

ANALYSIS OF CONCEPT 1 NORTH- ST BERNARD DR NE

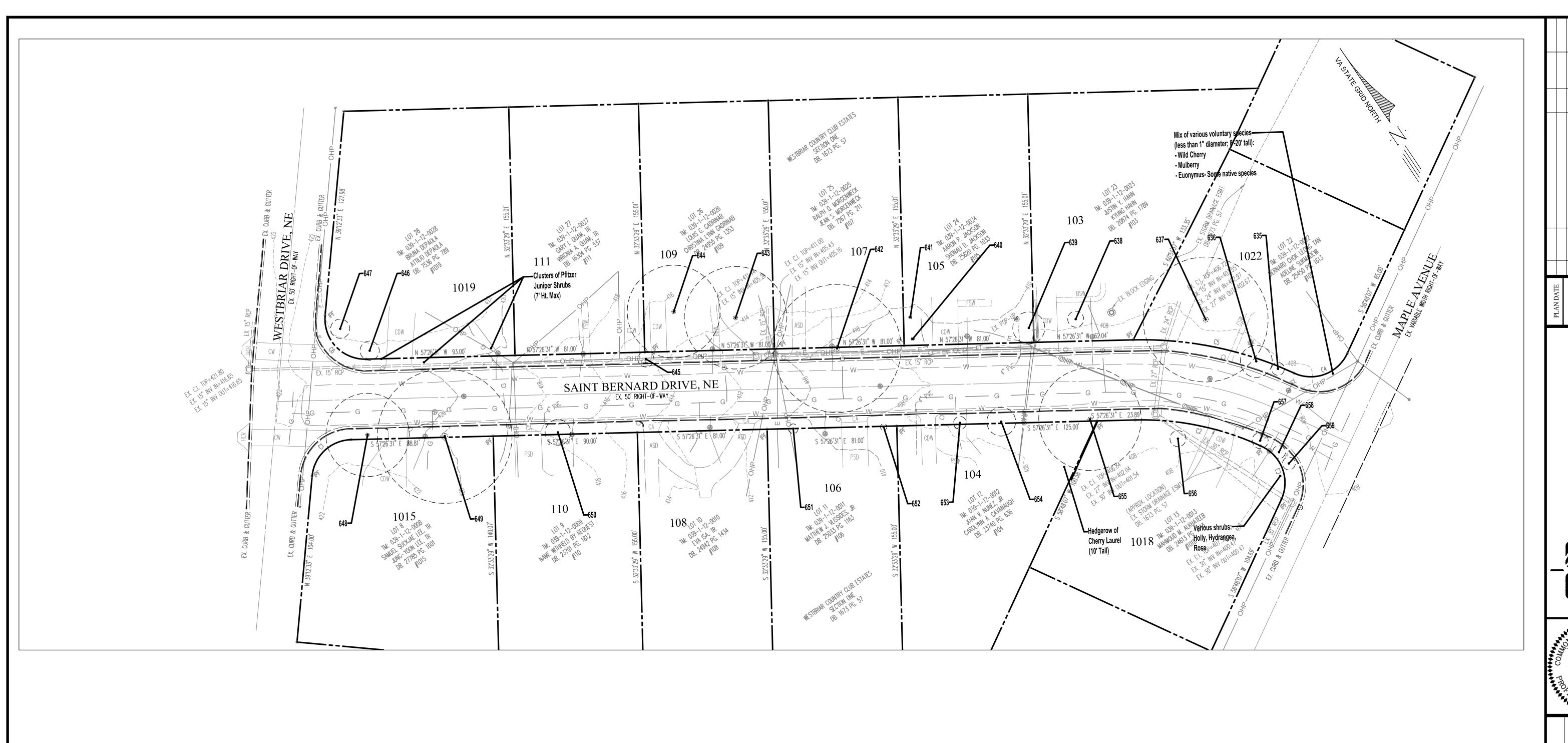
ANALYSIS OF CONCEPT 2 SOUTH- ST BERNARD DR NE

DESCRIPTION	THIS CONCEPT PROPOSES SIDEWALK ALONG NORTH SIDE OF ST BERNARD DR NE. THE SIDEWALK WILL EXTEND FROM THE MAPLE AVE E INTERSECTION TO THE INTERSECTION WITH WESTBRIAR DR NE. THE CONCEPT INCLUDES ADA RAMPS AT EACH INTERSECTION.	THIS CONCEPT PROPOSES SIDEWALK ALONG SOUTH SIDE OF ST BERNARD DR NE. THE SIDEWALK WILL EXTEND FROM THE MAPLE AVE E INTERSECTION TO THE INTERSECTION WITH WESTBRIAR DR NE . THE CONCEPT INCLUDES ADA RAMPS AT EACH INTERSECTION.
TREE IMPACT	TREES ALONG THIS SIDE OF ST BERNARD DR NE VARY IN SIZE AND AGE ACROSS A RANGE FROM NEWLY PLANTED TREES TO ESTABLISHED, MATURE CANOPY TREES. THERE ARE A FEW TREES AFFECTED BY THIS CONCEPT-FOUR TREES WILL NEED TO BE REMOVED. SEVERAL OF THESE TREES MAY BE TRANSPLANTED. ADDITIONAL TREES MAY BE AFFECTED DEPENDING ON THE EXTENT OF GRADING FOR THE WALK TO THE CRITICAL ROOT ZONES OF THE TREES.	TREES ALONG THIS SIDE OF ST BERNARD DR NE VARY IN SIZE AND AGE ACROSS A RANGE FROM NEWLY PLANTED TREES TO ESTABLISHED, MATURE CANOPY TREES. THERE ARE A GOOD NUMBER OF TREES AFFECTED BY THIS CONCEPT—NINE TREES WILL NEED TO BE REMOVED. HOWEVER, THEY GENERALLY ARE SMALLER AND YOUNGER THAN CONCEPT 1, SEVERAL OF WHICH MAY BE TRANSPLANTED. ADDITIONAL TREES MAY BE AFFECTED DEPENDING ON THE EXTENT OF GRADING FOR THE WALK TO THE CRITICAL ROOT ZONES OF THE TREES.
IMPACTS ON VEGETATION (OTHER THAN TREES)	THERE ARE SOME IMPACTS TO OTHER VEGETATION IN A FEW AREAS BY THIS CONSTRUCTION. THIS ANALYSIS IS FOCUSED MORE ON THE POTENTIAL CONSTRUCTION IMPACTS TO LARGER TREES. IF THIS CONCEPT IS PURSUED, HOMEOWNERS MAY WISH TO CONSIDER TRANSPLANTING PLANTS/SHRUBS OUT OF THE PATH OF THE SIDEWALK CONSTRUCTION TO AREAS ON THEIR LOTS.	THERE ARE SOME IMPACTS TO OTHER VEGETATION IN A FEW AREAS BY THIS CONSTRUCTION. THIS ANALYSIS IS FOCUSED MORE ON THE POTENTIAL CONSTRUCTION IMPACTS TO LARGER TREES. IF THIS CONCEPT IS PURSUED, HOMEOWNERS MAY WISH TO CONSIDER TRANSPLANTING PLANTS/SHRUBS OUT OF THE PATH OF THE SIDEWALK CONSTRUCTION TO AREAS ON THEIR LOTS.
GRADING IMPACTS	THE AREA BETWEEN MAPLE AVE E AND WESTBRIAR DR NE WHERE SIDEWALK WOULD BE BUILT IS SLIGHTLY STEEPER COMPARED TO CONCEPT 2. THE GRADING IMPACT ON THIS CONCEPT WILL BE MORE COMPARED TO CONCEPT 2. THE CONSTRUCTION LIMITS WILL BE DETERMINED DURING LATER STAGES OF DESIGN IF THIS CONCEPT IS PURSUED.	THE AREA WHERE SIDEWALK WOULD BE BUILT IS SLIGHTLY FLATTER COMPARED TO CONCEPT 1. THE GRADING IMPACT APPEARS TO BE MINIMAL. THE CONSTRUCTION LIMITS WILL BE DETERMINED DURING LATER STAGES OF DESIGN IF THIS CONCEPT IS PURSUED.
CONSTRUCTABILITY ISSUE	THIS CONCEPT HAS 4 UTILITY POLES WITHIN THE RIGHT-OF-WAY (R/W). AT 2 LOCATIONS THE RESULTING SIDEWALK WIDTH IS LESS THAN THE ADA RECOMMENDED WIDTH OF 4'.	THERE ARE NO SIGNIFICANT CONSTRUCTABILITY ISSUES ON CONCEPT 2. THIS CONCEPT HAS ONE UTILITY POLE. THE SIDEWALK WIDTH COULD BE REDUCED TO MINIMUM FOUR FEET TO PROVIDE CLEARANCE.
COST	THE COST OF THIS CONCEPT IS COMPARABLE TO OTHER ROBINSON SIDEWALK PROJECTS. BOTH THE CONCEPTS WILL HAVE SIMILAR COSTS COMPARED TO EACH OTHER.	THE COST OF THIS CONCEPT IS COMPARABLE TO OTHER SIDEWALK PROJECTS. BOTH THE CONCEPTS WILL HAVE SIMILAR COSTS.
CONNECTIVITY	BOTH THE SIDEWALK CONCEPTS HAVE SIMILAR CONNECTIVITY.	BOTH THE SIDEWALK CONCEPTS HAVE SIMILAR CONNECTIVITY.
RECOMMENDATION	CONCEPT 1 HAS CONSTRUCTABILITY ISSUES BECAUSE OF THE UTILITY POLES THAT RES THEREFORE, CONCEPT 2 IS RECOMMENDED.	SULT IN A SIDEWALK WIDTH THAT IS LESS THAN THE ADA RECOMMENDED WIDTH OF 4';





FILE No. PP-2593



TREE INVENTORY & CONDITION ANALYSIS							
TREE NO.	SPECIES	SIZE	CRZ	CONDITION RATING	COMMENTS		
	Common Name	DBH (in)	R (ft.)	%			
635	Cherry	4"	4'	37.50	Decay throughout		
636	Cherry	10"	10'	53.13			
637	Red Maple	39"	39'	59.38	Codominant trunk; raised planting base suggests formerly within a planting bed.		
638	Japanese Maple	5"	5'	65.63			
639	Crape Myrtle	48"	10'	75.00	Multistem		
640	Red Maple	1"	1'	65.63			
641	Red Maple	1"	1'	43.75	Trunk damage		
642	Cherry	40"	40'	12.50	Major decay; nearly dead		
643	Southern Magnolia	32"	32'	46.88	Branch decay; twisted trunk		
644	Sweetbay Magnolia	29"	29'	43.75	Trunk and branch decay		
645	Eastem Red Cedar	5' Ht.	5' Width	46.88	Trained / trimmed to shrub size		
646	Flowering Dogwood	6"	6'	50.00			
647	Norway Spruce	6"	6'	90.63			
648	Kwanzan Cherry	26"	26'	37.50	lvy; decay; over-pruned; multistem		
649	Kwanzan Cherry	42"	42'	43.75	Decay throughout; multistem		
650	Kwanzan Cherry	8"	8'	53.13			
651	Cherry	3"	3'	78.13			
652	Cherry	2"	2'	62.50			
653	Cherry	4"	4'	46.88	Decay		
654	Cherry	9"	9'	59.38			
655	Cherry	32"	32'	37.50	Multistem; decay		
656	Crape Myrtle	5"	5'	84.38	Multistem		
657	Yoshina Cherry	3"	3'	84.38			
658	Willow Oak	4"	4'	68.75			
659	Willow Oak	4"	4'	81.25			

					DAT		
					REV.BY APPROVED DATE		
					REV.BY		
					DESCRIPTION	REVISIONS	
					No. DATE		
					No.		
NDATE	TIVO VI	13/2023	26/2024				

(X) 300

C. RYAN CONNULIC. No.03953.

01/26/2024

TREE INVENTORY AND CONDITION ANALYSIS
ST. BERNARD DRIVE NE
CONCEPT STUDY
TOWN OF VIENNA
FAIRFAX COUNTY, VIRGINIA

SHEET OF

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