



Crystal City Substation Expansion

Date of Site Visit: June 11, 2020
 Certified Arborist: Janice M. Cena (MA-4699A)

Tree Tag #	Botanical name	Common Name	Caliper (DBH)	CRZ	Condition Rating	Species Rating	Total Rating	Preserve or Remove	Replacement(s) Required	Comments
T100	Quercus phellos	willow oak	22.0"	33.0'	0.72	0.7	11.1	Preserve	-	thin canopy, large deadwood
T101	Quercus phellos	willow oak	29.0"	43.5'	0.7	0.7	14.2	Preserve	-	thin canopy, large deadwood
T102	Quercus phellos	willow oak	28.0"	42.0'	0.65	0.7	12.7	Preserve	-	thin canopy, dieback
T103	Quercus phellos	willow oak	25.0"	37.5'	0.72	0.7	12.6	Preserve	-	
T104	Prunus sp.	Cherry sp.	8.0"	12.0'	0.5	0.65	NA	Remove	1.0	one-sided, dead limb, trunk wound
T105	Quercus phellos	willow oak	25.0"	37.5'	0.72	0.7	12.6	Preserve	-	
T106	Acer rubrum	red maple	12.0"	18.0'	0.8	0.7	6.7	Preserve	-	
T107	Quercus phellos	willow oak	34.0"	51.0'	0.78	0.7	18.6	Preserve	-	
T108	Acer rubrum	red maple	23.0"	34.5'	0.8	0.7	12.9	Remove	3.0	
T109	Quercus phellos	willow oak	32.0"	48.0'	0.85	0.7	19.0	Preserve	-	
T110	Quercus phellos	willow oak	29.0"	43.5'	0.78	0.7	15.8	Preserve	-	
T111	Quercus phellos	willow oak	20.0"	30.0'	0.78	0.7	10.9	Preserve	-	
T112	Quercus phellos	willow oak	23.0"	34.5'	0.82	0.7	13.2	Preserve	-	
T113	Quercus phellos	willow oak	25.0"	37.5'	0.85	0.7	14.9	Remove	3.0	
T114	Magnolia x soulangeana	saucer magnolia	3/3/3/4.5/3/4	30.8'	0.75	0.6	9.2	Remove	2.0	
T115	Magnolia x soulangeana	saucer magnolia	4.5/4/3.5/4	24.0'	0.5	0.6	4.8	Remove	2.0	top dead, sucker growth
T116	Magnolia x soulangeana	saucer magnolia	4/4.5/4/4.5/3.5	36.8'	0.7	0.6	10.3	Remove	3.0	

Total Tree Replacements: 14.0

- Notes:**
- Condition Rating Based on formula provided by the Council of Tree & Landscape Appraisers Guide for Plant Appraisal (9th Edition). Condition Rating: 90-100 Excellent, 70-89 Good, 50-59 Fair, 25-49 Poor, 05-24 Very Poor
 - Species Rating based on The Mid Atlantic Species Rating Guide (2007 Edition).
 - All trees with a minimum 3" DBH were inventoried and rated.
 - Any replacement trees that cannot be accommodated on site will be provided in a monetary amount: for every tree that cannot be planted on site a contribution to the County's Tree Canopy Fund of at least \$2,400.00 per tree will be provided to the Tree Canopy Fund, coordinated with DPR.

Arlington County Chesapeake Bay Preservation Ordinance Tree Canopy Coverage Calculations:

Per Section 61-1.0, Part C.1.b. the minimum canopy coverage is as follows: Ten (10) percent tree canopy for a site zoned business, commercial, or industrial.

Site Zoning:	C-O-2.5
Site Area:	61,681 SF
Public Use and Access Easement:	9,129 SF
Adjusted Site Area:	52,551 SF
Tree Canopy Required (10%):	5,255 SF
Tree Canopy (Existing):	4,387 SF
Tree Canopy (Proposed):	5,256 SF
% Provided:	18%

PLANT SCHEDULE

QTY	KEY	LATIN NAME	COMMON NAME	SIZE	ROOT CONDITION	20-YEAR CANOPY COVERAGE PER TREE (SF)	TOTAL CANOPY COVERAGE PROVIDED (SF)	NATIVE
7	AML	Amelanchier canadensis	Shadblow Serviceberry	2 - 2 1/2" cal.	B&B - 5 STEM	137.5	963	X
3	BNH	Betula nigra 'Heritage'	Heritage River Birch	3 - 3 1/2" cal.	B&B - 3 STEM	218.75	656	X
2	CCF	Cercis canadensis 'Forest Pansy'	Forest Pansy Redbud	2 - 2 1/2" cal.	B&B	218.75	438	X
2	CFD	Cornus florida 'Cherokee Princess'	Cherokee Princess Dogwood	2 - 2 1/2" cal.	B&B	218.75	438	X
2	LSX	Liquidambar styraciflua 'Rotundiloba'	Rotundiloba Sweetgum	2 1/2" - 3" cal.	B&B	312.5	625	X
5	MVL	Magnolia virginiana	Sweetbay Magnolia	2 - 2 1/2" cal.	B&B - 3 STEM	137.5	688	X
1	OVH	Ostrya virginiana	Eastern Hophornbeam	2 1/2" - 3" cal.	B&B	137.5	138	X
4	PAC	Platanus x acerifolia 'Morton Circle'	Exclamation London Planetree	3 - 3 1/2" cal.	B&B	250	1,000	X
3	QCS	Quercus coccinea	Scarlet Oak	3 - 3 1/2" cal.	B&B	-	-	X
1	NSX	Nyssa sylvatica	Blackgum	2 1/2" - 3" cal.	B&B	312.5	313	X
30							5,256	

Street Tree Calculations:

Per Section 14.2.2.B.1., one major deciduous tree is required for every 35 feet of property line abutting a public right-of-way.

South Hayes Street:	550 LF
South Fern Street:	209 LF
Street Trees Required:	22
Existing Street Trees To Remain:	3
Proposed Street Trees:	7
Street Trees Provided:	10

REV	DATE	DESCRIPTION

Dewberry Engineers Inc.
4805 Lake Brook Drive, Suite 200
Glen Allen, VA 23060; (p) 804.290.7957

LANDSCAPE PLAN

CRYSTAL SUBSTATION EXPANSION AND MODERNIZATION

ARLINGTON COUNTY VIRGINIA

OPERATIONAL REGION	NAME	B/M No.	SCALE
PROJECT	DESIGNER	DATE	1" = 25'
PROJECT ENGINEER	ARB / JS	10/16/20	SHEET: L-001
APPROVED BY	SRB	10/16/20	DRAWING: