RESOLUTION OF THE BOARD OF DIRECTORS OF THE SHERIDAN STATION WEST METROPOLITAN DISTRICT

A RESOLUTION ADOPTING AMENDED RULES AND REGULATIONS OF WEST LINE VILLAGE

At a regular meeting of the Board of Directors of the Sheridan Station West Metropolitan District, Jefferson County, Colorado, held at 10:00 A.M., on Friday, December 9, 2022, via video conference at <u>https://us02web.zoom.us/j/86267550643?pwd=V3RnRGRtWkRyUIZZc1VMWTJFZjFHdz09</u> and via telephone conference at Dial-In: 1-719-359-4580, Meeting ID: 862 6755 0643, Passcode: 987572, at which a quorum was present, the following resolution was adopted:

WHEREAS, Sheridan Station West Metropolitan District (the "District") is a quasimunicipal corporation and political subdivision of the State of Colorado located in the City of Lakewood, County of Jefferson, State of Colorado; and

WHEREAS, pursuant to Section 32-1-1001(1)(m), C.R.S., the District's Board of Directors (the "Board") has authority to adopt, amend, and enforce bylaws and rules and regulations not in conflict with the constitution and laws of the State of Colorado for carrying on the business, objects, and affairs of the Board and the District; and

WHEREAS, Sheridan Station Transit Village LLC, a Colorado limited liability company, the owner and master developer of West Line Village, executed a Declaration of Covenants, Conditions and Restrictions of West Line Village, recorded with the Jefferson County Clerk and Recorder at Reception No. 2017100573, as amended by that First Amendment to Declaration of Covenants, Conditions and Restrictions of West Line Village recorded in Clerk and Recorder's Office for Jefferson County on June 12, 2018 at Reception No. 2018052987 (the "Declaration"); and

WHEREAS, on June 20, 2017, the Board adopted Resolution 2017-06-01, Resolution of the Board of Directors of Sheridan Station West Metropolitan District Acknowledging and Adopting the Declaration of Covenants, Conditions and Restrictions of West Line Village, which acknowledged the District's authority to administer and enforce the Declaration; and

WHEREAS, pursuant to Section 2.4 of the Declaration, the District has authority to adopt, amend, repeal, and enforce rules and regulations concerning and governing the West Line Village; and

WHEREAS, on June 20, 2017, the Board adopted Resolution 2017-06-02, Resolution Adopting the Rules and Regulations of Sheridan Station West Metropolitan District Related to West Line Village (the "Original Rules and Regulations"); and

WHEREAS, the Original Rules and Regulations were amended and restated by that certain Resolution 2018-08-05, Resolution of the Board of Directors of Sheridan Station West

Metropolitan District Adopting the Amended Rules and Regulations of Sheridan Station West Metropolitan District Related to West Line Village, dated August 24, 2018, by that certain Resolution 2019-06-03, Resolution of the Board of Directors of Sheridan Station West Metropolitan District Adopting the Amended Rules and Regulations of Sheridan Station West Metropolitan District Related to West Line Village, dated June 20, 2019, and by that certain Resolution Adopting Amended Rules and Regulations of West Line Village dated December 10, 2021 (collectively, the "Amended Rules and Regulations"); and

WHEREAS, the Board retained an engineering firm to perform a study of the District's drainage plan and provide a report of its findings (the "Drainage Study"), set forth in Exhibit A attached hereto and incorporated herein by reference, to assist the District in developing revisions to the Amended Rules and Regulations with regard to permissible changes to landscaping; and

WHEREAS, based on the results of the Drainage Study and recommendations of the engineer contained therein as set forth in Exhibit A, the Board has determined it is necessary to revise the Amended Rules and Regulations again to allow for changes to landscaping.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SHERIDAN STATION WEST METROPOLITAN DISTRICT THAT:

1. <u>Adoption by the Board</u>. The Board hereby adopts the Amended and Restated Rules and Regulations of West Line Village attached hereto as **Exhibit B**, which are incorporated herein by this reference.

2. <u>Superseding Effect</u>. The Amended and Restated Rules and Regulations of West Line Village supersede in full the Original Rules and Regulations, the Amended Rules and Regulations, and any other policies and rules on the same subject matter.

3. <u>Binding Effect</u>. The Amended and Restated Rules and Regulations of West Line Village, as amended and restated herein, shall hereinafter be binding upon the property encumbered by the Declaration and within the boundaries of the District.

[Remainder of page intentionally left blank.]

Whereupon, a motion was made and seconded, and upon a majority vote this Resolution was approved by the Board.

ADOPTED AND APPROVED THIS 9th DAY OF DECEMBER 2022.

SHERIDAN STATION WEST METROPOLITAN DISTRICT

ACE S

Douglas Elenowitz, President

ATTEST:

Paul Malone, Assistant Secretary

Exhibit A Drainage Study



September 1st, 2022

David Solin District Manager Special District Management Services, Inc. 141 Union Boulevard, Suite 150 Lakewood, CO 80228

RE: Sheridan Station – Patio Modification Drainage Memo

To whom it may concern,

This drainage memo identifies potential drainage concerns due to changes in yard cover within the West Line Village townhome development (West Line Village Filings 1-3). This memo will summarize the results of the completed drainage study and provide recommendations to the Sheridan Station District on how to regulate changes in yard cover for each property.

The study has been organized as follows:

Project description and inventory of existing yard cover
Methods and assumptions
Conclusion and recommendations
Appendix A: Calculations
Appendix B: Existing information

Project Description and Inventory of Existing Yard Cover

The subject property is in the City of Lakewood, north of W. 10th Avenue and west of Chase St. The site is a part of the South 1/2 of the Northeast 1/4 of Section 1, Township 4 South, Range 69 West of the 6th Principal Meridian, City of Lakewood, County of Jefferson, State of Colorado. The project consists of filings 1-3 of the West Line Village subdivision, which consists of asphalt streets, concrete alley drives, concrete detached walks, townhomes, landscape areas, two detention and water quality ponds, and an assortment of utilities serving the subdivision.

Based on site observations performed on 8/30/2022, the types of existing ground cover are as follows:

Properties with paver patios: 24 Properties with concrete patios: 8

All remaining townhome yards consisted of artificial turf, grass, decks, or various landscaping. For the purpose of this study, these areas are grouped together as "landscape areas" since they share similar hydrologic properties as landscaping. Decks were included with this group since storm runoff will migrate past decking and into the soil below. The decks observed had large enough gaps between boards to allow infiltration without substantive impediment.

Methods and Assumptions

Calculations in this study are based on the approved design for the West Line Village construction drawings and the approved West Line Village Drainage reports Filing 1-3. Minor variations due to construction differences may result in slightly different results. The peak discharge for the onsite basins were originally calculated using the following Rational Method formula:

Q=CIA

Where:

Q = peak discharge (cfs)

C = runoff coefficient from the City of Lakewood Storm Drainage Criteria

I = rainfall intensity (inches/hour) from City of Lakewood Storm Drainage Criteria

A = drainage area (acres)



The approved impervious and "C" values used in the West Line Village Filing 1 and 2 drainage reports by R&R Engineers and Surveyors (see Appendix B) were found to be more conservative than the approved imperviousness and "C" values in the West Line Village Filing 3 drainage report by Ware Malcomb. Using the imperviousness and "C" values published in Lakewood criteria and approved in the Filing 3 Drainage Report by Ware Malcomb provides a method to confirm the impact to the phase 1 and 2 areas without recalculating all of the swale and detention pond volumes. Because of this, it was determined that by increasing the imperviousness due to patio construction, the flow in filings 1 and 2 would not increase beyond what is already calculated in the filing 1 and 2 drainage report. The Filing 3 minor and major storm frequencies for pipe and inlet designs were the 5-year and 100-year storm events with P values of 1.40 in/hr and 2.60 in/hr, respectively, from the City of Lakewood Storm Drainage Criteria Manual, Blue Book, Figure 2. The filing 3 detention pond was recalculated using the increased imperviousness and the revised calculation included in Appendix A.

It was assumed that the average patio size would be 6'x12' (72 SF). To be conservative, this number was rounded up to 80 SF.

To understand how the yard cover changes could impact the subdivision, the area imperviousness and related "C" values were calculated assuming every yard has a concrete patio. The 100-year storm event was used for this analysis. Calculations have been provided in Appendix A and were prepared to be consistent with the approved West Line Village Filings 1-3 reports. Relevant existing information has been included with Appendix B.

Individual patio installations should not be regulated the same as a cohesive subdivision improvement where the detention pond would have to be revised for changes in imperviousness. This would be triggered if the one landowner were to make changes to multiple properties (typically greater than 1 acre) as part of a development. Lakewood staff would likely require a new drainage report to be reviewed and approved for these changes. However, since these will be separate changes initiated by individual landowners, only the practical implications (rather than permitting) of the cover change were analyzed. Patio installation by individual property owners does not appear to require a permit (see Appendix B for permit exclusions provided by Lakewood).

Conclusion and Recommendations

Based on the results of the study, existing drainage infrastructure is adequate to handle changes to yard cover in the form of concrete or paver patios, artificial turf, grass, raised garden beds, or other landscaping. The subdivision water quality and detention ponds (as designed) should contain the minor increase in volume due to the additional concrete patios without overflowing and causing damage to neighboring properties. I recommend that the District not hesitate to allow patio installations due their affects on drainage.

If you have questions or concerns, please don't hesitate to reach out.

regards,

Craft Civil Design

Allen

Dan Allen, PE Owner 319.899.2345 dallen@craftcivil.com



APPENDIX A: CALCULATIONS

PROJECT: Sherdian Station Drainage Memo JOB NO.: 22002

CALC. BY: DFA DATE: 8/31/2022

Impervious Perce	entages - from	Urban Drainage Table	6-3	
Roof	90%		Gravel	7%
Walks/Drives	100%		Land Use 6	0%
Patios	96%		Land Use 7	0%
Landscape	0%		Land Use 8	0%
		-		
SOIL TYPE:	C or D	 (use equation from the equatin from the equation from the equation from the equation from	om Table 6-4)	

= FORMULA CELLS = USER INPUT CELLS

Filing 1 and 2 PROPOSED COMPOSITE IMPERVIOUSNESS (assumes all units add concrete patios)

		Weigl	hted Imp	ervious	and C \	/alues			Areas (ac)					
Basin	Area (ac)	Imp.	C2	C₅	C ₁₀	C ₁₀₀	Roof	Walks Drives	Patios	Landscape	Gravel	Land Use 6	Land Use 7	Land Use 8
A	0.37	69%	0.55	0.60	0.64	0.77	0.05	0.21		0.11				
В	0.30	77%	0.62	0.67	0.70	0.80	0.03	0.20		0.06				
С	0.32	87%	0.71	0.74	0.77	0.84	0.12	0.17		0.03				
D	0.13	98%	0.81	0.84	0.86	0.89	0.06	0.07	0.009	0.00				
E	1.07	88%	0.72	0.76	0.78	0.84	0.42	0.51	0.051	0.09				
F	0.12	89%	0.72	0.76	0.79	0.85	0.00	0.10		0.01				
G	0.08	86%	0.70	0.74	0.77	0.84	0.00	0.07		0.01				
Н	1.01	87%	0.71	0.75	0.78	0.84	0.39	0.49	0.046	0.09				
I	0.75	85%	0.69	0.73	0.76	0.83	0.21	0.41	0.037	0.09				
J	0.08	70%	0.56	0.61	0.65	0.77	0.01	0.05	0.002	0.02				
К	0.07	68%	0.54	0.60	0.64	0.76	0.01	0.04	0.002	0.02				
L	0.05	44%	0.33	0.39	0.45	0.66	0.02	0.00		0.03				
М	0.07	64%	0.50	0.56	0.60	0.74	0.04	0.00	0.009	0.02				
N	0.03	90%	0.74	0.77	0.80	0.85	0.03	0.00		0.00				
0	0.45	90%	0.74	0.78	0.80	0.85	0.17	0.22	0.029	0.024				
Р	0.12	0%	0.00	0.04	0.13	0.48	0.00	0.00		0.12				
Q	0.05	82%	0.67	0.71	0.74	0.82	0.03	0.00	0.015	0.01				
R	0.10	84%	0.68	0.72	0.75	0.83	0.03	0.038	0.011	0.01				
S	0.09	77%	0.62	0.67	0.70	0.80	0.03	0.03	0.011	0.02				
Т	0.10	42%	0.31	0.38	0.44	0.66	0.00	0.04		0.06				
U	0.06	71%	0.56	0.61	0.65	0.77	0.00	0.04		0.02				
Total Onsite	5.42	81%	0.66	0.70	0.73	0.82	1.66	2.70	0.22	0.84	0.00	0.00	0.00	0.00
Approved Onsite WITHOUT PATIOS	5.42	77%	0.62	0.67	0.70	0.80								
										<u> </u>				

PROJECT: Sherdian Station Drainage Memo JOB NO.: 22002

CALC. BY: DFA DATE: 8/31/2022

Impervious Percentages - from Urban Drainage Table 6-3

Roof	90%		Gravel	7%					
Asphalt	100%		Land Use 6	0%					
Concrete	96%	(includes patios)	Land Use 7	0%					
Landscape	0%		Land Use 8	0%					
				-					
SOIL TYPE: C or D V (use equation from Table 6-4)									

= FORMULA CELLS = USER INPUT CELLS

Filing 3 PROPOSED COMPOSITE IMPERVIOUSNESS (assumes all units add concrete patios)

		Weigh	nted Imp	pervious	and C V	/alues			Areas (ac)					
Basin	Area (ac)	Imp.	C ₂	C₅	C ₁₀	C ₁₀₀	Roof	Asphalt	Concrete	Landscape	Gravel	Land Use 6	Land Use 7	Land Use 8
TH1	0.10	46%	0.35	0.41	0.47	0.67	0.03		0.03	0.000				
OSA	0.48	65%	0.51	0.56	0.61	0.75		0.25	0.06	0.055				
TH2	0.17	50%	0.38	0.45	0.50	0.69	0.03		0.06	0.011				
TH5	0.16	39%	0.29	0.36	0.42	0.65	0.05		0.04	0.012				
A1	0.30	67%	0.53	0.58	0.62	0.76		0.16	0.04	0.029				
TH4	0.23	45%	0.34	0.40	0.47	0.67	0.08		0.05	0.018				
TH3	0.30	54%	0.42	0.48	0.53	0.71	0.09		0.09	0.020				
TH8	0.14	47%	0.35	0.42	0.48	0.68	0.05		0.04	0.000				
A2	1.84	90%	0.74	0.77	0.80	0.85	1.84							
A3	0.49	60%	0.47	0.53	0.58	0.73		0.22	0.08	0.057				
EXO	0.50	75%	0.60	0.65	0.69	0.79	0.17	0.22		0.054				
TH6	0.23	44%	0.33	0.40	0.46	0.67	0.08		0.05	0.020				
EXD	0.14	88%	0.72	0.76	0.79	0.85	0.06	0.07		0.005				
TH7	0.25	60%	0.47	0.53	0.58	0.73	0.09		0.07	0.007				
TH9	0.07	67%	0.53	0.58	0.63	0.76	0.04		0.01	0.004				
A4	0.24	72%	0.58	0.63	0.67	0.78		0.14	0.03	0.016				
TH10	0.11	34%	0.24	0.31	0.38	0.62	0.04		0.01	0.017				
EXM	0.11	35%	0.26	0.32	0.39	0.63	0.04		0.002	0.031				
A5	0.68	3%	0.01	0.06	0.15	0.49			0.02	0.322				
Total Tributary to Pond	5.10	81%	0.65	0.70	0.73	0.82	2.68	1.07	0.67	0.68				
Approved Total	5.10	79%												

Calculated By: Date: 8/31/2022 Checked By: DEA 100-Year 1-hour rainfall= 2.60

STANDARD FORM SF-3

Project: Sherdian Station Drainage Memo Job No.: 22002

Design Storm: 100-Year

STORM DRAINAGE SYSTEM DESIGN (RATIONAL METHOD PROCEDURE) PROPOSED CONDITIONS

= FORMULA CELLS
= USER INPUT CELLS

			D	IRECT	RUNO	FF			Т	OTAL I	RUNOF	F	STR	EET		PIPE					
BASIN	DESIGN POINT	AREA DESIGN	AREA (AC)	RUNOFF COEFF	t _c (MIN)	C * A (AC)	I (IN/HR)	Q (CFS)	t _c (MIN)	S (C * A) (CA)	I (IN/HR)	Q (CFS)	(%) SLOPE	STREET FLOW	DESIGN FLOW (CFS)	(%) SLOPE	PIPE DIAM. (IN.)	LENGTH (FT)	VELOCITY (FPS)	t _t (MIN)	REMARKS
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
TH6			0.23	0.67	5.4	0.16	8.64	1.3	5.4	0.2	8.64	1.3			1.3	6.0%	6	119.9	7.0	0.3	
									5.7	0.2	8.52	1.3			1.3	5.0%	6	10.11	6.4	0.03	
									5.7	0.2	8.51	1.3			1.3	2.1%	6	11.13	4.1	0.05	TH6 local flow piped to DP6
																					TH6 original flow = 1 CFS (.3 increase)



Nyloplast Inlet Capacity Table

DISCLAIMER: SAFETY FACTORS ARE NOT INCLUDED IN THESE CALCULATIONS. ACTUAL CALCULATIONS SHOULD BE CARRIED OUT AND VERIFIED BY THE DESIGN ENGINEER TAKING INTO ACCOUNT ALL LOCAL CONDITIONS. NYLOPLAST RECOMMENDS USING A MINIMUM SAFETY FACTOR OF 1.25 FOR PAVED AREAS AND 2.0 FOR TURF AREAS. ADS/NYLOPLAST IS NOT RESPONSIBLE FOR MISUSE OF THIS TOOL.



REV 2.1.21

I-Hour Rainfall Tributary Area (ac) % Impervious Depth (100-yr) Basin Slope (%) Basin Length 5.10 81.0% 2.6 3.3% 700.00 Soil Type %: A = 0.0% B = 0.0% C&D = 100.0% WQCV = 6.14 ac-ft ($WQCV = 1.0^*A^*(0.91i^3 - 1.19i^2 + 0.78i)/12$) V WQCV = 6.148 cu-ft ($V_{5} = (//66^*Ci)^*A //43560$)) - - 5-yr Detention = 0.34 ac-ft ($V_{5} = (//66^*Ci)^*A //43560$)) - - 100-yr Detention = 0.63 ac-ft ($V_{5} = (//66^*Ci)^*A //43560$)) - - 00-yr Detention = 27,265 cu-ft - - - - 00-yr Detention = 27,265 cu-ft - - - - Total Required Volume = 3,460 cu-ft - <td< th=""><th></th><th>Phase 3</th><th>EURV /</th><th>Detention</th><th>Calculat</th><th>ions (as</th><th>suming pa</th><th>atios cons</th><th>structed)</th><th></th></td<>		Phase 3	EURV /	Detention	Calculat	ions (as	suming pa	atios cons	structed)					
Tributary Area (ac) % Impervious Depth (100-yr) Basin Slope (%) Basin Length 5.10 81.0% 2.6 3.3% 700.00 Soil Type %: A = 0.0% B = 0.0% C&D = 100.0% WQCV = 0.14 ac-ft ($WQCV = 1.0^*A^+(0.91i^3 - 1.19i^2 + 0.78i)/12$) WQCV = 0.14 Soil Type %: A = 0.0% B = 0.0% C&D = 100.0% WQCV = 6.195 cu-ft ($V = (166^+Ci)^*A)/43560$) U Syr Detention = 0.63 ac-ft ($V_{300} = (166^+Ci)^*A)/43560$) Oryr Detention = 0.63 ac-ft ($V_{100} = (166^+Ci)^*A)/43560$) Oryr Detention = 0.63 ac-ft ($V_{100} = (166^+Ci)^*A)/43560$) Oryr Detention = 0.63 ac-ft ($V_{100} = (166^+Ci)^*A)/43560$) Oryr Detention = 0.63 ac-ft ($V_{100} = (166^+Ci)^*A)/43560$) Oryr Detention = 0.63 ac-ft ($V_{100} = (166^+Ci)^*A)/43560$) Oryr Detention = 0.63 ac-ft ($V_{100} = (166^+Ci)^*A)/43560$) Oryr Detention = 0.63 ac-ft ($V_{100} = (166^+Ci)^*A)/43560$) Oryr Detention = 0.77 ac-ft	Require	d Volume			1-	-Hour Rain	ıfall							
5.10 81.0% 2.6 3.3% 700.00 Soil Type %: A = 0.0% B = 0.0% $(\&D = 100.0\%)$ WQCV = 0.14 ac-ft ($WQCV = 1.0^*A^*(0.91i^3 - 1.19i^2 + 0.78i//12$) WQCV = 6.195 cu-ft S-yr Detention = 0.34 ac-ft ($V_5 = ((36^+Ci)^*A)/43560$)) S-yr Detention = 0.34 ac-ft ($V_{100} = ((66^+Ci)^*A)/43560$)) S-yr Detention = 0.34 ac-ft ($V_{100} = ((66^+Ci)^*A)/43560$)) S-yr Detention = 27,265 cu-ft Total Required Volume = 0.77 ac-ft ($V100$) Sige (ft) Counce ft Octal Required Volume = 0.77 ac-ft ($V100$) Sige (ft) Counce ft Total Network ($V100$) Sige (ft) Counce ft Total Volume (ft ³) Sige (ft) Contour <td <="" colspan="4" th=""><th>• Tri</th><th>butary Area</th><th>(ac)</th><th>% Imperviou</th><th>s D</th><th>epth (100</th><th>-yr) E</th><th>Basin Slope (S</th><th>%) E</th><th>Basin Length (ft</th></td>	<th>• Tri</th> <th>butary Area</th> <th>(ac)</th> <th>% Imperviou</th> <th>s D</th> <th>epth (100</th> <th>-yr) E</th> <th>Basin Slope (S</th> <th>%) E</th> <th>Basin Length (ft</th>				• Tri	butary Area	(ac)	% Imperviou	s D	epth (100	-yr) E	Basin Slope (S	%) E	Basin Length (ft
Soil Type %: A = 0.0% B = 0.0% C&D = 100.0% WQCV = 0.14 ac-ft ($WQCV = 1.0^{+}A^{+}(0.91)^{+3} - 1.19)^{2} + 0.781)/12$) WQCV = 6.195 cu-ft 5-yr Detention = 0.34 ac-ft ($V_{50} = (136^{+}CI)^{+}A)/43560$)) 5-yr Detention = 0.63 ac-ft ($V_{100} = (166^{+}CI)^{+}A)/43560$) Image: Colored text in the co		5.10		81.0%		2.6		3.3%		700.00				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		S	oil Type %	: A =	0.0%	В	= 0.0%	C&D=	100.0%					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		WOCV =	0.14	ac-ft	(WOCV =	1	91i ³ -1 19i ²	⊧0 78i)/12)						
S-yr Detention 0.34 a.c.ft ($V s = ((36 + Cl)^* A)/43560$) S-yr Detention = 14,872 cu-ft 100-yr Detention = 0.63 ac.ft ($V_{100} = ((66 + Cl)^* A)/43560$) 100-yr Detention = 27,265 cu-ft Oryr Detention = 27,265 cu-ft Total Required Volume = 0.77 ac.ft ($V100$) = 33,460 cu-ft Max Allowable Release Rate Q ₃ = 1.02 cfs (q= 0.20 cfs/ac) Q ₃ = 1.02 cfs (q= 1.00 cfs/ac) Provided Volume Stage (ft) Contour (ft ²) Area (ft ²) 1/3 (A1 + A2 + (A1A2) ^{1/2}) D Total Volume (ft ³) Total Volume (ac-ft) 0.00 5335.00 0 0 0 0.00 1.00 5336.00 2.385 795 795 0.02 2.00 5337.00 3.125 2.747 3.541 0.08 3.00 5338.00 3.968 3.538 7.080 <td></td> <td>WOCV =</td> <td>6.195</td> <td>cu-ft</td> <td>1 10 000 -</td> <td>1.0 /1 (0.5</td> <td>, 1.131</td> <td>0.701/12 /</td> <td></td> <td></td>		WOCV =	6.195	cu-ft	1 10 000 -	1.0 /1 (0.5	, 1.131	0.701/12 /						
S-yr Detention = 14,872 cu-ft 100-yr Detention = 0.63 ac-ft $(V_{100} = (166 + CI)^*A)/43560)$) 100-yr Detention = 27,265 cu-ft (V_{100} = (166 + CI)^*A)/43560)) (V100) Oryr Detention + WQCV = 33,460 cu-ft Previosly approved; 32556 cu. ft. Max Allowable Release Rate Q ₅ = 1.02 cfs (q= 0.20 cfs/ac.) Q ₅ = 1.02 cfs (q= 1.00 cfs/ac.) Q ₅ = 1.02 cfs (q= 1.00 cfs/ac.) Provided Volume Sige (ft) Contour f(ft) Total Volume (ft ³) Total Volume (ac-ft) 0.00 5335.00 0 0 0 0.00 1.00 5336.00 2,385 795 795 0.02 2.00 5337.00 3,125 2,747 3,541 0.08 0.16 4.40 5338.00 3,968 3,538 7,080 0.16 0.72 0.26 0.72 0.26 0.72 0.72 0.72 0.72 0.72 <t< td=""><td>5-yr l</td><td>Detention =</td><td>0.34</td><td>ac-ft</td><td>$(V_5 = ((36))$</td><td>5*Ci)*A)/4.</td><td>3560))</td><td></td><td></td><td></td></t<>	5-yr l	Detention =	0.34	ac-ft	$(V_5 = ((36))$	5*Ci)*A)/4.	3560))							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	5-yr	Detention =	14,872	cu-ft		, ,,	,,							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	100-yr I	Detention =	0.63	ac-ft	(V ₁₀₀ = ((6	6*Ci)*A)/4	43560))							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	100-yr	Detention =	27,265	cu-ft										
Total Required Volume 0.77 ac-ft $(V100)$ 33,460 cu-ft Previosly approved: 32556 cu. ft. Max Allowable Release Rate Previosly approved: 32556 cu. ft. Q ₅ = 1.02 cfs (q= 0.20 cfs/ac) Q ₁₀₀ = 5.10 cfs (q= 1.00 cfs/ac) Provided Volume Stage (ft) Contour (ft) Area (ft ²) 1/3 (A1 + A2 + (A1A2) ^{1/2}) D Total Volume (ft ³) Total Volume (ac-ft) 0.00 5336.00 0 0 0.00 0.00 0.00 1/3 (A1 + A2 + (A1A2) ^{1/2}) D Total Volume (ft ³) Total Volume (ac-ft) 0.00 5336.00 2.385 795 795 0.02 2.00 5336.00 3.125 2.747 3.541 0.08 3.00 5338.00 3.968 3.538 7.080 0.16 4.00 5339.00 4.873 4.413 11.493 0.26 5.00 5341.00 7.092 6.510 23.403 0.54	0-yr Detention	n + WQCV =	33,460	cu-ft										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Tot	al Require	d Volume =	0.77	ac-ft	(V100)							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				=	33,460	cu-ft	Previosly a	approved: 32	2556 cu. ft.					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Max Allow	able Relea	se Rate										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Q ₅ =	1.02	cfs	(q=	0.20	cfs/ac)							
Provided VolumeStage (ft)Contour (ft)Area (ft²)1/3 (A1 + A2 + (A1A2) ^{1/2}) DTotal Volume (ft³)Total Volume (ac-ft)0.005335.000000.001.005336.002,3857957950.022.005337.003,1252,7473,5410.083.005338.003,9683,5387,0800.164.005339.004,8734,41311,4930.265.005340.005,9455,40016,8930.396.005341.007,0926,51023,4030.547.005342.008,8327,94631,3500.727.215342.219,3978,40633,4600.778.005343.0011,55110,16141,5110.95Image: teal teal teal teal teal teal teal teal		Q ₁₀₀ =	5.10	cfs	(q=	1.00	cfs/ac)							
Stage (ft)Contour Elevation (ft)Area (ft²)1/3 (A1 + A2 + (A1A2) ^{1/2}) DTotal Volume (ft³)Total Volume (ac-ft)0.005335.000000.001.005336.002,3857957950.022.005337.003,1252,7473,5410.083.005338.003,9683,5387,0800.164.005339.004,8734,41311,4930.265.005340.005,9455,40016,8930.396.005341.007,0926,51023,4030.547.005342.008,8327,94631,3500.727.215342.219,3978,40633,4600.778.005343.0011,55110,16141,5110.95VSELDepth (ft) Area (SF)WQCV =5-yr =5339.634.635543.93100-yr + WQCV =5342.217.219396.98	Provide	d Volume												
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Stage (ft)	Contour Elevation (ft)		Area (ft ²⁾	1/3 (A1 (A1A2	+ A2 + 2) ^{1/2}) D	Total Vo	olume (ft ³)	Total Vo	lume (ac-ft)				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.00	5335.00		0				0	C	0.00				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.00	5336.00	2	,385	79	95	7	'95	C	0.02				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2.00	5337.00	3	,125	2,7	747	3,	541	C	.08				
4.00 5339.00 $4,873$ $4,413$ $11,493$ 0.26 5.00 5340.00 $5,945$ $5,400$ $16,893$ 0.39 6.00 5341.00 $7,092$ $6,510$ $23,403$ 0.54 7.00 5342.00 $8,832$ $7,946$ $31,350$ 0.72 7.21 5342.21 $9,397$ $8,406$ $33,460$ 0.77 8.00 5343.00 $11,551$ $10,161$ $41,511$ 0.95 WSEL Depth (ft) Area (SF)WSEL Depth (ft) Area (SF)WQCV = 5337.75 2.75 3757.59 S-yr = 5339.63 4.63 5543.93 $100-yr + WQCV = 5342.21$ 7.21 9396.98	3.00	5338.00	3	,968	3,5	538	7,	080	C).16				
5.00 5340.00 $5,945$ $5,400$ $16,893$ 0.39 6.00 5341.00 $7,092$ $6,510$ $23,403$ 0.54 7.00 5342.00 $8,832$ $7,946$ $31,350$ 0.72 7.21 5342.21 $9,397$ $8,406$ $33,460$ 0.77 8.00 5343.00 $11,551$ $10,161$ $41,511$ 0.95 8.00 5343.00 $11,551$ $10,161$ $41,511$ 0.95 100 10 10 10 10 10 10 100 10 100	4.00	5339.00	4	,873	4,4	113	11	,493	C).26				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5.00	5340.00	5	,945	5,4	100	16	,893	C).39				
7.00 5342.00 $8,832$ $7,946$ $31,350$ 0.72 7.21 5342.21 $9,397$ $8,406$ $33,460$ 0.77 8.00 5343.00 $11,551$ $10,161$ $41,511$ 0.95 8.00 5343.00 $11,551$ $10,161$ $41,511$ 0.95 10 10 10 $10,161$ $41,511$ 0.95 100 10 10 10 100 100 100 100 100 100 100 100 100 100 100 100 100 100	6.00	5341.00	7	,092	6,5	510	23	,403	C).54				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	7.00	5342.00	8	,832	7,9	946	31	,350	C).72				
8.00 5343.00 11,551 10,161 41,511 0.95 Model Model Model Model Model Model Model WSEL Depth (ft) Area (SF) Model		5342.21	9	,397	8,4	406	33	,460	C).77				
WSEL Depth (ft) Area (SF) WQCV = 5337.75 2.75 3757.59 5-yr = 5339.63 4.63 5543.93 100-yr + WQCV = 5342.21 7.21 9396.98	7.21	5343.00	11	,551	10,	161	41	,511	C).95				
WSEL Depth (ft) Area (SF) WQCV = 5337.75 2.75 3757.59 5-yr = 5339.63 4.63 5543.93 100-yr + WQCV = 5342.21 7.21 9396.98	7.21 8.00													
WQCV =5337.752.753757.595-yr =5339.634.635543.93100-yr + WQCV =5342.217.219396.98	7.21 8.00) Area (SF)							
5-yr = 5339.63 4.63 5543.93 100-yr + WQCV = 5342.21 7.21 9396.98	7.21 8.00				WSEL	<u>Depth (ft</u>								
100-yr + WQCV = 5342.21 7.21 9396.98	7.21 8.00			WQCV =	<u>WSEL</u> 5337.75	<u>Depth (ft</u> 2.75	3757.59							
	7.21 8.00			WQCV = 5-yr =	<u>WSEL</u> 5337.75 5339.63	Depth (ft 2.75 4.63	3757.59 5543.93	-						
Reference:	7.21 8.00		100-	WQCV = 5-yr = yr + WQCV =	<u>WSEL</u> 5337.75 5339.63 5342.21	Depth (ft 2.75 4.63 7.21	3757.59 5543.93 9396.98							



APPENDIX B: EXISTING INFORMATION







R&R Engineers-Surveyors

Sheridan Station Transit Village TP15066 6/12/2017 RJN

"C" CALCULATIONS - DEVELOPED

I = Σ (Impervious + Area)/Overall Area

DRIVE/ WALKS	100%
ROOFS	90%
LANDSCAPE	0%
GRAVEL	7%
Soils Type per NRCS Soil Survey	С

i = % imperviousness/100 expressed as a decimal

C_A = Runoff coefficient for Natural Resources Conservation Service (NRCS) Type A soils

 C_B = Runoff coeff. for NRCS Type B soils

 C_{CD} = Runoff coeff. for NRCS Type C and D soils

BASIN	OVERALL	DRIVE/ WALKS	GRAVEL	ROOFS	LANDSCAPE	% Imp	C ₂	C ₅	C ₁₀	C ₁₀₀
FX-1	/32 051	9615	4100	2190	<i>A</i> 16 1 <i>A</i> 5	3%	0.02	0.08	0.22	0 5 2
FX-2	203 049	16184	7210	13110	166 545	1/1%	0.02	0.00	0.22	0.52
EX 2	139 / 95	17995	44000	0	77 500	14%	0.12	0.17	0.30	0.57
	135,455	17555	44000	0	77,500	1370	0.15	0.10	0.51	0.50
А	15,970	9,067	0	2,157	4,746	69%	0.61	0.65	0.71	0.82
В	13,028	8,781	0	1,440	2,807	77%	0.69	0.72	0.77	0.86
С	14,128	7,615	0	5,127	1,386	87%	0.77	0.81	0.84	0.90
D	5,876	3,180	0	2,461	235	92%	0.82	0.85	0.88	0.92
E	46,538	22,402	0	18,128	6,008	83%	0.74	0.78	0.82	0.88
F	5,151	4,563	0	0	588	89%	0.79	0.82	0.86	0.91
G	3,627	3,113	0	0	514	86%	0.76	0.80	0.84	0.89
Н	44,116	21,314	0	16,941	5,861	83%	0.74	0.77	0.81	0.88
I	32,473	17,911	0	9,166	5,396	81%	0.72	0.75	0.80	0.87
J	3,490	2,027	0	394	1,069	68%	0.61	0.65	0.70	0.82
К	2,875	1,538	0	393	944	66%	0.59	0.62	0.69	0.80
L	2,242	0	0	1,086	1,155	44%	0.39	0.43	0.52	0.70
Μ	3,152	107	0	1,685	1,360	51%	0.46	0.50	0.58	0.74
Ν	1,363	0	0	1,363	0	90%	0.80	0.84	0.87	0.91
0	19,465	9,621	0	7,504	2,340	84%	0.75	0.78	0.82	0.89
Р	5,269	0	0	0	5,269	0%	0.00	0.05	0.20	0.51
Q	2,181	0	0	1,311	870	54%	0.48	0.52	0.60	0.75
R	4,148	1,653	0	1,508	986	73%	0.65	0.68	0.74	0.83
S	3,882	1,184	0	1,507	1,191	65%	0.58	0.62	0.68	0.80
т	4,419	1,860	0	0	2,559	42%	0.37	0.42	0.51	0.70
U	2,613	1,844	0	0	769	71%	0.63	0.67	0.72	0.83
OS-1	18,822	0	0	0	18,822	0%	0.00	0.05	0.20	0.51
OS-2	11,516	466	560	455	10,595	8%	0.07	0.12	0.26	0.54
EX-1	208,226	0	0	0	208,226	0%	0.00	0.05	0.20	0.51
EX-2	104,009	21,786	645	7,454	74,124	27%	0.24	0.29	0.40	0.63
EX-3	170,857	34,162	44,000	0	92,695	22%	0.19	0.24	0.36	0.61
P-1	20,649	0	0	0	20,649	0%	0.00	0.05	0.20	0.51
P-2	13,682	0	0	0	13,682	0%	0.00	0.05	0.20	0.51
TOTAL	770,643	174,194	45,205	80,082	471,163	32%	0.29	0.33	0.44	0.65

R&R Engineers-Surveyors Sheridan Station Transit Village TP15066 6/12/2017

RJN

TIME OF CONCENTRATION - DEVELOPED

$t_i = 0.395(1.1 - C_5)\sqrt{L / S^{0.33}}$	MANUAL Eqn. (6-3)
$V = C_v S_w^{0.5}$	MANUAL Eqn. (6-4)
$t_t = L/(60V)$	
$t_c = t_i + t_t$	MANUAL Eqn. (6-2)
MAX. $t_c = (18-15i)+L_t/60(24i+12)S_o^{0.5}$	MANUAL Eqn. (6-5)

SUB-BASIN DATA			INITIA	AL / OVERLAN	TRAVEL TIME (Tt) AVG. SLOPE					COMP Tc CHECK FI				FINAL		
	ARFA	C5	LENGTH	AVG SLOPE	Ti	LENGTH	S	Con Coef	VEI	Tt		ΤΟΤΑΙ		Tc Check	10	REMARKS
BASIN	(Acres)	00	(ft)	(ft/ft)	(min)	(ft)	-w (ft/ft)	C	(fns)	(min)	(min)	LENGTH (ft)	(ft/ft)	(min)	(min)	
	(ACICS)		(10)	(10/10)	(11111)	(10)	(10/10)	υv	(123)	(11111)			(10/10)	(11111)		
EX-1	9.92	0.08	300	0.010	32.03	1081	0.030	5.0	0.9	20.8	52.83	1381	0.026	28.94	28.9	
EX-2	4.66	0.17	18	0.020	5.64	1166	0.012	15.0	1.6	11.8	17.47	1184	0.012	27.56	17.5	
EX-3	3.20	0.18	300	0.015	25.07	543	0.033	7.0	1.3	7.1	32.19	843	0.027	21.25	21.2	
	0.07	0.65										205		0.50		
A	0.37	0.65	29	0.030	3.03	276	0.044	20.0	4.2	1.1	4.13	305	0.043	8.52	5.0	forced to 5
В	0.30	0.72	29	0.030	2.54	276	0.045	20.0	4.2	1.1	3.62	305	0.044	7.19	5.0	forced to 5
C	0.32	0.81	37	0.020	2.58	279	0.023	20.0	3.0	1.5	4.11	316	0.023	6.08	5.0	forced to 5
D	0.13	0.85	31	0.025	1.85	104	0.010	20.0	2.0	0.9	2.72	135	0.013	4.80	5.0	forced to 5
E	1.07	0.78	22	0.034	1.83	423	0.021	20.0	2.9	2.5	4.30	445	0.021	7.12	5.0	forced to 5
F	0.12	0.82	39	0.035	2.07	175	0.022	20.0	3.0	1.0	3.05	214	0.024	5.40	5.0	forced to 5
G	0.08	0.80	17	0.033	1.51	130	0.012	20.0	2.2	1.0	2.50	147	0.014	5.75	5.0	forced to 5
н	1.01	0.77	67	0.018	3.98	232	0.024	20.0	3.1	1.3	5.24	299	0.022	6.62	5.2	
I.	0.75	0.75	45	0.024	3.15	241	0.013	20.0	2.3	1.8	4.91	286	0.015	7.17	5.0	forced to 5
1	0.08	0.65	21	0.050	2.21	57	0.005	20.0	1.4	0.7	2.88	78	0.017	8.11	5.0	forced to 5
К	0.07	0.62	21	0.015	3.44	53	0.013	20.0	2.3	0.4	3.83	74	0.014	8.51	5.0	forced to 5
L	0.05	0.43	11	0.020	3.18				0.0		3.18	11	0.020	11.52	5.0	forced to 5
M	0.07	0.50	41	0.020	5.52				0.0		5.52	41	0.020	10.47	5.5	
N	0.03	0.84	10	0.020	1.20				0.0		1.20	10	0.020	4.54	5.0	forced to 5
0	0.45	0.78	33	0.012	3.09	228	0.030	20.0	3.5	1.1	4.18	261	0.028	6.19	5.0	forced to 5
Р	0.12	0.05			0.00	265	0.050	15.0	3.4	1.3	1.32	265	0.050	19.65	5.0	forced to 5
Q	0.05	0.52	16	0.130	1.79				0.0		1.79	16	0.130	9.91	5.0	forced to 5
R	0.10	0.68	25	0.041	2.36				0.0		2.36	25	0.041	7.18	5.0	forced to 5
S	0.09	0.62	26	0.032	3.00				0.0		3.00	26	0.032	8.27	5.0	forced to 5
т	0.10	0.42	77	0.060	5.98	63	0.039	20.0	3.9	0.3	6.25	140	0.051	12.16	6.2	
U	0.06	0.67	19	0.030	2.38	66	0.048	20.0	4.4	0.3	2.63	85	0.044	7.65	5.0	forced to 5
OS-1	0.43	0.05	300	0.012	30.86	34	0.020	7.0	1.0	0.6	31.43	334	0.013	22.10	22.1	
OS-2	0.26	0.12	209	0.017	21.45	-			0.0		21.45	209	0.017	18.73	18.7	
FX-1	4 78	0.05	300	0.010	32 77	506	0 030	7.0	12	7.0	39 73	806	0.023	25.45	25.5	
FX-2	2 39	0.29	43	0.020	7.62	1253	0.011	10.0	1.0	19.9	27 53	1296	0.011	24.82	24.8	
EX-3	2.00	0.20	300	0 150	10 92	901	0.036	20.0	3.2	<u>д</u> л	15 25	1290	0.062	19 7/	15 2	
D 1	0.47	0.24	100	0.100	10.90	534	0.050	20.0	0.0	7.4	10.00	100	0.002	10 07	12.5	
L-T	0.47	0.05	190	0.100	12.45				0.0		12.45 6.09	190	0.100	10.07	12.5	
P-2	0.31	0.05	//	0.210	0.08				0.0		0.08	//	0.210	10.23	0.1	

P:\TP15066 Sheridan Station TOD\Engineering\Documents\Reports\Drainage\3.5.1.4 Hydrology\TP15066-Rational Calculations - CONC. TIME

6/12/2017

R&R Engineers-Surveyors Sheridan Station Transit Village TP15066 6/12/2017 RJN

5	5 YR DESI	GN STO	RM - [DEVELOPE	D
2YR	5YR	10 YR	25 YR	50 YR	100 YR
	1.40				2.60

					DIRE	CT RUNOFF	
	l= (28.5*P1)	/((10+Tc)^	0.786)				
	DESIGN	AREA	RUNOFF	tc		INTENSITY	RUNOFF
BASIN	POINT	(ACRES)	COEFF	(MIN)	C*A	(IN/HR)	(CFS)
EX-1	1	9.92	0.08	28.94	0.75	2.24	1.69
EX-2	2	4.66	0.17	17.47	0.81	2.95	2.39
EX-3	3	3.20	0.18	21.25	0.59	2.67	1.57
A	1	0.37	0.65	5.00	0.24	4.75	1.13
В	2	0.30	0.72	5.00	0.22	4.75	1.03
С	3	0.32	0.81	5.00	0.26	4.75	1.24
D	4	0.13	0.85	5.00	0.11	4.75	0.54
E	5	1.07	0.78	5.00	0.83	4.75	3.94
F	6	0.12	0.82	5.00	0.10	4.75	0.46
G	7	0.08	0.80	5.00	0.07	4.75	0.32
Н	8	1.01	0.77	5.24	0.78	4.69	3.67
I	9	0.75	0.75	5.00	0.56	4.75	2.67
J	10	0.08	0.65	5.00	0.05	4.75	0.25
К	11	0.07	0.62	5.00	0.04	4.75	0.20
L	12	0.05	0.43	5.00	0.02	4.75	0.11
М	13	0.07	0.50	5.52	0.04	4.62	0.17
Ν	14	0.03	0.84	5.00	0.03	4.75	0.12
0	15	0.45	0.78	5.00	0.35	4.75	1.66
Р	16	0.12	0.05	5.00	0.01	4.75	0.03
Q	17	0.05	0.52	5.00	0.03	4.75	0.12
R	18	0.10	0.68	5.00	0.07	4.75	0.31
S	19	0.09	0.62	5.00	0.06	4.75	0.26
Т	20	0.10	0.42	6.25	0.04	4.46	0.19
U	21	0.06	0.67	5.00	0.04	4.75	0.19
OS-1	22	0.43	0.05	22.10	0.02	2.61	0.06
OS-2	23	0.26	0.12	18.73	0.03	2.85	0.09
EX-1	24	4.78	0.05	25.45	0.25	2.42	0.60
EX-2	25	2.39	0.29	24.82	0.69	2.45	1.70
EX-3	26	3.92	0.24	15.35	0.95	3.14	2.98
P-1	27	0.47	0.05	12.45	0.02	3.46	0.09
P-2	28	0.31	0.05	6.08	0.02	4.50	0.07

P:\TP15066 Sheridan Station TOD\Engineering\Documents\Reports\Drainage\3.5.1.4 Hydrology\TP15066-Rational Calculations - 5-Yr

R&R Engineers-Surveyors Sheridan Station Transit Village TP15066 6/12/2017 RJN

0.82

100 YR DESIGN STORM - DEVELOPED						
2YR	5YR	10 YR	25 YR	50 YR	100 YR	
	1.40				2.60	

					DIRE	CT RUNOFF	
l=	86)						
	DESIGN	AREA	RUNOFF	tc		INTENSITY	RUNOFF
BASIN	POINT	(ACRES)	COEFF	(MIN)	C*A	(IN/HR)	(CFS)
EX-1	1	9.92	0.52	28.94	5.16	4.17	21.50
EX-2	2	4.66	0.57	17.47	2.66	5.48	14.59
EX-3	3	3.20	0.58	21.25	1.84	4.95	9.14
А	1	0.37	0.82	5.00	0.30	8.82	2.65
В	2	0.30	0.86	5.00	0.26	8.82	2.26
С	3	0.32	0.90	5.00	0.29	8.82	2.57
D	4	0.13	0.92	5.00	0.12	8.82	1.10
E	5	1.07	0.88	5.00	0.94	8.82	8.31
F	6	0.12	0.91	5.00	0.11	8.82	0.95
G	7	0.08	0.89	5.00	0.07	8.82	0.66
Н	8	1.01	0.88	5.24	0.89	8.71	7.77
I	9	0.75	0.87	5.00	0.65	8.82	5.72
J	10	0.08	0.82	5.00	0.07	8.82	0.58
К	11	0.07	0.80	5.00	0.05	8.82	0.47
L	12	0.05	0.70	5.00	0.04	8.82	0.32
М	13	0.07	0.74	5.52	0.05	8.59	0.46
Ν	14	0.03	0.91	5.00	0.03	8.82	0.25
0	15	0.45	0.89	5.00	0.40	8.82	3.49
Р	16	0.12	0.51	5.00	0.06	8.82	0.54
Q	17	0.05	0.75	5.00	0.04	8.82	0.33
R	18	0.10	0.83	5.00	0.08	8.82	0.70
S	19	0.09	0.80	5.00	0.07	8.82	0.63
Т	20	0.10	0.70	6.25	0.07	8.28	0.59
U	21	0.06	0.83	5.00	0.05	8.82	0.44
OS-1	22	0.43	0.51	22.10	0.22	4.85	1.06
OS-2	23	0.26	0.54	18.73	0.14	5.29	0.76
EX-1	24	4.78	0.51	25.45	2.43	4.49	10.89
EX-2	25	2.39	0.63	24.82	1.51	4.55	6.86
EX-3	26	3.92	0.61	15.35	2.38	5.84	13.88
P-1	27	0.47	0.51	12.45	0.24	6.42	1.55
P-2	28	0.31	0.51	6.08	0.16	8.35	1.33

P:\TP15066 Sheridan Station TOD\Engineering\Documents\Reports\Drainage\3.5.1.4 Hydrology\TP15066-Rational Calculations - 100-Yr

R&R Engineers-Surveyors

Sheridan Station Transit Village TP15066 6/12/2017 RJN

Basin	Design	% Imp	Area	C ₅	Q ₅	C ₁₀₀	Q ₁₀₀
	Point		(AC)		(cfs)		(cfs)
EX-1	1	3%	9.92	0.08	1.69	0.52	21.50
EX-2	2	14%	4.66	0.17	2.39	0.57	14.59
EX-3	3	15%	3.20	0.18	1.57	0.58	9.14
А	1	69%	0.37	0.65	1.13	0.82	2.65
В	2	77%	0.30	0.72	1.03	0.86	2.26
С	3	87%	0.32	0.81	1.24	0.90	2.57
D	4	92%	0.13	0.85	0.54	0.92	1.10
E	5	83%	1.07	0.78	3.94	0.88	8.31
F	6	89%	0.12	0.82	0.46	0.91	0.95
G	7	86%	0.08	0.80	0.32	0.89	0.66
Н	8	83%	1.01	0.77	3.67	0.88	7.77
I	9	81%	0.75	0.75	2.67	0.87	5.72
J	10	68%	0.08	0.65	0.25	0.82	0.58
K	11	66%	0.07	0.62	0.20	0.80	0.47
L	12	44%	0.05	0.43	0.11	0.70	0.32
М	13	51%	0.07	0.50	0.17	0.74	0.46
Ν	14	90%	0.03	0.84	0.12	0.91	0.25
0	15	84%	0.45	0.78	1.66	0.89	3.49
Р	16	0%	0.12	0.05	0.03	0.51	0.54
Q	17	54%	0.05	0.52	0.12	0.75	0.33
R	18	73%	0.10	0.68	0.31	0.83	0.70
S	19	65%	0.09	0.62	0.26	0.80	0.63
Т	20	42%	0.10	0.42	0.19	0.70	0.59
U	21	71%	0.06	0.67	0.19	0.83	0.44
OS-1	22	0%	0.43	0.05	0.06	0.51	1.06
OS-2	23	8%	0.26	0.12	0.09	0.54	0.76
EX-1	24	0%	4.78	0.05	0.60	0.51	10.89
EX-2	25	27%	2.39	0.29	1.70	0.63	6.86
EX-3	26	22%	3.92	0.24	2.98	0.61	13.88
P-1	27	0%	0.47	0.05	0.09	0.51	1.55
P-2	28	0%	0.31	0.05	0.07	0.51	1.33

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Wednesday, May 31 2017

Offsite Eastern Swale

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 3.00	Depth (ft)	= 0.24
Total Depth (ft)	= 0.50	Q (cfs)	= 0.520
		Area (sqft)	= 0.20
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 2.58
Slope (%)	= 6.00	Wetted Perim (ft)	= 1.75
N-Value	= 0.030	Crit Depth, Yc (ft)	= 0.27
		Top Width (ft)	= 1.68
Calculations		EGL (ft)	= 0.34
Compute by:	Known Q		
Known Q (cfs)	= 0.52		



Reach (ft)

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Southwestern Swale

User-defined		Highlighted	
Invert Elev (ft)	= 5361.81	Depth (ft)	= 0.27
Slope (%)	= 2.00	Q (cfs)	= 0.920
N-Value	= 0.030	Area (sqft)	= 0.52
		Velocity (ft/s)	= 1.77
Calculations		Wetted Perim (ft)	= 3.76
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.26
Known Q (cfs)	= 0.92	Top Width (ft)	= 3.71
		EGL (ft)	= 0.32

(Sta, El, n)-(Sta, El, n)... (1.28, 5362.60)-(7.54, 5361.82, 0.030)-(7.88, 5361.81, 0.030)-(8.53, 5361.97, 0.030)-(11.71, 5362.52, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Southwestern Curb Chase

Rectangular		Highlighted	
Bottom Width (ft)	= 2.00	Depth (ft)	= 0.13
Total Depth (ft)	= 0.50	Q (cfs)	= 0.920
		Area (sqft)	= 0.26
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 3.54
Slope (%)	= 2.00	Wetted Perim (ft)	= 2.26
N-Value	= 0.013	Crit Depth, Yc (ft)	= 0.19
		Top Width (ft)	= 2.00
Calculations		EGL (ft)	= 0.32
Compute by:	Known Q		
Known Q (cfs)	= 0.92		



Reach (ft)





Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Offsite + Onsite Section A-A

	Highlighted	
= 5359.91	Depth (ft)	= 0.18
= 2.00	Q (cfs)	= 0.600
= 0.030	Area (sqft)	= 0.48
	Velocity (ft/s)	= 1.25
	Wetted Perim (ft)	= 5.89
Known Q	Crit Depth, Yc (ft)	= 0.17
= 0.60	Top Width (ft)	= 5.88
	EGL (ft)	= 0.20
	= 5359.91 = 2.00 = 0.030 Known Q = 0.60	Highlighted= 5359.91 Depth (ft)= 2.00 Q (cfs)= 0.030 Area (sqft)Velocity (ft/s)Wetted Perim (ft)Known QCrit Depth, Yc (ft)= 0.60 Top Width (ft)EGL (ft)

(Sta, El, n)-(Sta, El, n)... (44.14, 5360.24)-(46.02, 5360.10, 0.030)-(49.82, 5359.94, 0.030)-(49.89, 5359.91, 0.030)-(50.00, 5359.92, 0.030)-(59.74, 5360.70, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Offsite Only Section A-A

	Highlighted	
= 5359.91	Depth (ft)	= 0.18
= 2.00	Q (cfs)	= 0.540
= 0.030	Area (sqft)	= 0.48
	Velocity (ft/s)	= 1.12
	Wetted Perim (ft)	= 5.89
Known Q	Crit Depth, Yc (ft)	= 0.16
= 0.54	Top Width (ft)	= 5.88
	EGL (ft)	= 0.20
	= 5359.91 = 2.00 = 0.030 Known Q = 0.54	Highlighted= 5359.91 Depth (ft)= 2.00 Q (cfs)= 0.030 Area (sqft) Velocity (ft/s) Wetted Perim (ft)Known QCrit Depth, Yc (ft)= 0.54 Top Width (ft) EGL (ft)

(Sta, El, n)-(Sta, El, n)... (44.14, 5360.24)-(46.02, 5360.10, 0.030)-(49.82, 5359.94, 0.030)-(49.89, 5359.91, 0.030)-(50.00, 5359.92, 0.030)-(59.74, 5360.70, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Friday, Jun 2 2017

Onsite Only Section B-B

User-defined		Highlighted	
Invert Elev (ft)	= 5360.97	Depth (ft)	= 0.14
Slope (%)	= 2.00	Q (cfs)	= 0.280
N-Value	= 0.030	Area (sqft)	= 0.19
		Velocity (ft/s)	= 1.48
Calculations		Wetted Perim (ft)	= 1.77
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.13
Known Q (cfs)	= 0.28	Top Width (ft)	= 1.70
		EGL (ft)	= 0.17

(Sta, El, n)-(Sta, El, n)... (51.43, 5361.46)-(51.66, 5361.18, 0.030)-(52.05, 5361.13, 0.030)-(52.66, 5360.97, 0.030)-(53.66, 5360.97, 0.030)-(54.23, 5361.46, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Wednesday, Jun 7 2017

Offsite Only Section B-B

User-de	efined
---------	--------

User-defined		Highlighted	
Invert Elev (ft)	= 5361.66	Depth (ft)	= 0.15
Slope (%)	= 2.00	Q (cfs)	= 1.060
N-Value	= 0.030	Area (sqft)	= 0.87
		Velocity (ft/s)	= 1.21
Calculations		Wetted Perim (ft)	= 11.65
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.14
Known Q (cfs)	= 1.06	Top Width (ft)	= 11.65
		EGL (ft)	= 0.17

(Sta, El, n)-(Sta, El, n)... (13.16, 5362.25)-(39.03, 5361.66, 0.030)-(45.79, 5361.86, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Wednesday, Jun 7 2017

Onsite Only Section C-C

User-defined		Highlighted	
Invert Elev (ft)	= 5362.83	Depth (ft)	= 0.19
Slope (%)	= 2.00	Q (cfs)	= 0.280
N-Value	= 0.030	Area (sqft)	= 0.21
		Velocity (ft/s)	= 1.31
Calculations		Wetted Perim (ft)	= 2.35
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.17
Known Q (cfs)	= 0.28	Top Width (ft)	= 2.32
		EGL (ft)	= 0.22

(Sta, El, n)-(Sta, El, n)... (50.00, 5363.37)-(51.67, 5363.00, 0.030)-(52.67, 5362.83, 0.030)-(53.67, 5363.00, 0.030)-(56.83, 5363.28, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Wednesday, Jun 7 2017

Offsite Only Section C-C

User-defined		Highlighted	
Invert Elev (ft)	= 5363.20	Depth (ft)	= 0.12
Slope (%)	= 2.00	Q (cfs)	= 1.060
N-Value	= 0.030	Area (sqft)	= 1.09
		Velocity (ft/s)	= 0.97
Calculations		Wetted Perim (ft)	= 18.12
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.11
Known Q (cfs)	= 1.06	Top Width (ft)	= 18.12
		EGL (ft)	= 0.13

(Sta, El, n)-(Sta, El, n)... (9.30, 5363.61)-(35.05, 5363.20, 0.030)-(50.00, 5363.37, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Wednesday, Jun 7 2017

Offsite Only Section D-D

User-defined		Highlighted	
Invert Elev (ft)	= 5364.87	Depth (ft)	= 0.08
Slope (%)	= 2.00	Q (cfs)	= 1.060
N-Value	= 0.030	Area (sqft)	= 1.09
		Velocity (ft/s)	= 0.98
Calculations		Wetted Perim (ft)	= 20.73
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.08
Known Q (cfs)	= 1.06	Top Width (ft)	= 20.72
		EGL (ft)	= 0.09

(Sta, El, n)-(Sta, El, n)... (0.00, 5365.21)-(23.06, 5364.95, 0.030)-(25.50, 5364.87, 0.030)-(43.30, 5364.92, 0.030)-(44.58, 5365.00, 0.030)-(45.77, 5365.21, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Offsite + Onsite Section E-E

User-defined		Highlighted	
Invert Elev (ft)	= 5365.69	Depth (ft)	= 0.17
Slope (%)	= 2.00	Q (cfs)	= 1.340
N-Value	= 0.030	Area (sqft)	= 1.07
		Velocity (ft/s)	= 1.26
Calculations		Wetted Perim (ft)	= 12.15
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.16
Known Q (cfs)	= 1.34	Top Width (ft)	= 12.14
		EGL (ft)	= 0.19

(Sta, El, n)-(Sta, El, n)... (26.23, 5366.03)-(33.75, 5365.96, 0.030)-(47.22, 5365.69, 0.030)-(48.92, 5365.75, 0.030)-(53.92, 5366.03, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Wednesday, Jun 7 2017

Offsite Only Section E-E

User-defined		Highlighted	
Invert Elev (ft)	= 5365.69	Depth (ft)	= 0.15
Slope (%)	= 2.00	Q (cfs)	= 1.060
N-Value	= 0.030	Area (sqft)	= 0.84
		Velocity (ft/s)	= 1.27
Calculations		Wetted Perim (ft)	= 10.79
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.14
Known Q (cfs)	= 1.06	Top Width (ft)	= 10.78
		EGL (ft)	= 0.17

(Sta, El, n)-(Sta, El, n)... (26.23, 5366.03)-(33.75, 5365.96, 0.030)-(47.22, 5365.69, 0.030)-(48.92, 5365.75, 0.030)-(53.92, 5366.03, 0.030)



Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Monday, Jun 12 2017

Western Swale Curb Chase

Rectangular		Highlighted	
Bottom Width (ft)	= 2.00	Depth (ft) =	= 0.13
Total Depth (ft)	= 0.50	Q (cfs) =	= 1.340
		Area (sqft) =	= 0.26
Invert Elev (ft)	= 100.00	Velocity (ft/s) =	= 5.15
Slope (%)	= 4.20	Wetted Perim (ft) =	= 2.26
N-Value	= 0.013	Crit Depth, Yc (ft) =	= 0.25
		Top Width (ft) =	= 2.00
Calculations		EGL (ft) =	= 0.54
Compute by:	Known Q		
Known Q (cfs)	= 1.34		



Reach (ft)
Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Monday, Jun 12 2017

Northern Curb Chase

Rectangular		Highlighted	
Bottom Width (ft)	= 2.00	Depth (ft)	= 0.50
Total Depth (ft)	= 0.50	Q (cfs)	= 9.026
		Area (sqft)	= 1.00
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 9.03
Slope (%)	= 2.70	Wetted Perim (ft)	= 3.00
N-Value	= 0.013	Crit Depth, Yc (ft)	= 0.50
		Top Width (ft)	= 2.00
Calculations		EGL (ft)	= 1.77
Compute by:	Known Depth		
Known Depth (ft)	= 0.50		



Reach (ft)

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Monday, Jun 12 2017

W. 11th Avenue Section A-A

User-defined		Highlighted	
Invert Elev (ft)	= 10.00	Depth (ft)	= 0.41
Slope (%)	= 2.00	Q (cfs)	= 9.012
N-Value	= Composite	Area (sqft)	= 2.03
		Velocity (ft/s)	= 4.43
Calculations		Wetted Perim (ft)	= 14.22
Compute by:	Q vs Depth	Crit Depth, Yc (ft)	= 0.50
No. Increments	= 50	Top Width (ft)	= 13.80
		EGL (ft)	= 0.71

(Sta, El, n)-(Sta, El, n)... (0.00, 10.41)-(12.00, 10.17, 0.013)-(14.00, 10.00, 0.013)-(14.00, 10.50, 0.013)-(24.00, 10.70, 0.030)



Doc ID: 0b885cde7674ced80e00994c898fa3a0897977ab

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Monday, Jun 12 2017

W. 11th Avenue Section A-A

User-defined		Highlighted	
Invert Elev (ft)	= 10.00	Depth (ft)	= 0.52
Slope (%)	= 3.00	Q (cfs)	= 17.43
N-Value	= Composite	Area (sqft)	= 2.89
		Velocity (ft/s)	= 6.03
Calculations		Wetted Perim (ft)	= 15.01
Compute by:	Q vs Depth	Crit Depth, Yc (ft)	= 0.69
No. Increments	= 50	Top Width (ft)	= 14.50
		EGL (ft)	= 1.08

(Sta, El, n)-(Sta, El, n)... (0.00, 10.53)-(12.00, 10.17, 0.013)-(14.00, 10.00, 0.013)-(14.00, 10.50, 0.013)-(24.00, 10.70, 0.030)



Doc ID: 0b885cde7674ced80e00994c898fa3a0897977ab

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Monday, Jun 12 2017

W. 11th Avenue Section C-C

User-defined		Highlighted	
Invert Elev (ft)	= 10.00	Depth (ft)	= 0.64
Slope (%)	= 4.00	Q (cfs)	= 23.67
N-Value	= Composite	Area (sqft)	= 4.44
		Velocity (ft/s)	= 5.33
Calculations		Wetted Perim (ft)	= 21.57
Compute by:	Q vs Depth	Crit Depth, Yc (ft)	= 0.70
No. Increments	= 25	Top Width (ft)	= 21.05
		EGL (ft)	= 1.09

(Sta, El, n)-(Sta, El, n)... (0.00, 10.65)-(12.00, 10.17, 0.013)-(14.00, 10.00, 0.013)-(14.00, 10.50, 0.013)-(24.00, 10.70, 0.030)



Sta (ft)



PROJECT: West Line Village JOB NO.: DCS18-4106 CALC. BY: ICA

DATE: 3/6/2019

WARE MALCOMB

ARCHITECTURE | PLANNING | INTERIORS BRANDING | CIVIL ENGINEERING

> = FORMULA CELLS = USER INPUT CELLS

Impervious Percentages - from Urban Drainage Table 6-3

Roof	90%	Gravel	7%
Paved	100%	Land Use 6	0%
Drives & Walks	96%	Land Use 7	0%
Landscape	0%	Land Use 8	0%

SOIL TYPE: C or D (use equation from Table 6-4)

PROPOSED COMPOSITE IMPERVIOUSNESS

		Weighted Impervious and C Values					Areas (ac)							
Basin	Area (ac)	Imp.	C ₂	C₅	C ₁₀	C ₁₀₀	Roof	Paved	Drives & Walks	Landscape	Gravel	Land Use 6	Land Use 7	Land Use 8
TH1	0.06	80%	0.65	0.69	0.72	0.81	0.03		0.01	0.01				
OSA	0.37	84%	0.69	0.73	0.76	0.83		0.25	0.06	0.06				
TH2	0.10	84%	0.68	0.72	0.75	0.83	0.03		0.06	0.01				
TH5	0.10	66%	0.52	0.57	0.62	0.75	0.05		0.02	0.03				
A1	0.23	87%	0.71	0.75	0.77	0.84		0.16	0.04	0.03				
TH4	0.15	71%	0.57	0.62	0.66	0.78	0.08		0.04	0.03				
TH3	0.20	83%	0.68	0.72	0.75	0.83	0.09		0.09	0.02				
TH8	0.08	78%	0.62	0.67	0.71	0.80	0.05		0.02	0.01				
A2	1.84	90%	0.74	0.77	0.80	0.85	1.84							
A3	0.36	83%	0.67	0.72	0.75	0.82		0.22	0.08	0.06				
EXO	0.45	84%	0.68	0.72	0.75	0.83	0.17	0.22		0.05				
TH6	0.15	70%	0.56	0.61	0.65	0.77	0.08		0.04	0.04				
EXD	0.13	92%	0.75	0.79	0.81	0.86	0.06	0.07		0.01				
TH7	0.17	89%	0.73	0.76	0.79	0.85	0.09		0.07	0.01				
TH9	0.05	84%	0.69	0.73	0.76	0.83	0.04		0.01	0.004				
A4	0.19	91%	0.75	0.78	0.81	0.86		0.14	0.03	0.02				
TH10	0.07	53%	0.41	0.47	0.52	0.70	0.04			0.03				
EXM	0.07	51%	0.39	0.46	0.51	0.69	0.04		0.00	0.03				
A5	0.34	5%	0.03	0.08	0.17	0.50			0.02	0.32				
Total Tributary to Pond	5.10	79%	0.64	0.69	0.72	0.81	2.68	1.07	0.59	0.75				
EX2	1.57	10%	0.06	0.11	0.20	0.52	0.17			1.40				
OSB	0.47	99%	0.82	0.85	0.86	0.89		0.33	0.14					
Total Undetained*	2.04	30%	0.22	0.28	0.36	0.61	0.17	0.33	0.14	1.40				
UC1	0.08	84%	0.68	0.72	0.75	0.83		0.05	0.02	0.01				
UC2	0.29	44%	0.33	0.39	0.46	0.66			0.13	0.16				
Total UC	0.37	53%	0.40	0.47	0.52	0.70	0.00	0.05	0.15	0.17				
OS1	0.15	85%	0.69	0.73	0.76	0.83		0.12	0.01	0.02				
EX3	3.86	21%	0.15	0.21	0.29	0.57			0.78	2.07	1.01			
OS2	0.23	6%	0.04	0.09	0.18	0.51			0.01	0.21				
OS3	0.49	33%	0.24	0.31	0.38	0.62		0.12	0.05	0.33				
Total OS	4.74	24%	0.17	0.23	0.31	0.58	0.00	0.24	0.85	2.63	1.01			

* FLOW INCLUDED IN EMERGENCY OVERFLOW DESIGN, NOT INCLUDED IN THE POND VOLUME CALCULATION

UD-Detention, Version 3.07 (February 2017)

Project:	TP15066 - Sh	eridan Stati	on TOD		
Basin ID:	Phase 1 Pon	d			
ZONE 3	2				
T	ONE 1		<hr/>		
VOLUME EURY WOCY				~	
± ± +		A constraints			
ZONE	1 AND 2	ORIFICE			Depth Increment =
POOL Example Zone	Configurat	ion (Reter	tion Pond)		Stage - Storage
			,		Description
Required Volume Calculation		-			Top of Micropool
Selected BMP Type =	EDB				
Watershed Area =	5.09	acres			
Watershed Length =	905	ft			
Watershed Slope =	0.030	ft/ft			
Watershed Imperviousness =	71.00%	percent			
Percentage Hydrologic Soil Group A =	0.0%	percent			
Percentage Hydrologic Soil Group B =	0.0%	nercent			
Percentare Hydrologic Soil Groups C/D =	100.0%	nercent			
Desired WOCV Prain Time =	40.0	bours			
Location for 1 hr Rainfall Donths -	lakawaad Lu	kowood Cult	hural Contor		
Water Quality Capture Volume (MQC)	0.110	acro foot			
Evenes Likes Duref() (dure (FUD)) =	0.113		1-hr Precipita	tion	
2 va Duraff Valuma (D1 = 0.70 in) =	0.332	acre-leet			
2-yi Runon Volume (P1 = 0.79 iii.) =	0.222	acre-leet		inches	
5-yi Ruhon Volume (P1 = 1.06 in.) =	0.400	acre-leet		inches	7
10-yr Runon Volume (P1 = 1.3 II.) =	0.600	acre-leet		inches	Zone i (wqcv)
23-yi Runoli Volume (P1 = 1.04 II.) =	0.362	acre-leet		inches	
30-yi Runoli Volume (P1 = 1.93 ii.) =	0.700	acre-leet		inches	
100-yi Runoli Volume (P1 = 2.23 ii.) =	4.000	acre-leet		inches	
Soo-yi Runon Volume (P1 – 2.99 II.) –	0.202	acre-leet		Incries	
Approximate 2-yr Detention Volume -	0.209	acre-leet			
Approximate 5-yr Detention Volume -	0.311	acre-leet			
Approximate 10-yr Detention Volume =	0.375	acre-teet			
Approximate 25-yr Detention Volume =	0.440	acre-teet			
Approximate 50-yr Detention Volume =	0.473	acre-teet			7
Approximate 100-yr Detention volume =	0.525	acre-teet			Zone 2 (User)
Otana Otanana Calaviatian					
Stage-Storage Calculation		n			
Zone 1 Volume (WQCV) =	0.119	acre-feet			
Zone 2 volume (User Defined - Zone 1) =	0.180	acre-feet			
Zone 3 Volume (User Defined - Zones 1 & 2) =	0.367	acre-feet			
I otal Detention Basin Volume =	0.666	acre-feet			
initial Surcharge Volume (ISV) =	user	ft/3			
Initial Surcharge Depth (ISD) =	user	ft			
I otal Available Detention Depth (H _{total}) =	user	ft			
Depth of Trickle Channel (H _{TC}) =	user	ft			
Slope of Trickle Channel (STC) =	user	ft/ft			
Slopes of Main Basin Sides (S _{main}) =	user	Η:V			Zone 3 (User)
Basin Length-to-Width Ratio (R _{L/W}) =	user				
	r	n			
Initial Surcharge Area (A _{ISV}) =	user	ft*2			
Surcharge Volume Length (L _{ISV}) =	user	ft			
Surcharge Volume Width (W _{ISV}) =	user	ft			
Depth of Basin Floor (H _{FLOOR}) =	user	ft			
Length of Basin Floor (L _{FLOOR}) =	user	ft			
Width of Basin Floor (W _{FLOOR}) =	user	ft			
Area of Basin Floor (A _{FLOOR}) =	user	ft*2			
Volume of Basin Floor (V _{FLOOR}) =	user	ft′3			
Depth of Main Basin (H _{MAIN}) =	user	ft			
Length of Main Basin (L _{MAIN}) =	user	ft			
Width of Main Basin (W _{MAIN}) =	user	ft			
Area of Main Basin (A _{MAIN}) =	user	ft*2			
Volume of Main Basin (V _{MAIN}) =	user	ft/3			
Calculated Total Basin Volume (V _{total}) =	user	acre-feet			

Depth Increment =	0.25	ft Ontional			1	Ontional			1
Stage - Storage	Stage	Optional Override	Length	Width	Area	Optional Override	Area	Volume	Volume
Description	(ft)	Stage (ft)	(ft)	(ft)	(ft'2)	Area (ft/2)	(acre)	(ft/3)	(ac-ft)
Top of Micropool		0.00	-		-	1	0.000		
		0.25	-			31	0.001	4	0.000
		0.50	-		-	77	0.002	17	0.000
		0.75	-		-	214	0.005	52	0.001
	-	1.00	-		-	443	0.010	132	0.003
		1.25				760	0.017	279	0.006
		1.50				1,108	0.025	509	0.012
		1.75				1,461	0.034	826	0.019
		2.00				1,676	0.038	1,216	0.028
		2.25				1,861	0.043	1,675	0.038
	-	2.50				2,048	0.047	2,164	0.050
	-	2.75				2,226	0.051	2,698	0.062
	-	3.00	-			2,406	0.055	3,277	0.075
		3.25		-	-	2,591	0.059	3,902	0.090
	-	3.50	-			2,778	0.064	4,573	0.105
Zone 1 (WQCV)	-	3.72				2,945	0.068	5,202	0.119
		3.75				2,971	0.068	5,291	0.121
		4.00		-	-	3,168	0.073	6,058	0.139
		4.25		-	-	3,368	0.077	6,875	0.158
		4.50				3,572	0.082	7,743	0.178
		4.75				3,774	0.087	8,661	0.199
		5.00	-		-	3,976	0.091	9,630	0.221
		5.25	-		-	4,1//	0.096	10,649	0.244
		5.50	-		-	4,3//	0.100	11,/18	0.269
Zono 2 (lless)		5./5	-		-	4,580	0.105	12,838	0.295
Zone z (User)	-	5.79			-	4,014	0.100	14,009	0.299
		6.00				4,782	0.110	14,008	0.322
		0.25				4,983	0.114	10,229	0.350
		6.76	-	-	-	5,197	0.119	17,900	0.379
		7.00	-	-	-	5,401	0.124	10 202	0.409
		7.00	-	-	-	5,800	0.129	20.629	0.441
		7.50	-		-	6,012	0.133	20,023	0.474
		7.75	_	_	_	6.226	0.160	23,636	0.543
		8.00	_	_	_	6,433	0.148	25,219	0.579
		8.25	_	_	_	6,400	0.152	26,853	0.616
	-	8.50	-			6.847	0.157	28,539	0.655
Zone 3 (User)		8.75			-	6.912	0.159	30,258	0.695
Lone e (eser)		0.70	_	_	_	0,012	0.100	00,200	0.000
			_	_	_				
			-		-				
			-		-				
			-		-				
			_	_	_				
			_	_	_				
			-		-				
					-				
					-				
					-				
					-				
					-				
					-				
					-				
			-		-				
			-	-	-				
			-	-	-				
	-			-	-				
				-	-				
			-	-	-				
			-	-	-				
			-	-					
					-				
	-		-		-				
	-			-	-				
	-			-	-				
	-				-				
			-	-	-				
			-	-	-				
			-		-				
			-	-	-			I	
	-		-		-				
				-		-			
			-	-	-				
					-		-	-	
	-		-	-	-			I	
			-	-	-				
			-	-	-		_		
	-							1	
	-								
	-		111		-				
			1 1 1 1		-				
	-								

6/12/2017, 4:29 PM

WARE MALCOMB

architecture | planning | interiors | branding | civil

			EURV	/ Detention	on Calcu	lations			
Require	d Volume			1-	Hour Rainf	fall			
Tri	butary Area	(ac)	% Imperviou	s D	epth (100-	yr) E	Basin Slope (%) B	asin Length (ft)
	5.10		79.0%		2.6		3.3%	-	700.00
	Sc	oil Type %	: Δ =	0.0%	B =	- 0.0%	C&D=	100.0%	
		0.14	- //-	(* . * (
		U.14	ac-n	(WQCV = 1	1.0*A*(0.9	11 -1.191 -	+0.781)/12)		
5-vr (Detention =	0.33	ac-ft	(V 5 = //36	;*(i)* <u>A</u>)/ <u>A</u> 3	(560)			
5-vr	Detention =	14.504	cu-ft	1 0 3 - [[30		500) /			
100-vr [Detention =	0.61	ac-ft	(V ₁₀₀ = ((6	6*Ci)*A)/4	3560))			
100-yr I	Detention =	26,591	cu-ft	100 11					
yr Detentior	ו + WQCV =	32,556	cu-ft						
	Tot	al Require	d Volume =	0.75	ac-ft	(V100)			
		· · ·	=	32,556	cu-ft	. ,			
	Max Allowa	able Relea	se Rate						
	Q ₅ =	1.02	cfs	(q=	0.20	cfs/ac)			
	Q ₁₀₀ =	5.10	cfs	(q=	1.00	cfs/ac)			
Provide	d Volume								
Stage (ft)	Contour Elevation (ft)	<u>م</u> (\rea (ft ²⁾	1/3 (A1 (A1A2	+ A2 + 2) ^{1/2}) D	Total Vo	olume (ft ³)	Total Vol	ume (ac-ft)
0.00	5335.00		0				0	0	.00
1.00	5336.00	2,	385	7	95	7	795	0	.02
2.00	5337.00	3,	125	2,7	'47	3	,541	0	.08
2.00		0				Ξ,		0	16
3.00	5338.00	3,	968	3,5	538	7,	,080	0	
3.00 4.00	5338.00 5339.00	3,	.968 873	3,5 4,4	538 13	7,	,080 ,493	0	.26
2.00 3.00 4.00 5.00	5338.00 5339.00 5340.00	3, 4, 5,	968 873 945	3,5 4,4 5,4	538 13 00	7, 7, 11	,080 ,493 5,893	0	.26 .39
2.00 3.00 4.00 5.00 6.00	5338.00 5339.00 5340.00 5341.00	3, 4, 5, 7,	968 873 945 092	3,5 4,4 5,4 6,5	538 13 00 10	7, 11 16 23	,080 ,493 ,893 ,403	0	.26 .39 .54
2.00 3.00 4.00 5.00 6.00 7.00	5338.00 5339.00 5340.00 5341.00 5342.00	3, 4, 5, 7, 8,	968 873 945 092 832	3,5 4,4 5,4 6,5 7,9	538 13 00 510	7, 11 16 23 31	,080 ,493 5,893 3,403 ,350	000000000000000000000000000000000000000	.26 .39 .54
2.00 3.00 4.00 5.00 6.00 7.00 7.12	5338.00 5339.00 5340.00 5341.00 5342.00 5342.12	3, 4, 5, 7, 8, 9,	968 873 945 092 832 155	3,5 4,4 5,4 6,5 7,9 8,2	538 538 500 510 546 509	7, 111 16 23 31 32	,493 ,493 3,893 3,403 ,350 2,556	0 0 0 0 0	.26 .39 .54 .72 .75
2.00 3.00 4.00 5.00 6.00 7.00 7.12 8.00	5338.00 5339.00 5340.00 5341.00 5342.00 5342.12 5343.00	3, 4, 5, 7, 8, 9, 11	968 873 945 092 832 155 ,551	3,5 4,4 5,4 6,5 7,9 8,2 10,	6338 113 100 146 109 161	7, 111 16 23 31 32 41	,080 ,493 5,893 5,403 ,350 2,556 ,511	0 0 0 0 0 0 0	.26 .39 .54 .72 .75 .95
2.00 3.00 4.00 5.00 6.00 7.00 7.12 8.00	5338.00 5339.00 5340.00 5341.00 5342.00 5342.12 5343.00	3, 4, 5, 7, 8, 9, 11	968 873 945 092 832 155 ,551	3,5 4,4 5,4 6,5 7,9 8,2 10,	6338 113 100 100 146 209 161	7, 11 16 23 31 32 41	,080 ,493 5,893 5,403 ,350 2,556 ,511		.26 .39 .54 .72 .75 .95
2.00 3.00 4.00 5.00 6.00 7.00 7.12 8.00	5338.00 5339.00 5340.00 5341.00 5342.00 5342.12 5343.00	3, 4, 5, 7, 8, 9, 11	968 873 945 092 832 155 ,551	3,5 4,4 5,4 6,5 7,9 8,2 10,	538 113 00 510 146 209 161 	7, 111 16 23 31 32 41	,080 ,493 5,893 3,403 ,350 2,556 ,511		.26 .39 .54 .72 .75 .95
2.00 3.00 4.00 5.00 6.00 7.00 7.12 8.00	5338.00 5339.00 5340.00 5341.00 5342.00 5342.12 5343.00	3, 4, 5, 7, 8, 9, 11	968 873 945 092 832 155 ,551 WQCV =	3,5 4,4 5,4 6,5 7,9 8,2 10, <u>WSEL</u> 5337.68	113 113 100 100 146 109 161 <u>Depth (ft)</u> 2.68	7, 11 16 23 31 32 41	,080 ,493 5,893 5,403 ,350 2,556 ,511		.26 .39 .54 .72 .75 .95
2.00 3.00 4.00 5.00 6.00 7.00 7.12 8.00	5338.00 5339.00 5340.00 5341.00 5342.00 5342.12 5343.00	3, 4, 5, 7, 8, 9, 11	968 873 945 092 832 155 ,551 	3,5 4,4 5,4 6,5 7,9 8,2 10, 10, <u>WSEL</u> 5337.68 5339.56	113 113 100 146 209 161 <u>Depth (ft)</u> 2.68 4.56	7, 11 16 23 31 32 41	,080 ,493 5,893 5,403 ,350 2,556 ,511		.26 .39 .54 .72 .75 .95

JANSEN STRAWN CONSULTING ENGINEERS 990 South Broadway, Suite 230 - Denver, CO 80209 p: 303.561.3333 f: 303.561.3339





CITY OF LAKEWOOD PERMIT PROCESS ASSISTANCE HANDOUT

Permits – Civic Center North – 470 S Allison Pkwy – 303.987.7500

Except as specified, no building or structure regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished unless a separate permit for each building or structure has first been obtained from the building official.

A building permit is not required for the following:

- a. One-story detached accessory buildings used as tool and storage sheds, pergolas, playhouses and similar uses, provided the floor area does not exceed 120 square feet for commercial and 200 square feet for residential structures.
- b. Moveable cases, cabinets, counters, and partitions not over five feet, nine inches (5'-9") in height.
- c. Retaining walls not exceeding 30 inches in height, measuring from grade to top of the wall unless supporting a surcharge or impounding flammable liquids.
- d. Water tanks supported directly upon grade if the capacity does not exceed 5000 gallons and the ratio of height to diameter or width does not exceed 2:1.
- e. Private walks and driveways not more than 30 inches above grade and not over any basement or story below and not part of an accessible route.
- f. Painting, paper and similar finish work.
- g. Prefabricated, non-heated swimming pools that are less than 24 inches deep without a circulation system.
- h. Temporary motion picture, television and theater stage sets and scenery, subject to fire department approval.
- i. Swings and other playground equipment accessory to a single-family residence, a two family residence or a townhome.
- j. Window awnings supported by an exterior wall of Group R, Division 3 Occupancies when projecting not more than 54" from the face of the structure.
- k. Shutters, windows, gutters, doors and other minor cosmetic additions not affecting the structure.
- I. Roof covering repairs of less than 100 square feet unless the repair requires the removal of mechanical or electrical equipment.
- m. Residential decks not over 200 square feet in area that are not more than 30 inches above grade at any point, are not structurally attached to the dwelling, do not serve the required exit door and are not installed over a required emergency escape and rescue opening.
- n. Any unforeseen emergency situation whereby the lack of immediate corrective action creates a substantial risk to life, property, health or welfare. Any contractor who starts or completes work under this exemption shall obtain the appropriate permit the next business day. Failure to obtain such required permit may be cause for suspension or revocation of the contractor's registration and the permit fee may be doubled.

Unless otherwise exempted by this code, separate plumbing, electrical and mechanical permits would still be required for work related to the above exempted items.

Exemption from the permit requirements of this Code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Code or any other laws or ordinances of this jurisdiction.

Work requiring permits includes but is not limited to: re-roofing, replacement of siding, fences, retaining walls greater than 30" in height, hot tubs, decks, patio covers, room additions, garage additions or detached garages, storage/accessory structures over 120 square feet in area for commercial and 200 square feet for residential, interior remodeling, water heater, furnace, or a/c replacements, and window replacement affecting the structure, addition, or alterations.

Exhibit B

Amended and Restated Rules and Regulations of West Line Village

AMENDED AND RESTATED RULES AND REGULATIONS OF

WEST LINE VILLAGE

Adopted by the Board of Directors on December 9, 2022

TABLE OF CONTENTS

1.	INTR	ODUCTION	5
	1.1	Basis for Rules and Regulations	5
	1.2	Definitions	5
	1.3	Contents of Rules	5
	1.4	Architectural Review Committee or Representative	5
	1.5	ARC Contact Information	5
	1.6	Effect of Declaration	5
	1.7	Effect of Governmental and Other Regulations	6
	1.8	Water Service	6
	1.9	Interference with Utilities	6
	1.10	Goal of Rules	6
2.	PROC	CEDURES FOR ARC APPROVAL	7
	2.1	General	7
	2.2	Drawings or Plans	7
	2.3	Submission of Drawings and Plans	8
	2.4	Action by ARC	8
	2.5	Revisions and Additions to Approved Plans	9
	2.6	Completion of Work	9
	2.7	Inspection of Work	9
	2.8	Notice of Non-Compliance	9
	2.9	Correction of Non-Compliance	10
	2.10	Amendment	10
	2.11	Questions	10
3.	SPEC	IFIC TYPES OF IMPROVEMENTS / SITE RESTRICTIONS	10
	3.1	General	10
	3.2	Accessory Buildings	11
	3.3	Additions and Expansions	11
	3.4	Address Numbers	12
	3.5	Air Conditioning Equipment	12
	3.6	Antennae/Satellite Dishes	12
	3.7	Awnings	13
	3.8	Balconies and Decks	13
	3.9	Barbecue/Gas Grills	14
	3.10	Basketball Backboards	14
	3.11	Birdbaths	14

3.12	Birdhouses and Bird Feeders	.14
3.13	Clothes Lines and Hangers	.14
3.14	Decks	.14
3.15	Dog Houses	.14
3.16	Doors	.14
3.17	Drainage	.15
3.18	Evaporative Coolers	.15
3.19	Exterior Lighting	.15
3.20	Fences	.15
3.21	Fire Pits	.15
3.22	Firewood Storage	.16
3.23	Flags/Flagpoles	.16
3.24	Gardens – Flower or Vegetable	.16
3.25	Grading and Grade Changes	.16
3.26	Hanging of Clothes	.16
3.27	Kennels	.16
3.28	Landscaping	.16
3.29	Lights and Lighting	.17
3.30	Mailboxes	.18
3.31	Ornaments/Art - Landscape/Yard	.18
3.32	Painting	.18
3.33	Patios - Enclosed	.18
3.34	Paving	.18
3.35	Pipes	.18
3.36	Play Structures and Sports Equipment	.18
3.37	Playhouses	.18
3.38	Poles	.19
3.39	Ponds and Water Features	.19
3.40	Radio Antennae	. 19
3.41	Radon Mitigation Systems	.19
3.42	Roofing Materials	.19
3.43	Rooftop Equipment	. 19
3.44	Satellite Dishes	.19
3.45	Screen Doors	. 19
3.46	Seasonal Decorations	.19
3.47	Security Devices.	.20
3.48	Shutters - Exterior	.20

3.49	Siding	20
3.50	Solar Energy Devices	20
3.51	Statues or Fountains	20
3.52	Storage Sheds	20
3.53	Swamp Coolers	.211
3.54	Television Antennae	21
3.55	Trash/Garbage and Recycling Receptables	21
3.56	Tree Houses	21
3.57	Vanes	21
3.58	Vents	21
3.59	Walls	21
3.60	Walls, Retaining	21
3.61	Weather Vanes and Directionals	21
3.62	Wind Electric Generators	22
3.63	Windows Replacement	22
3.64	Windows: Tinting, Security Bars, etc.	22

1. **INTRODUCTION**

1.1 Basis for Rules and Regulations

These Rules and Regulations (the "Rules") are intended to assist Owners living in the West Line Village community (the "Community"). Pursuant to the Declaration of Covenants, Conditions and Restrictions of West Line Village ("Declaration"), recorded at Reception No. 2017100573, the Sheridan Station West Metropolitan District ("District") is authorized to adopt rules and regulations for the Community.

1.2 Definitions

All capitalized words and phrases used in these Rules shall have the meaning provided in the Declaration unless otherwise defined herein.

1.3 Contents of Rules

In addition to the introductory material, these Rules contain (A) a summary of procedures for obtaining approval from the ARC (see Section 2); and (B) a listing of specific types of improvements that Owners might wish to make with specific information as to each of these types of improvements (see Section 3).

1.4 Architectural Review Committee or Representative

The ARC consists of persons, representatives or a committee appointed to review requests for approval of architectural or site changes.

1.5 ARC Contact Information

The contact information of the ARC, persons, committee or representative authorized to administer the architectural review process is:

COMPANY NAME	OFFICE	FAX	E-MAIL
<u>Special District</u> <u>Management Services</u>	<u>(303) 987-0835</u>	<u>(303) 987-2032</u>	<u>cm@sdmsi.com</u>

1.6 Effect of Declaration

The Declaration governs the Community. Each Owner should review and become familiar with the Declaration. Nothing in these Rules supersedes or alters the provisions or requirements of the Declaration and, if there is any conflict or inconsistency, the Declaration will control.

1.7 Effect of Governmental and Other Regulations

Use of property within the Community and any Improvements must comply with any applicable building codes and other governmental requirements and regulations. Owners are encouraged to contact Jefferson County ("County") and the City of Lakewood ("City") and the Consolidated Mutual Water Company ("Consolidated") for further information and requirements for Improvements they wish to make.

APPROVAL BY THE ARC <u>DOES NOT</u> CONSTITUTE ASSURANCE THAT IMPROVEMENTS COMPLY WITH APPLICABLE GOVERNMENTAL REQUIREMENTS OR REGULATIONS OR THAT A PERMIT OR APPROVALS ARE NOT ALSO REQUIRED FROM APPLICABLE GOVERNMENTAL BODIES.

1.8 Water Service

Water service to the Community is provided by Consolidated, which is a Colorado nonprofit corporation and is a mutual company (i.e., it is owned by its shareholders); Consolidated is not a government authority. All Owners and the District are subject to all of the Articles of Incorporation, Bylaws, Engineering Standards, rules, regulations, policies and procedures (the "<u>Consolidated Rules</u>") promulgated by Consolidated from time to time, including, without limitation, Consolidated Rules concerning failure to pay water service bills and Consolidated's right and procedure to suspend and to disconnect service from customers that are delinquent in payment or use water in an unauthorized manner. All Owners and the District are required to observe, abide by, and comply with the Consolidated Rules. At such time as an Owner desires to sell his/her home, that Owner must provide his/her buyer with copies of the Consolidated Rules as part of the due diligence documents provided to his/her buyer or shall inform his/her buyer in writing that the Consolidated Rules are available from the District upon request. Copies of the Consolidated Rules shall also be available from the District upon request.

1.9 Interference with Utilities

In making Improvements to property, Owners are responsible for locating all water, sewer, gas, electrical, cable television, or other utility lines or easements. Owners should not construct any Improvements over such easements without the consent of the utility involved, and Owners will be responsible for any damage to any utility lines. All underground utility lines and easements can be located by contacting:

Utility Notification Center of Colorado

1-800-922-1987

1.10 Goal of Rules

Compliance with these Rules and the provisions of the Declaration will help preserve the inherent architectural and aesthetic quality of the Community. It is the responsibility of the ARC to ensure that all proposed Improvements meet or exceed the requirements of these

Rules and to promote the highest quality design for the neighborhood. It is important that Improvements to property be made in harmony with and are not detrimental to the rest of the Community. A spirit of cooperation with the ARC and neighbors will go far in creating an optimum environment, which will benefit all Owners. By following these Rules and obtaining prior written approval for Improvements to property from the ARC, Owners will be protecting their financial investment and will help ensure that Improvements to property are compatible with standards established for the Community. If a question ever arises as to the correct interpretation of any terms, phrases or language contained in these Rules, the ARC's interpretation shall be final and binding.

2. <u>PROCEDURES FOR ARC APPROVAL</u>

2.1 General

The procedures set forth in this Article 2 are intended to clarify the terms, provisions and requirements of Article 4 of the Declaration. In the event of any conflict between these rules and the Declaration, the terms of Article 4 in the Declaration shall control. As indicated in Section 3 of these Rules, there are some cases in which advance written approval of the ARC is not required if the Rules with respect to that specific type of Improvement are followed. In a few cases, as indicated in Section 3, a specific type of Improvement is not permitted under any circumstances. In all other cases, including Improvements not included in Section 3, advance, or prior written approval by the ARC is required before an Improvement to property is commenced.

2.2 Drawings or Plans

Owners are required to submit to the ARC a completed Architectural Review Request Form ("ARR"), which forms are available from the person or entity listed in Section 1.5, the current version of which is attached as <u>Appendix A</u>, and complete plans and specifications, in duplicate, (said plans and specifications to show exterior design, height, materials, color, location of the structure or addition to the structure, plotted horizontally and vertically, location and size of driveways, general plan of landscaping, fencing, walls, windbreaks and grading plan, as well as such other materials and information as may be required) prior to commencement of work on any Improvement to property. In most cases, the materials to be submitted will *not* have to be professionally prepared by an architect or draftsman, and a simple drawing with dimensions and description will be sufficient. In the case of major improvements, such as room additions, structural changes or accessory building construction, detailed plans and specifications, prepared by a licensed architect, may be required. Whether done by the Owner, or professionally, the following guidelines should be followed in preparing drawings or plans:

A. The drawing or plan should be done to scale and shall depict the property lines of your Lot and the outside boundary lines of the home as located on the Lot. If you have a copy of an improvement survey of your Lot obtained when you purchased it, this survey would be an excellent base from which to start.

- **B.** Existing Improvements, in addition to your home, should be shown on the drawing or plan and identified or labeled. Such existing Improvements include driveways, walks, decks, trees, shrubs, fences, etc. The proposed Improvements should be shown on the plan and labeled. Either on the plan or on an attachment, there should be a brief description of the proposed Improvement, including the materials to be used and the colors. For Example: Replacement of front steps.
- **C.** The plan or drawing and other materials should include the name of the Owner, the address of the home, the lot, block and filing number of the Lot, and the e-mail address and telephone number where the Owner can be reached.
- **D.** Additions to and expansions of homes are not permitted. Improvements that may be approved generally are limited to new roofing, exterior painting, and replacement of windows and doors.
- **E.** The proposed Improvements must take into consideration the easements, building location restrictions and sight distance limitations at intersections.
- **F.** Owners should be aware that many Improvements require a permit from the County, the City or other governmental entity. The ARC reserves the right to require a copy of such permit as a condition of its approval.
- **G.** In some instances, elevation drawings of the proposed Improvement will be required. The elevation drawings should indicate materials.
- **H.** Photographs of existing conditions and of proposed materials and colors are encouraged to be included, and are helpful to convey the intended design, but should not be used solely to describe the proposed changes.

2.3 Submission of Drawings and Plans

One copy of the drawing or plans (minimum acceptable size 8.5" x 11") must be submitted to the ARC along with a completed ARR. Submission may be electronically via e-mail. Color photographs, brochures, paint swatches, etc. will help expedite the approval process. Specific dimensions and locations are required.

Any Submittal Fees required by the ARR, the current version of which is attached as <u>Appendix A</u>, and any costs incurred by the ARC for review of submittals shall be borne by the Owner and shall be payable prior to final approval. Any reasonable engineering/consultant fees or other fees incurred by the ARC in reviewing any submission will be assessed to the Owner requesting approval of the submission.

2.4 Action by ARC

The ARC will meet as required to review plans submitted for approval. The ARC may require submission of additional information or material, and the request will be deemed denied until all required information and materials have been submitted. The ARC will act upon all requests in writing within forty-five (45) days after the complete submission of

plans, specifications, and other materials and information as requested by the ARC. If the ARC fails to review and approve in writing (which may be with conditions and/or requirements) or disapprove, a request for architectural approval within forty-five (45) days after the complete submission of the plans, specifications, materials and other information with respect thereto, such request is deemed approved by the ARC.

2.5 Revisions and Additions to Approved Plans

Any revisions and/or additions to approved plans made by the Owner or as required by any governmental agency, must be re-submitted for approval by the ARC. The revised plans must follow the requirements as outlined above.

2.6 Completion of Work

After approval of an ARR (which may be with conditions and/or requirements) of any proposed Improvement by the ARC, the proposed Improvement shall be completed and constructed as promptly and diligently as possible, and in complete conformity with all conditions and requirements of the approval. Failure to complete the proposed Improvement within one year from the date of the approval or such other date as may be set forth in the approval or as set forth in the Declaration (the "Completion Deadline"), shall constitute noncompliance; provided, however, that the ARC may grant extensions of time to individual Owners for completion of any proposed Improvements, either (a) at the time of initial approval of such Improvements, or (b) upon the request of any Owner, provided such request is delivered to the ARC in writing and the Owner is diligently prosecuting completion of the subject Improvements or other good cause exists at the time such request is made.

2.7 Inspection of Work

The ARC, or its duly authorized representative, shall have the right to inspect any Improvement at any time, including prior to or after completion, in order to determine whether or not the proposed Improvement is being completed or has been completed in compliance with the approval granted pursuant to this Section.

2.8 Notice of Non-Compliance

If, as a result of inspections or otherwise, the ARC determines that any Improvement has been done without obtaining all required approvals (which may be with conditions and/or requirements), or was not done in substantial compliance with the approval that was granted, or has not been completed by the Completion Deadline, subject to any extensions of time granted pursuant to Section 2.6 hereof, then the ARC shall notify the District, and the District shall then notify the applicant in writing of the non-compliance (the "Notice of Non-Compliance"). The Notice of Non-Compliance shall specify the particulars of the non-compliance, shall state that the applicant is required to remedy or remove the non-compliance within not more than forty-five (45) days, and that if the non-compliance is not remedied or removed, that the District may impose fines upon the applicant as provided in Section 2.9. Proof of delivery of the Notice of Non-Compliance shall be placed in the records of the Board. Such proof shall be deemed adequate if a copy of the notice, together

with a statement of the date and manner of delivery, is entered by the officer, director, or agent who gave such notice. The notice requirement shall be deemed satisfied if the applicant files a response. The applicant shall respond to the Notice of Non-Compliance within ten (10) days after it receives the notice, regardless of whether the applicant is challenging the finding of non-compliance. The applicant may request a hearing before the Board by including the request for a hearing in or with such Owner's response to the Notice of Non-Compliance. If a hearing is timely requested, the hearing shall be held before the Board. At the hearing, the applicant shall be afforded a reasonable opportunity to be heard. The Board may adopt rules for the conduct of such hearings that may include, without limitation, rules that govern the presentation of evidence and witnesses and the ability of an applicant to question adverse witnesses. The minutes of the hearing shall contain a written statement of the results of the hearing.

2.9 Correction of Non-Compliance

The Person responsible for any non-compliance shall remedy or remove the same within not more than forty-five (45) days from the date of receipt of the Notice of Non-Compliance or the hearing described in Section 2.8 if at such hearing the Board determines that a non-compliance exists. If such Person does not remedy or remove the noncompliance within such period, the ARC shall notify the District, and the District may, at its option and if allowed by applicable law, record a notice of non-compliance against the Lot on which the non-compliance exists, may impose fines in the amount of \$15.00 for each day for the first thirty (30) days such non-compliance exists and thereafter fines in the amount of \$30.00 for each day such non-compliance exists, penalties and interest, may remove the non-complying Improvement, or may otherwise remedy the non-compliance in accordance with the Declaration and applicable law. The Person responsible for such noncompliance shall reimburse the District, upon demand, for all costs and expenses, as well as anticipated costs and expenses, with respect thereto.

2.10 Amendment

These Rules may at any time, from time to time, be added to, deleted from, repealed, amended, and modified, reenacted, or otherwise changed by the District, by majority vote or written approval of the members of the Board, with the approval of the Person authorized to appoint the Board, as changing conditions and/or priorities dictate.

2.11 Questions

If you have any questions about the foregoing procedures, feel free to call the District at the phone number and address listed in the Section 1.5 of these Rules.

3. <u>SPECIFIC TYPES OF IMPROVEMENTS / SITE RESTRICTIONS</u>

3.1 General

The following is a listing, in alphabetical order, of a wide variety of specific types of Improvements which Owners typically consider installing, with pertinent information as to each. Unless otherwise specifically stated, drawings or plans for a proposed Improvement must be submitted to the ARC and written approval of the ARC obtained before the Improvements are made. In some cases, where it is specifically so noted, an Owner may proceed with the Improvements without advance approval if the Owner follows the stated guideline. In some cases, where specifically stated, some types of Improvements are prohibited. ARC review and approval is required on any external items not be listed below.

3.1.1 Variances

Approval of any proposed plans by the granting of a variance from compliance with any of the provisions of these Rules is at the sole discretion of the ARC when circumstances such as topography, natural obstructions, hardship, aesthetic or environmental considerations may require.

3.1.2 No Unsightliness

All unsightly conditions, structures, facilities, equipment, and objects, including snow removal equipment and garden or maintenance equipment, when not in actual use, must be enclosed within a structure.

3.1.3 Waivers; No Precedent

The approval or consent of the ARC to any application for approval shall not be deemed to constitute a waiver of any right to withhold or deny approval or consent as to any application or other matters whatsoever, as to which approval or consent may subsequently or additionally be required. Nor shall any such approval or consent be deemed to constitute a precedent in any other matter.

3.1.4 Liability

The District, the Board and the ARC and the members thereof shall not be liable in damages to any person submitting requests for approval or to any approval, or failure to approve or disapprove in regard to any matter within its jurisdiction. The ARC shall not bear any responsibility for ensuring structural integrity or soundness of approved construction or modifications, or for ensuring compliance with building codes and other governmental requirements. The ARC will not make any investigation into title, ownership, easements, rights-of-way, or other rights appurtenant to property with respect to architectural requests and shall not be liable for any disputes relating to the same.

3.2 Accessory Buildings

Accessory buildings are not permitted. That includes, without limitation, storage sheds, gazebos, playhouses and play structures.

3.3 Additions and Expansions

Addition to or expansion of any home is not permitted.

3.4 Address Numbers

Approval is required to replace, alter or relocate existing address numbers, unless the address numbers are replaced using the same style, color and type of number currently on the home.

3.5 Air Conditioning Equipment

Approval is required for all air conditioning equipment including evaporative coolers (swamp coolers) and attic ventilators installed after the initial construction.

Approval is not required for replacement of existing air conditioning equipment with like equipment located in the same location as the equipment being replaced. Replacement with different equipment requires approval.

No heating, air conditioning, air movement (e.g., swamp coolers) or refrigeration equipment shall be placed or installed on rooftops, or extended from windows. Ground mounted or exterior wall air conditioning equipment installed in the yard must be installed in a manner so as to minimize visibility from the street and minimize any noise to adjacent property Owners.

3.6 Antennae/Satellite Dishes

3.6.1 General Provisions

"Permitted Antennas" are defined as (a) an antenna which is less than one meter in diameter and is used to receive direct broadcast satellite service, including direct-to-home satellite services, or is used to receive or transmit fixed wireless signals via satellite; (b) an antenna which is less than one meter in diameter and is used to receive video programming services via multipoint distribution services, including multichannel multipoint distribution services, instruction television fixed services, and local multipoint distribution services or is used to receive or transmit fixed wireless signals other than via satellite; (c) an antenna which is designed to receive broadcast television broadcast signals; or (d) other antennas which are expressly permitted under applicable federal statutes or regulations. In the event a Permitted Antenna is no longer expressly permitted under applicable federal statutes or regulations, such antenna will no longer be a Permitted Antenna for purposes of this Section. Installation of Permitted Antennas shall not require the approval of the ARC.

- 1. All Permitted Antennas shall be installed with emphasis on being as unobtrusive as possible to the Community. To the extent that reception is not substantially degraded or costs unreasonably increased, all Permitted Antennas shall be screened from view from any street and nearby Lots to the maximum extent possible, and placement shall be made in the following order of preference:
 - (1) Inside the structure of the house, not visible from the street
 - (2) Rear yard or side yard, mounted on the house, in the least visible location below roofline

- (3) Back rooftop
- (4) Any other location approved by the ARC.
- 2. If more than one (1) location on the Lot allows for adequate reception without imposing unreasonable expense or delay, the order of preference described above shall be used, and the least visible site shall be selected.
- **3.** Permitted Antennas shall not encroach upon common areas or any other Owner's property.
- 4. Permitted Antennas may not be installed on balconies.

3.6.2 Installation of Antennae/Satellite Dishes

- 1. All installations must comply with all applicable building codes and other governmental regulations, and must be secured so they do not jeopardize the safety of residents or cause damage to adjacent properties. Any installation must strictly comply with FCC guidelines.
- 2. All Permitted Antennas shall be no larger, nor installed more visibly, than is necessary for reception of an acceptable signal.
- **3.** Owners are responsible for all costs associated with the Permitted Antenna, including but not limited to costs to install, replace, repair, maintain, relocate, or remove the Permitted Antenna.
- 4. All cabling must be run internally when feasible, must be securely attached, and must be as inconspicuous as possible. Permitted Antennas, masts and any visible wiring may be required to be painted to match the color of the structure to which they are attached. The Owner should check with the installer/vendor for the appropriate type of paint.
- 5. All other antennas, not addressed above, are prohibited.

3.7 Awnings

Awnings, including, without limitation, cloth or canvas overhangs, and sunshades are not permitted.

3.8 Balconies and Decks

Balconies are not permitted, except for reconstruction of a balcony constructed by a builder as part of the original construction of the home. Reconstruction requires approval of the ARC.

Decks require approval by the ARC prior to installation. Consideration will be given to size, construction and color. Any proposed deck shall conform with Section 3.17 Drainage.

3.9 Barbecue/Gas Grills

Approval is not required. Only gas-fired barbeque grills are permitted; charcoal grills are not permitted. All barbecue grills, smokers, etc. must be stored in the Owner's garage or on a balcony or in a yard.

3.10 Basketball Backboards

Not permitted, whether portable or affixed.

3.11 Birdbaths

Approval is not required, subject to the following limitations. Placement in front or side yard is not allowed. Birdbaths are only permitted in the rear yard.

See Section 3.52, Statues or Fountains.

3.12 Birdhouses and Bird Feeders

Approval is not required, subject to the following limitations. If installed in the rear yard and the size is limited to one foot by two feet, no approval is required. No more than one of each of a birdhouse or bird feeder shall be installed on any Lot. Birdhouses or bird feeders may be mounted on a pole, provided the pole shall not exceed five (5) feet in height.

3.13 Clothes Lines and Hangers

Exterior clotheslines and hangers are permitted but must be retracted when not in use.

3.14 Decks

See Section 3.8, Balconies and Decks.

3.15 Dog Houses

Approval is required. Dog houses are restricted to six (6) square feet and must be located in a fenced rear yard. Dog houses must be installed at ground level, and must not be visible above the fence. Dog houses must also match the colors and materials of the exterior of the home. Limit of one dog house per Lot. Dog runs are not permitted.

3.16 Doors

Approval is not required for an already existing main entrance door to a home or an accessory building if the material matches or is similar to existing doors on the house and if the color is generally accepted as a complementary color to that of existing doors on the house. Complementary colors would be the body, trim or accent colors of the house or white (for storm/screen doors).

A. Storm Doors. Approval is required.

B. Security Doors and Windows. All security or security-type doors and windows must be approved prior to installation.

3.17 Drainage

The Declaration requires that there be no interference with the established drainage pattern over any property. The established drainage pattern means the drainage pattern which exists at the time final grading of a Lot by the Declarant or a Builder is completed. It is very important to ensure that water drains away from the foundation of the house and that the flow patterns prevent water from flowing under or against the house foundation, walkways, sidewalks, and driveways into the street. Therefore, changes to landscaping are only permitted as provided in Section 3.28. The ARC may require a report from a drainage engineer as part of improvement plan approval. Landscaping and all drainage from downspouts off the house should conform to the established drainage pattern. Sump pump drainage should be vented a reasonable distance from the property line, on the Owner's property, to allow for absorption. Adverse effects to adjacent properties, including District lands, sidewalks and streets, will not be tolerated. Potted plants are permitted in containers not exceeding 18 inches in diameter.

3.18 Evaporative Coolers

Approval is required. No rooftop or window mount installations are allowed.

See Section 3.5, Air Conditioning Equipment.

3.19 Exterior Lighting

See Section 3.29, Lights and Lighting.

3.20 Fences

Fences will be constructed by the Developer or Builder. Perimeter fences and fences between Lots may not be removed, replaced, painted a different color or altered by any Owner. Adding a gate to a fence requires the approval of the ARC. All perimeter fences and fencing separating lots are owned and maintained by the District. Owners with pets may install 4-inch x 2-inch weld wire mesh on yard fences only with the approval of the ARC, in which case such modification to the fencing shall be maintained by the Owner. If vertical planter boxes are installed on a perimeter fence pursuant to Sections 3.24 and 3.28, the Owner shall be solely liable for all costs associated with any damage or loss incurred to such perimeter fence, or any appurtenances thereto, which is caused by or attributable to the installation, existence, or removal of any such vertical planter box.

3.21 Fire Pits

Fire pits are not permitted.

3.22 Firewood Storage

All firewood must be stored in the Owner's garage.

3.23 Flags/Flagpoles

The installation of flag poles shall be submitted to ARC review and approval. Flagpoles must be no higher than 20 feet from the ground when affixed to the ground and are limited to not more than 1 flagpole per residence. An Owner or resident may also display a flag on the inside of a window or door of the home, or on a balcony adjoining the home.

3.24 Gardens – Flower or Vegetable

In-ground gardens are not permitted. Potted plants are allowed as follows: (a) in containers not exceeding 18 inches in diameter or 2 square feet; (b) in vertical planter boxes along the 6' privacy fence between Lots, subject to approval as outlined in Section 3.28 below; and (c) elevated garden boxes, subject to the criteria and approval as outlined in Section 3.28 below.

3.25 Grading and Grade Changes

See Section 3.17, Drainage.

3.26 Hanging of Clothes

See Section 3.13, Clothes Lines and Hangers.

3.27 Kennels

Approval will not be granted. Breeding or maintaining animals for a commercial purpose is prohibited.

3.28 Landscaping

Generally, changes to landscaping are not permitted. However, the ARC has determined that the changes listed herein may be approved for yards only, provided such changes comply with the submittal and approval requirements set forth in Section 2, drainage requirements of Section 3.17, and any other relevant part of these Rules or the Declarations.

Approval by the ARC is required for the following changes to landscaping, which shall be permitted only in the yard of each Lot:

- A. Installation of turf or other artificial grasses;
- **B.** Installation of vertical planter boxes along the six-foot (6') privacy fence between Lots, anchored to the horizontal support beams of the fence, and subject to the requirements set forth in Section 3.20;
- C. Installation of landscape edging;

- **D.** Concrete, stepping stones, pavers, or paving consistent with Section 3.34; and
- **E.** Installation of a pergola, either free-standing or "wall-mounted" to the residence, over the existing patio area in the rear yard of each Lot.
- **F.** Elevated garden boxes are permitted subject to the criteria below:
 - 1. made of a material that is designed to withstand outdoor weather elements year-round;
 - 2. Properly installed with correct drainage in place as to not flood the area or any adjacent areas;
 - 3. A color complimentary to the exterior of the home;
 - 4. No more than 8" above the patio/balcony railing, if applicable;
 - 5. Elevated garden boxes may not be larger than 3' by 5'.

3.29 Lights and Lighting

Approval is not required for replacing existing lighting, including coach lights, with the same or similar lighting style and color as originally installed.

Approval is required to modify or add exterior lighting.

Approval is required to install motion detector spotlights, spotlights, floodlights or ballasted fixtures (sodium, mercury, multi-vapor, fluorescent, metal halide, etc.).

- **A.** Considerations will include, but may not be limited to, the visibility, style and location of the fixture.
- **B.** Exterior lighting for security and/or other uses must be directed at the ground and house, whereby the light cone stays within the property boundaries and the light source does not cause glare to other properties (bullet type light fixtures are recommended).
- **C.** Ground lighting along walks must be maintained in a working and sightly manner. Low- voltage or solar powered ground lighting fixtures which are typically affixed by stakes or similar posts are to be maintained in good aesthetic repair, be functional, not be a tripping or other physical hazard along pedestrian pathways, and remain generally vertical in their presentation.
- **D.** Holiday lighting and decorations do not require approval. It is required that they not be installed more than forty-five (45) days prior to the holiday. They shall be removed within thirty (30) days following the holiday.

3.30 Mailboxes

Communal mailboxes are owned and maintained by the District. Changes by Owners are not permitted.

3.31 Ornaments/Art - Landscape/Yard

Approval is not required for yard ornaments which are installed in the rear yard and which are of a height less than three (3) feet.

Up to three (3) small (less than 12 inches in height) front yard ornaments may be installed in the front yard without approval, as long as the ornament is installed at ground level and the color and design integrate into the landscape.

Approval is required for any other yard ornaments.

See Section 3.51, Statues or Fountains.

3.32 Painting

Approval is required. The ARC generally will approve repainting if it is satisfied that color and/or color combinations are identical to the original manufacturer color established on the home and/or accessory improvement. Any changes to the color scheme must be submitted for approval and must conform to the general scheme of the Community.

3.33 Patios - Enclosed

See Section 3.3, Additions and Expansions.

3.34 Paving

Approval is required, regardless of whether for walks, driveways, patio areas or other purposes, and regardless of whether concrete, asphalt, brick, flagstones, stepping stones, pre-cast patterned, or exposed aggregate concrete pavers are used as the paving material.

3.35 Pipes

Approval is required for all exterior pipes, conduits and equipment. Adequate screening may also be required.

3.36 Play Structures and Sports Equipment

Play structures and sports equipment (trampolines, swing sets, fort structures, etc.) are not permitted.

3.37 Playhouses

Playhouse are not permitted.

3.38 Poles

See Section 3.23, Flags/Flagpoles.

3.39 Ponds and Water Features

Ponds and water features are not permitted.

3.40 Radio Antennae

See Section 3.6, Antennae/Satellite Dishes.

3.41 Radon Mitigation Systems

Approval is not required. Equipment must be painted a color similar or generally accepted as complimentary to the exterior of the house. All equipment shall be installed so as to minimize its visibility.

3.42 Roofing Materials

Approval is required for all roofing materials other than those originally used by the Builder. All buildings constructed on a Lot should be roofed with the same or greater quality and type of roofing material as originally used by the Builder.

Approval is not required for repairs to an existing roof with the same building material that exist on the building.

3.43 Rooftop Equipment

Approval is required. Equipment must be painted a color similar or generally accepted as complimentary to the roofing material of the house. All rooftop equipment shall be installed so as to minimize its visibility.

See Section 3.50 Solar Energy Devices.

3.44 Satellite Dishes

See Section 3.6, Antennae/Satellite Dishes.

3.45 Screen Doors

Screen doors require approval. See Section 3.16, Doors.

3.46 Seasonal Decorations

Approval is not required if installed on a Lot within forty-five (45) days of a holiday, provided that an Owner is keeping with the Community standards, and provided that the decorations are removed within thirty (30) days of the holiday.

See Section 3.29, Lights and Lighting.

3.47 Security Devices.

Approval is not required. Security devices, including cameras and alarms, must be selected, located and installed so as to be an integral part of the house and not distract from the home's architecture and appearance. Cameras and housing sirens, speaker boxes, conduits and related exterior elements should be unobtrusive and inconspicuous. Such devices should be located where not readily visible and should be a color that blends with or matches the surface to which it is attached.

3.48 Shutters - Exterior

Approval is required. Shutters should be appropriate for the architectural style of the home and be of the appropriate proportion to the windows they frame. Shutters should be the same color as the "accent" color of the home (typically the same as the front door or other accent details).

3.49 Siding

Approval is required.

3.50 Solar Energy Devices

Approval is required in order to review aesthetic conditions. Photovoltaic (PV) Solar panels must lay flat on the roof, meet all applicable safety, building codes and electrical requirements, including solar panels for thermal systems (solar water heaters). The ARC is allowed to request changes as long as they don't significantly increase the cost by more than ten percent (10%) or decrease the efficiency of the proposed device and panels by more than ten percent (10%). Please also see Colorado Law C.R.S. 38-30-168, which governs the review and the Owner's installation of such devices.

3.51 Statues or Fountains

Approval is not required if statues or fountains are installed in the rear yard and are not greater than four (4) feet in height from the highest point, including any pedestal.

Approval is required if the statue or fountain is proposed for the front yard. Statue or fountain location in the front yard should be located close to the main entrance of the house.

See Section 3.11, Birdbaths and Section 3.31, Ornaments/Art – Landscape/Yard

3.52 Storage Sheds

See Section 3.2, Accessory Buildings.

3.53 Swamp Coolers

See Section 3.5, Air Conditioning Equipment, Section 3.18, Evaporative Coolers, and Section 3.43, Rooftop Equipment.

3.54 Television Antennae

See Section 3.6, Antennae/Satellite Dishes.

3.55 Trash/Garbage and Recycling Receptables

When not out for the purposes of pick-up, trash and recycling receptacles will be stored out of view. Trash cans/bags can be out from noon the day before collection day to noon the day after collection day.

3.56 Tree Houses

Approval will not be granted. Tree houses are not permitted.

3.57 Vanes

See Section 3.61, Weather Vanes and Directionals.

3.58 Vents

See Section 3.43, Rooftop Equipment.

3.59 Walls

See Section 3.20, Fences and Section 3.60, Walls, Retaining.

3.60 Walls, Retaining

New retaining walls are not permitted. Retaining walls installed by the Declarant will be maintained by the District.

3.61 Weather Vanes and Directionals

Approval is required.

3.62 Wind Electric Generators

Approval is required. In addition to ARC approval, windmills and any other type of fixture, which fall under the criteria of a wind generator, or are used to generate power etc., must meet the requirement of the C.R.S. §40-2-124 and any applicable regulations of the Colorado Public Utilities Commission.

3.63 Windows Replacement

Approval is not required if windows are being replaced with substantially similar windows. Otherwise, approval is required. Considerations will include, but may not be limited to, size, color, existing and proposed window style and style of home.

3.64 Windows: Tinting, Security Bars, etc.

Approval is required for any visible window tinting. Highly reflective and/or dark tinting is considered too commercial for residential applications and is not permitted.

Approval is required for security bars and may not be approved on second story windows and other windows visible to the street.

Remainder of page intentionally left blank.

Appendix A

APPENDIX A: Architectural Review Request Form

EOD OFFICE LISE ONLY

ARCHITECTURAL REVIEW REQUEST FORM

		Date Rece	eived	
Sheridan Station West N	Ietropolitan District	Crucial Date Date Sent to Entity		
141 Union Blvd., Suite 1	50			
Lakewood, CO 80228		Date Revo	d from Entity	
303-987-0835				
HOMEOWNER'S NAM	ſE(S):			
ADDRESS:				
EMAIL ADDRESS:				
PHONE(S):				
My request involves the	following type of improvement	nt(s):		
□ Landscaping	□ Deck/Patio Slab	□ Roofing	Drive/Walk Addition	
□ Painting	□ Patio Cover			
□ Weld Wire Mesh	\Box Other:			
Fencing				

Include two copies of your plot plans, and describe improvements showing in detail what you intend to accomplish (see Article 2 of the Rules and Regulations of West Line Village). Be sure to show existing conditions as well as your proposed improvements and any applicable required screening (see the Rules and Regulations for requirement details for your specific proposed Improvement).

I understand that I must receive approval from the ARC in order to proceed with installation of Improvements if Improvements vary from the Rules and Regulations or, are not specifically exempt. I understand that I may not alter the drainage on my lot. I understand that the ARC is not responsible for the safety of Improvements, whether structural or otherwise, or conformance with building codes or other governmental laws or regulations, and that I may be required to obtain a building permit to complete the proposed Improvements. The ARC and the members thereof, as well as the District, the Board of Directors of the District, or any representative of the ARC, shall not be liable for any loss, damage or injury arising out of or in any way connected with the performance of the ARC for any action, failure to act, approval, disapproval, or failure to approve or disapprove submittals, if such action was in good faith or without malice. All work authorized by the ARC shall be completed within the time limits established specified below, but if not specified, not later than ninety (90) days after the approval was granted. I further understand that following the completion of my approved Improvement the ARC reserves to right to inspect the Improvement at any time in order to determine whether the proposed Improvement has been completed and/or has been completed in compliance with this Architectural Review Request.

Date: _____ Homeowner's Signature: ____

ARC Action:				
	Approved as submitted			
	Approved subject to the following requirements:			
	Disapproved for the following reasons:			
	All work to be completed no later than:		_	
	DRC/ARC Signature:	Date:		

SUBMITTAL FEES

Submittal Fees shall be charged \$100 for each submittal.
{00629489.DOCX; 1} 1247.0005: 729535 1819703