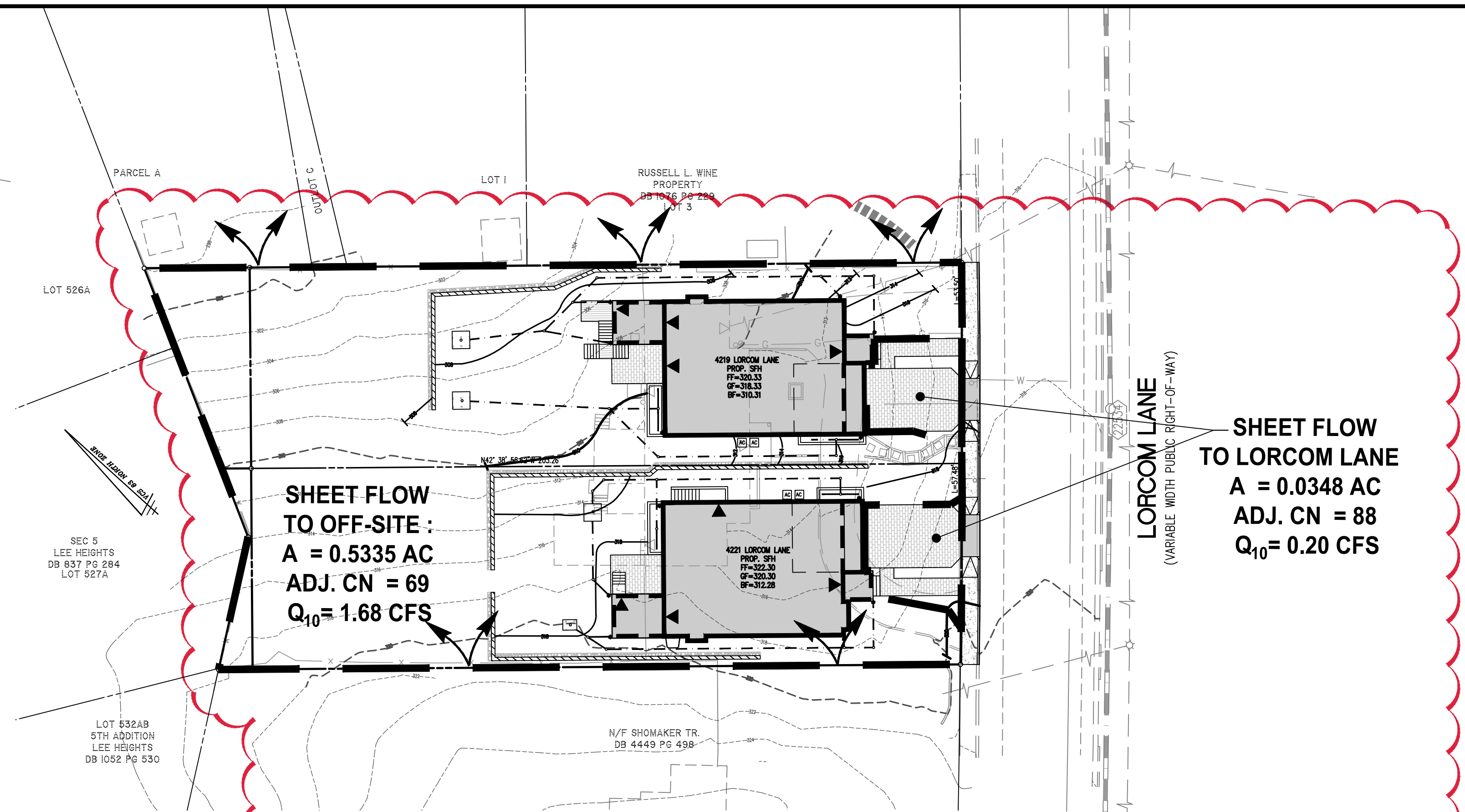


EXISTING DRAINAGE DIVIDES
1" = 25'



PROPOSED DRAINAGE DIVIDES
1" = 25'

EXISTING CURVE NUMBER

	SOIL:	A	B	C	D
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	CN	39	61	74	80
Impervious Cover	CN	98	98	98	98

EXISTING DRAINAGE DIVIDE

PERVIOUS AREA = 20,156 SF OR 0.4627 ACRES
 IMPERVIOUS AREA = 4,601 SF OR 0.1056 ACRES
 TOTAL AREA = 24,757 SF OR 0.5683 ACRES

EXISTING CN = $[(4,601 \times 98) + (20,156 \times 61)] \div 24,757 = 68$

PROPOSED CURVE NUMBER

OVERALL IMPERVIOUS AREA TABULATION (POST-DEVELOPMENT)

PERVIOUS AREA = 17,882 SF OR 0.4105 ACRES
 IMPERVIOUS AREA = 6,875 SF OR 0.1578 ACRES
 TOTAL AREA = 24,757 SF OR 0.5683 ACRES

Drainage Area A		A Soils	B Soils	C Soils	D Soils	Total Area (acres):
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.0000	0.0000	0.0000	0.0000	0.5683
	CN	30	55	70	77	Runoff Reduction Volume (ft ³): 167.7621
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.0000	0.4105	0.0000	0.0000	
	CN	39	61	74	80	
Impervious Cover	Area (acres)	0.0000	0.1578	0.0000	0.0000	
	CN	98	98	98	98	
		CN(D.A. A)				
		71				
		1-year storm	2-year storm	10-year storm		
RV _{Developed (watershed-inch)} with no Runoff Reduction*		0.8482	0.5889	1.9963		
RV _{Developed (watershed-inch)} with Runoff Reduction*		0.7669	0.5076	1.9150		
	Adjusted CN*	69	69	70		

IMPERVIOUS AREA TABULATIONS

LOT A1		
ITEM	EXISTING (SF)	PROPOSED (SF)
BUILDING	789	2455
ACCESSORY BUILDING	0	0
VEHICLE AREA	807	490
WALLS	24	230
PEDESTRIAN AREA	17	377
TOTAL	1637	3552

LOT B1		
ITEM	EXISTING (SF)	PROPOSED (SF)
BUILDING	1386	2444
ACCESSORY BUILDING	0	0
VEHICLE AREA	1315	484
WALLS	18	99
PEDESTRIAN AREA	245	296
TOTAL	2964	3323

OVERALL SITE		
ITEM	EXISTING (SF)	PROPOSED (SF)
BUILDING	2175	4899
ACCESSORY BUILDING	0	0
VEHICLE AREA	2122	974
WALLS	42	329
PEDESTRIAN AREA	262	673
TOTAL	4601	6875

OUTFALL NARRATIVE

UNDER THE EXISTING CONDITIONS THE ENTIRE SITE, 0.5683 ACRES (CN=68) OUTFALLS AS NON-EROSIVE SHEET FLOW TOWARD ADJACENT PROPERTIES TO THE NORTH. UNDER THE PROPOSED CONDITION, SOME OF THE SITE, 0.0348 ACRES (CN 88 AFTER RUNOFF REDUCTION), WILL DRAIN TOWARD LORCOM LANE AND THE MAJORITY OF THE SITE, 0.5335 ACRES (CN 69 AFTER RUNOFF REDUCTION), WILL CONTINUE TO DISCHARGE AS NON-EROSIVE SHEET FLOW TO THE EXISTING OUTFALL. THE EXISTING CURVE NUMBER FOR THE SITE IS 68 AND THE PROPOSED CURVE NUMBER FOR THE SITE IS 70 AFTER RUNOFF REDUCTION. WATER FROM THE FRONT OF THE PROPERTIES WILL BE DIRECTED TOWARD LORCOM LANE AND THE MUNICIPAL STORM SYSTEM TO REDUCE THE AMOUNT OF LAND COVER THAT DISCHARGES TOWARD ADJACENT PROPERTIES. ADDITIONALLY, ALL ROOF WATER IS PIPED TO ONE OF FOUR (4) DRY WELLS TO FURTHER REDUCE RUNOFF FROM THE BUILDINGS AND TO ENSURE THAT WATER FLOWS FROM THE SITE AS NON-EROSIVE SHEET FLOW. PROPOSED SITE WALLS WILL NOT IMPEDE FLOW FROM UPSTREAM AREAS AND ARE DESIGNED TO ALLOW SHEET FLOW TO CONTINUE THROUGH THE EXISTING DRAINAGE PATTERN.

PERMEABLE PAVEMENT WILL BE PROVIDED FOR ALL DRIVEWAYS, LEADWALKS, AND PATIOS, AND BIO-RETENTION PLANTERS WILL CAPTURE THE MAJORITY OF IMPERVIOUS ROOF WATER. ADDITIONALLY, PORTIONS OF AREA PREVIOUSLY DIRECTED TOWARD OFFSITE PROPERTIES WILL BE DIRECTED TOWARD LORCOM LANE. THE OVERALL DRAINAGE PATTERN WILL NOT BE AFFECTED BY THE DEVELOPMENT AND THE EXISTING OUTFALL WILL REMAIN UNCHANGED. THE NON-EROSIVE SHEET FLOW FROM THE SITE WILL BE DECREASED BY 0.03 CFS FOR THE 10-YEAR, 24-HOUR STORM. THEREFORE, IT IS THE OPINION OF THIS SUBMITTING ENGINEER THAT THERE WILL NOT BE A NEGATIVE IMPACT ON ADJACENT PROPERTIES DUE TO THE REDEVELOPMENT OF THIS SITE.

FLOOD PLAIN AND RPA NOTE

THE SITE IS NOT WITHIN THE 100-YEAR FLOOD PLAIN AND NO KNOWN OR MAPPED RPAS EXIST ON THE SITE.

PROPOSED DRAINAGE DIVIDE TO LORCOM LANE

PERVIOUS AREA = 284 SF OR 0.0065 ACRES
 IMPERVIOUS AREA = 1,233 SF OR 0.0283 ACRES
 TOTAL AREA = 1,517 SF OR 0.0348 ACRES
 ADJ. CURVE NUMBER = 88

PROPOSED DRAINAGE DIVIDE TO OFFSITE

PERVIOUS AREA = 17,598 SF OR 0.4040 ACRES
 IMPERVIOUS AREA = 5,642 SF OR 0.1295 ACRES
 TOTAL AREA = 23,240 SF OR 0.5335 ACRES
 ADJ. CURVE NUMBER = 69

*SEE SHEET C-0701A FOR ADJUSTED CURVE NUMBER CALCULATIONS AND HYDROGRAPHS

LEGEND



NOTES

- SEE SHEETS C-0702 - C-0705 FOR STORMWATER MANAGEMENT DESIGN AND COMPUTATIONS.



EXISTING & PROPOSED DRAINAGE DIVIDES



Engineers • Surveyors • Planners
 Landscape Architects • Arborists
 207 PARK AVENUE
 FALLS CHURCH, VIRGINIA 22046
 (703) 532-6163 Fax (703) 533-1301
 www.WLPINC.com

**ARLINGTON, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES**

4219/4221 LORCOM LANE
THE PROPERTY OF R.A. PHILLIPS
GRADING PLAN
4219/4221 LORCOM LANE, ARLINGTON, VIRGINIA 22207

SCALE: 1" = 25'	DRAWN CR	CHECKED TP/BKW
SUBMITTED DATE 03/05/2019		
05/07/2019		
06/24/2019		
07/17/2019		
	APPROVED DATE	
	DIRECTOR OF ENVIRONMENTAL SERVICES	

SHEET: **C-0701**