APPENDIX J: WASTEWATER

UPDATED WASTEWATER DEMAND



Daily Wastewater Design Flows Phase 1 - Residential Silo Ridge Resort Community

Project Component	Flow	Unit Quantity	Flow Generation Rate (GPD) ¹	Flow Reduction Credit	Average Daily Flow (GPD)				
Phase 1 Residential Summary									
Village Green Condos									
3 BR Condo	3 BR Unit	58	400	20%	18,560				
4 BR Condo	4 BR Unit	22	475	20%	8,360				
Single Family	*	•			•				
Village Green 5 BR	5 BR Unit	9	550	20%	3,960				
Village Green 4 BR	4 BR Unit	17	475	20%	6,460				
Golf Villas 5 BR	5 BR Unit	8	550	20%	3,520				
Golf Villas 4 BR	4 BR Unit	21	475	20%	7,980				
South Lawn 5 BR	5 BR Unit	7	550	20%	3,080				
South Lawn 4 BR	4 BR Unit	3	475	20%	1,140				
Estate Homesite	5 BR Unit	17	550	20%	7,480				
Total					60,540				
	I	Phase 1 Non-Resident	ial Summary						
Lodge Clubhouse			an Summary						
Lodge Clubhouse Restaurant	Number of Seats	167	35	20%	4,676				
-	Number of Seats Employee			20% 20%	4,676				
Restaurant		167	35		-				
Restaurant Store / Pro Shop Pool	Employee	167 4	35 15	20%	48				
Restaurant Store / Pro Shop Pool Sales House - General Store	Employee Swimmer	167 4 50 ²	35 15 10	20% 20%	48 400				
Restaurant Store / Pro Shop Pool Sales House - General Store	Employee Swimmer	167 4 50 ²	35 15 10	20% 20%	48 400				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn	Employee Swimmer SF	167 4 50 ² 5,000	35 15 10 0.1	20% 20% 20%	48 400 400				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool	Employee Swimmer SF Each	167 4 50 ² 5,000 2 ²	35 15 10 0.1 400	20% 20% 20% 20%	48 400 400 640				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool	Employee Swimmer SF Each	167 4 50 ² 5,000 2 ²	35 15 10 0.1 400	20% 20% 20% 20%	48 400 400 640				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Fitness	Employee Swimmer SF Each Swimmer	$ \begin{array}{r} 167 \\ 4 \\ 50^2 \\ 5,000 \\ 2^2 \\ 50^2 \\ \\ 50^2 \end{array} $	35 15 10 0.1 400 10	20% 20% 20% 20% 20%	48 400 400 640 400				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Fitness Pool	Employee Swimmer SF Each Swimmer Swimmer	$ \begin{array}{r} 167 \\ 4 \\ 50^2 \\ 5,000 \\ 2^2 \\ 50^2 \\ 50^2 \\ 50^2 \end{array} $	35 15 10 0.1 400 10 10	20% 20% 20% 20% 20% 20%	48 400 400 640 400 400				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Pool Bathrooms Pool Bathrooms Showers	Employee Swimmer SF Each Swimmer Swimmer Each	$ \begin{array}{r} 167 \\ 4 \\ 50^2 \\ 5,000 \\ 2^2 \\ 50^2 \\ 50^2 \\ 50^2 \\ 2^2 \\ 50^2 \\ 2^2 \\ 50^2 \\ $	35 15 10 0.1 400 10 10 400	20% 20% 20% 20% 20% 20%	48 400 400 640 400 400 640				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Pool Pool Bathrooms Pool Bathrooms Showers Golf Maintenance Building	Employee Swimmer SF Each Swimmer Swimmer Each Each	$ \begin{array}{r} 167 \\ 4 \\ 50^{2} \\ 5,000 \\ 2^{2} \\ 50^{2} \\ 50^{2} \\ 2^{2} \\ 8^{2} \\ 8^{2} \\ \end{array} $	35 15 10 0.1 400 10 10 400 10	20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 400 640 64				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Pool Pool Bathrooms Pool Bathrooms Showers Golf Maintenance Building Golf Academy	Employee Swimmer SF Each Swimmer Each Each SF	$ \begin{array}{r} 167 \\ 4 \\ 50^{2} \\ 5,000 \\ 2^{2} \\ 50^{2} \\ 50^{2} \\ 2^{2} \\ 8^{2} \\ 11,500 \\ \end{array} $	35 15 10 0.1 400 10 10 400 10 0.1	20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 400 640 640 64 920				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Pool Pool Bathrooms Pool Bathrooms Showers Golf Maintenance Building Golf Academy	Employee Swimmer SF Each Swimmer Each Each SF	$ \begin{array}{r} 167 \\ 4 \\ 50^{2} \\ 5,000 \\ 2^{2} \\ 50^{2} \\ 50^{2} \\ 2^{2} \\ 8^{2} \\ 11,500 \\ \end{array} $	35 15 10 0.1 400 10 10 400 10 0.1	20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 400 640 640 64 920				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Fitness Pool Bathrooms Showers Golf Maintenance Building Golf Academy Lake Pavilion Bathrooms	Employee Swimmer SF Each Swimmer Each Each SF Sudent	$ \begin{array}{r} 167 \\ 4 \\ 50^2 \\ 5,000 \\ 2^2 \\ 50^2 \\ 50^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ \end{array} $	35 15 10 0.1 400 10 10 10 400 10 0.1 10	20% 20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 400 640 640 64 920 320				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Pool Bathrooms Pool Bathrooms Showers Golf Maintenance Building Golf Academy Lake Pavilion	Employee Swimmer SF Each Swimmer Each Each SF Sudent	$ \begin{array}{r} 167 \\ 4 \\ 50^2 \\ 5,000 \\ 2^2 \\ 50^2 \\ 50^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ \end{array} $	35 15 10 0.1 400 10 10 10 400 10 0.1 10	20% 20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 400 640 64 920 320				
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool Pool Fitness Pool Bathrooms Showers Golf Maintenance Building Golf Academy Lake Pavilion Bathrooms Comfort Stations	Employee Swimmer SF Each Swimmer Each Each SF Sudent Each	$ \begin{array}{r} 167 \\ 4 \\ 50^2 \\ 5,000 \\ 2^2 \\ 50^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ 2^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ 2^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ 2^2 \\ 8^2 \\ 11,500 \\ 40^2 \\ 2^2 \\ 8^2 \\ 10,500 \\ 40^2 \\ 2^2 \\ 8^2 \\ 10,500 \\ 40^2 \\ 2^2 \\ 8^2 \\ 10,500 \\ 40^2 \\ 8^2 \\ 10,500 \\ 40^2 \\ 8^2 \\ 10,500 \\ 40^2 \\ 8^2 \\ 10,500 \\ 40^2 \\ 10,500 \\ 10,500 \\ 10,500 \\$	35 15 10 0.1 400 10 10 10 400 10 0.1 10 0.1 10 400	20% 20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 640 640 64 920 320 640				

Total Phase 1 Wastewater Flows = 72,852 G.P.D.

1 - Hydraulic Loading Rates as per NYSDEC Design Standards for Wastewater Treatment Works 1988 2 - Certain assumptions were made regarding daily wastewater flow generation. Prior to final wastewater design uses and anticipated flows shall be confirmed with applicant



Daily Wastewater Design Flows Phase 2 Silo Ridge Resort Community

Project Component	Flow	Unit Quantity	Flow Generation Rate (GPD) ¹	Flow Reduction Credit	Average Daily Flow (GPD)			
Phase 2 Summary								
Lodge								
Lodge Clubhouse	1 BR Unit	5	150	20%	600			
Single Family					·			
South Lawn 5 BR	5 BR Unit	6	550	20%	2,640			
South Lawn 4 BR	4 BR Unit	17	475	20%	6,460			
Estate Homesite	5 BR Unit	41	550	20%	18,040			
Total					27,740			
Sub Total Phase 2 Wastewater Flows = 27,740 G.P.D.								

Daily Wastewater Design Flows Phase 3 Silo Ridge Resort Community

Project Component	Flow	Unit Quantity	Flow Generation Rate (GPD) ¹	Flow Reduction Credit	Average Daily Flow (GPD)				
Phase 3 Summary									
Winery Building									
Restaurant	Number of Seats	80	35	20%	2,240				
Winery	Allowance	1	2000 ²	20%	1,600				
Vineyard Cottages Pool and Cab	ana								
Pool	Swimmer	50 ²	10	20%	400				
Bathrooms	Each	2 ²	400	20%	640				
Single Family	•		•						
Vineyard Cottages	3 BR Unit	19	400	20%	6,080				
Total			•		10,960				
Sub Total Phase 3 Wastewater Flows = 10,960 G.P.D.									

Total Phase 2 & 3 Wastewater Flows = 38,700 G.P.D.

1 - Hydraulic Loading Rates as per NYSDEC Design Standards for Wastewater Treatment Works 1988

2 - Certain assumptions were made regarding daily wastewater flow generation. Prior to final wastewater design uses and anticipated flows shall be confirmed with applicant