SUPPRESSION	
1642	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	12	GOOD			
1643	Acer negundo	BOXELDER	Remove	-	-	6	POOR		LEAN VINES	
1644	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	13	GOOD			
1645	Acer negundo	BOXELDER	Remove	-	-	8	POOR		LEAN, VINES	
1646	Populus deltoides	EASTERN COTTONWOOD	Remove	-	-	12	GOOD			
1647	Fraxinus pennsylvanica	GREEN ASH	Save	-	Yes	21	POOR		VINES, INSECT, DIEBACK	
1648	Carya cordiformis	BITTERNUT HICKORY	Save	-	-	6	GOOD			
1649	Fraxinus pennsylvanica	GREEN ASH	Save	-	Yes	6	POOR		UTILITY TRIM, INSECT	
1650	Fraxinus pennsylvanica	GREEN ASH	Save	-	Yes	7	POOR		INSECT	
1651	Populus deltoides	EASTERN COTTONWOOD	Save	-	-	11	GOOD			
1652	Populus deltoides	EASTERN COTTONWOOD	Save	-	-	14	GOOD			

Tree #	Botanical Name	Common Name	To be Saved/Removed	Landmark/Historic	Exempt	Dia.	Type	Other Dia.	Condition	Comments
1653	Fraxinus pennsylvanica	GREEN ASH	Save	-	Yes	6	POOR		UTILITY TRIM, INSECT	
1654	Malus spp.	APPLE	Save	-	-	7	MULTI 6		POOR UTILITY TRIM, DIEBACK, VINES	
1655	Acer negundo	BOXELDER	Remove	-	-	6	POOR		UTILITY TRIM	
1656	Acer negundo	BOXELDER	Save	-	-	6	POOR		ROT, DIEBACK, LEAN, UTILITY TRIM	
1657	Morus alba	WHITE MULBERRY	Save	-	-	9	FAIR		FUNGUS	
1658	Acer negundo	BOXELDER	Save	-	-	14	MULTI 12, 9		POOR ROT, DIEBACK, TREE STAND	
1659	Acer negundo	BOXELDER	Remove	-	-	8	FAIR		DIEBACK	
1660	Acer negundo	BOXELDER	Remove	-	-	11	TWIN 11		POOR ROT, INSECT, DIEBACK	
1661	Acer negundo	BOXELDER	Remove	-	-	6	FAIR		LEAN	
1662	Acer negundo	BOXELDER	Remove	-	-	6	TWIN		POOR ROT, SUPPRESSION, DIEBACK	
1663	Acer negundo	BOXELDER	Remove	-	-	7	FAIR		LEAN	
1664	Acer negundo	BOXELDER	Remove	-	-	7	FAIR		LEAN	
1665	Acer negundo	BOXELDER	Remove	-	-	7	FAIR		LEAN, DIEBACK	
1666	Acer negundo	BOXELDER	Remove	-	-	7	GOOD			
1667	Acer negundo	BOXELDER	Remove	-	-	6	POOR		VINES	
1668	Acer negundo	BOXELDER	Remove	-	-	8	TWIN		FAIR LEAN, VINES	
1669	Acer negundo	BOXELDER	Remove	-	-	10	FAIR		LEAN, DIEBACK	
1670	Acer negundo	BOXELDER	Remove	-	-	6	MULTI		FAIR LEAN, DIEBACK	
1671	Acer negundo	BOXELDER	Remove	-	-	7	FAIR		LEAN, DIEBACK	
1672	Fraxinus pennsylvanica	GREEN ASH	Remove	-	Yes	10	POOR		LEAN, COMPETITION	
1673	Acer negundo	BOXELDER	Remove							

**LEGEND**

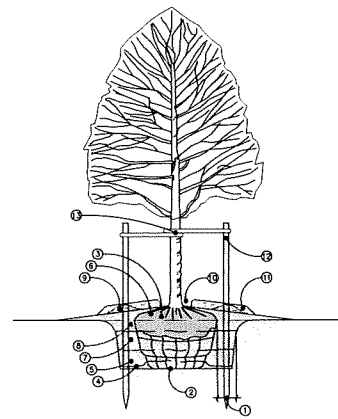
- INSTALLATION NOTES:**
1. DIG PLANT POCKET 12" WIDER THAN EDGE OF ROOTBALL
  2. THOROUGHLY COMPACT BOTTOM OF PLANT POCKET
  3. REMOVE PLANT FROM CONTAINER AND EXAMINE ROOTMASS IF ROOTMASS IS LOOSE, INTEGRATE PLANT ROOTS & FITTINGS OF MEDIA WITH PLANT ROOTS. IF A ROOTMASS OF COMPETITIVE QUALITY EXIST, TRIM THE ROOTMASS BY CUTTING THROUGH BOTTOM HALF OF ROOTBALL. REMOVE EXCESS SOIL FROM TOP OF ROOTBALL DOWN TO THE UPPER LEVEL OF THE ROOT SYSTEM. SEE ROOTBALL WITH TOP 1/4" OF BALL ABOVE FINISH GRADE.
  4. BEFORE CONTINUING WITH BACKFILL, REMOVE TOP SOLE OF BALL. REMOVE EXCESS SOIL.
  5. BACKFILL PLANT POCKET SECOND TO BOTTOM PLANTING MIX & COMPACT THOROUGHLY. ASSURE TREE IS STILL STRAIGHT.
  6. BACKFILL PLANT POCKET LAST 10% WITH PLANTING MIX & COMPACT THOROUGHLY. ASSURE TREE IS STILL STRAIGHT. 1" DEEP GRADE AWAY FROM TREE.
  7. IF PLANTED IN UNHOMOGENEOUS AREAS, FORM A SAUCER WITH SOIL AT OUTSIDE EDGE OF ROOTBALL.
  8. SHREDED BARK MULCH 4" DEPTH. MULCH TO BE NATURAL PINK COLOR. LEAVE 2" RING EXPOSED AT BASE OF TRUNK.
  9. MULCH RINGS TO BE CONSISTENT WITH PLANT TYPE/USE THROUGHOUT PROJECT & SHOULD EXTEND 4' BEYOND LOWEST BRANCH OF EVERGREEN TREES.
  10. MAXIMUM 2" x 1/2" HARDWOOD STAKES TO BE EXTENDED INTO UNDISTURBED SOIL UNDER PLANT POCKET. STAKE LOCATIONS PER TREE TO BE CONSISTENT THROUGHOUT PROJECT.
  11. 1" WIDE BELT LINE IN LON. ELASTIC OR OTHER ACCEPTABLE MATERIAL. TOWARD OR HOLE TO BE USED TO GUY TREES. TWO (2) GUY'S PER TREE.



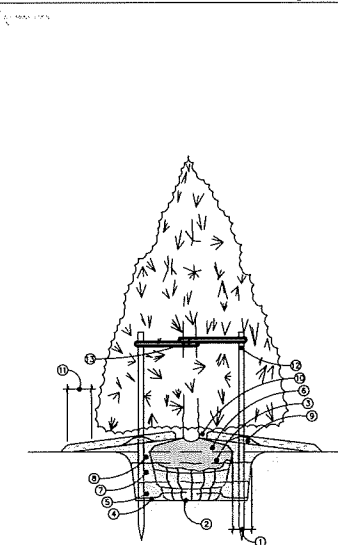
Shrub Planting Detail - Container Scale: NTS

Tree #	Botanical Name	Common Name	To be Saved/	Landmark/	Historic	Exempt	Dia.	Type	Other Dia.	Condition	Comments
1774	Acer negundo	BOXELDER	Remove	-	-	-	6			POOR	VINES
1775	Acer negundo	BOXELDER	Remove	-	-	-	6			FAIR	VINES
1776	Fraxinus pennsylvanica	GREEN ASH	Remove	-	Yes	-	9			POOR	VINES
1777	Acer negundo	BOXELDER	Remove	-	-	-	9	TWIN	6	POOR	LEAN, VINES, DIEBACK
1778	Acer negundo	BOXELDER	Remove	-	-	-	13	TWIN	8	POOR	ROT, DIEBACK, INSECT
1779	Malus spp.	APPLE	Remove	-	-	-	6	TWIN	6	GOOD	
1780	Prunus serotina	BLACK CHERRY	Remove	-	-	-	19	TWIN	12	POOR	ROT, DIEBACK, VINES
1781	Prunus serotina	BLACK CHERRY	Remove	-	-	-	16			POOR	ROT, DIEBACK, INSECT
1782	Ulmus americana	AMERICAN ELM	Remove	-	-	-	13			FAIR	VINES
1783	Crataegus spp.	HAWTHORN	Remove	-	-	-	7			FAIR	VINES
1784	Prunus serotina	BLACK CHERRY	Remove	-	-	-	9			GOOD	
1785	Pyrus spp.	PEAR	Remove	-	-	-	10			FAIR	UTILITY TRIM
1786	Malus spp.	APPLE	Remove	-	-	-	6			POOR	LEAN, VINES, DIEBACK, UTILITY TRIM
1787	Malus spp.	APPLE	Remove	-	-	-	7			FAIR	VINES
1788	Prunus serotina	BLACK CHERRY	Remove	-	-	-	7			POOR	UTILITY TRIM, SEAM, ROT
1789	Malus spp.	APPLE	Remove	-	-	-	7			FAIR	VINES
1790	Acer negundo	BOXELDER	Remove	-	-	-	7			POOR	VINES, ROT, DIEBACK
1791	Acer negundo	BOXELDER	Remove	-	-	-	6			POOR	VINES
1792	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6			POOR	VINES
1793	Prunus serotina	BLACK CHERRY	Remove	-	-	-	8			GOOD	
1794	Prunus serotina	BLACK CHERRY	Remove	-	-	-	8			POOR	VINES, DIEBACK, ROT
1795	Ulmus americana	AMERICAN ELM	Remove	-	-	-	11			FAIR	INSECT
1796	Pyrus spp.	PEAR	Remove	-	-	-	11			FAIR	DIEBACK, SUPPRESSION
1797	Malus spp.	APPLE	Remove	-	-	-	7			GOOD	
1798	Prunus serotina	BLACK CHERRY	Remove	-	-	-	13	MULTI	11,11	POOR	ROT, FUNGUS, DIEBACK, VINES
1799	Ulmus americana	AMERICAN ELM	Remove	-	-	-	12			FAIR	VINES, COMPETITION
1800	Malus spp.	APPLE	Remove	-	-	-	8			FAIR	VINES
1801	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6			POOR	FUNGUS
1802	Prunus serotina	BLACK CHERRY	Remove	-	-	-	7			POOR	FUNGUS, ROT
1803	Prunus serotina	BLACK CHERRY	Remove	-	-	-	7			POOR	FUNGUS, VINES
1804	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6	TWIN		POOR	MECHANICAL DAMAGE, ROT
1805	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6	TWIN		POOR	MECHANICAL DAMAGE, ROT
1806	Acer negundo	BOXELDER	Remove	-	-	-	8			FAIR	VINES
1807	Pyrus spp.	PEAR	Remove	-	-	-	8			FAIR	COMPETITION
1808	Pyrus spp.	PEAR	Remove	-	-	-	8			FAIR	COMPETITION
1809	Pyrus spp.	PEAR	Remove	-	-	-	14	TWIN	8	FAIR	DIEBACK, UTILITY TRIM
1810	Pyrus spp.	PEAR	Remove	-	-	-	8			FAIR	VINES, COMPETITION
1811	Pyrus spp.	PEAR	Remove	-	-	-	7			FAIR	COMPETITION
1812	Pyrus spp.	PEAR	Remove	-	-	-	6			FAIR	COMPETITION
1813	Pyrus spp.	PEAR	Remove	-	-	-	6	TWIN		POOR	UTILITY TRIM, COMPETITION
1814	Pyrus spp.	PEAR	Remove	-	-	-	9			GOOD	
1815	Pyrus spp.	PEAR	Remove	-	-	-	6			FAIR	COMPETITION
1816	Pyrus spp.	PEAR	Remove	-	-	-	6			GOOD	
1817	Pyrus spp.	PEAR	Remove	-	-	-	8			GOOD	
1818	Prunus serotina	BLACK CHERRY	Remove	-	-	-	15	MULTI	11, 10	POOR	ROT, DIEBACK, FUNGUS
1819	Quercus rubra	RED OAK	Remove	-	-	-	10			GOOD	
1820	Prunus serotina	BLACK CHERRY	Remove	-	-	-	11	MULTI	6	POOR	DIEBACK, ROT
1821	Prunus serotina	BLACK CHERRY	Remove	-	-	-	15	MULTI	7, 5, 6	FAIR	DIEBACK
1822	Ulmus pumila	SIBERIAN ELM	Remove	-	Yes	-	13			FAIR	FUNGUS, VINES
1823	Rhamnus cathartica	COMMON BUCKTHORN	Remove	-	-	-	8			FAIR	VINES
1824	Malus spp.	APPLE	Remove	-	-	-	6	MULTI		FAIR	VINES
1825	Prunus serotina	BLACK CHERRY	Remove	-	-	-	7			FAIR	WEAK UNION
1826	Malus spp.	APPLE	Remove	-	-	-	5			POOR	LEAN, VINES, SUPPRESSION
1827	Prunus serotina	BLACK CHERRY	Remove	-	-	-	7			FAIR	VINES
1828	Acer platanoides	NORWAY MAPLE	Remove	-	-	-	19			FAIR	DIEBACK
1829	Prunus serotina	BLACK CHERRY	Remove	-	-	-	13	TWIN	10	FAIR	ROT, DIEBACK
1830	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6	TWIN	6	FAIR	COMPETITION
1831	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6	MULTI		FAIR	COMPETITION
1832	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6			FAIR	COMPETITION
1833	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6			FAIR	COMPETITION
1834	Prunus serotina	BLACK CHERRY	Remove	-	-	-	8	MULTI	6	FAIR	LEAN, COMPETITION
1835	Prunus serotina	BLACK CHERRY	Remove	-	-	-	13	MULTI	11, 8, 6	FAIR	VINES, DIEBACK
1836	Prunus serotina	BLACK CHERRY	Remove	-	-	-	10	TWIN	8	GOOD	
1837	Prunus serotina	BLACK CHERRY	Remove	-	-	-	7			FAIR	LEAN, VINES, SEAM
1838	Prunus serotina	BLACK CHERRY	Remove	-	-	-	6			FAIR	LEAN, SUPPRESSION
1839	Prunus serotina	BLACK CHERRY	Remove	-	-	-	10	TWIN	6	FAIR	DIEBACK, VINES
1840	Prunus serotina	BLACK CHERRY	Remove	-	-	-	10	TWIN	6	FAIR	DIEBACK, COMPETITION
1841	Prunus serotina	BLACK CHERRY	Remove	-	-	-	10			FAIR	VINES, COMPETITION
1842	Prunus serotina	BLACK CHERRY	Remove	-	-	-	16	TWIN	10	FAIR	DIEBACK
1843	Pyrus spp.	PEAR	Remove	-	-	-	10	MULTI		FAIR	COMPETITION
1844	Prunus serotina	BLACK CHERRY	Remove	-	-	-	8	MULTI		POOR	VINES, ROT, DIEBACK
1845	Prunus serotina	BLACK CHERRY	Remove	-	-	-	21			FAIR	VINES, DIEBACK
1846	Prunus serotina	BLACK CHERRY	Remove	-	-	-	8			FAIR	ROT, SUPPRESSION
1847	Prunus serotina	BLACK CHERRY	Remove	-	-	-	10	TWIN	8	FAIR	DIEBACK, FUNGUS
1848	Prunus serotina	BLACK CHERRY	Remove	-	-	-	8	TWIN	6	FAIR	FUNGUS
1849	Acer negundo	BOXELDER	Remove	-	-	-	13			FAIR	FUNGUS, COMPETITION
1850	Prunus serotina	BLACK CHERRY	Remove	-	-	-	16	TWIN	13	POOR	ROT, DIEBACK, INSECT

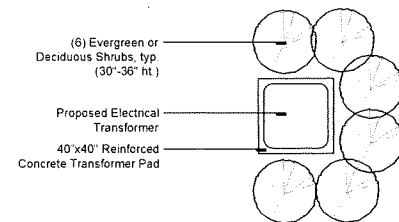
Note: This Tree Survey was prepared by Nowak & Fraus Engineers



Deciduous Tree Planting Detail - 4" Cal. and Under Scale: NTS

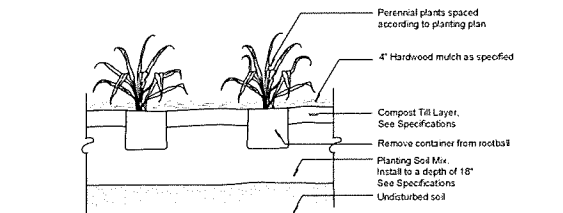


Evergreen Tree Planting Detail - 10' Ht. and Under Scale: NTS

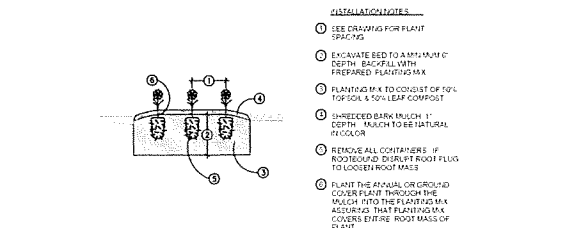


Optional Transformer Screening Detail Scale: 1/2" = 1'

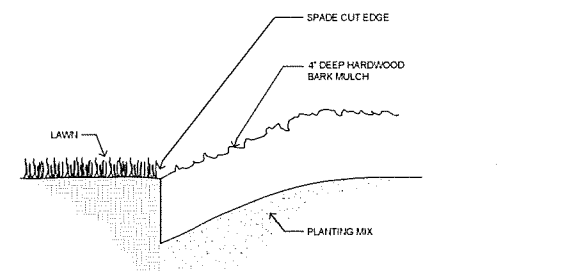
- \*Notes
- Transformer Pad shall be screened on a minimum of three sides
  - Actual Pad and Plant Locations shall be determined in the field, based on actual construction, orientation, and desired screening



Perennial Planting Detail Scale: NTS



Annual & Ground Cover Planting Detail Scale: NTS



Spade Cut Edging Detail Scale: NTS

sheet title:  
**Tree Survey & Details**

project title:  
**Brewster Village**  
City of Rochester Hills, MI

prepared by:  
Robertson Brothers Homes  
6905 Telegraph Rd. - Suite 200  
Bloomfield Hills, MI 48301

Phone: 248.644.3460

job number: 17031  
date: 08.02.2018

drawn by: EMJ  
checked by: WTK

revisions:  
10.12.2018 Per Site Redesign  
11.13.2018 Per Municipal Review



Know what's below.  
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sheet no.

L-5