# 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) <sup>1</sup>	Flow Reduction Credit	Average Daily Flow (GPD)
		Phase 1 Residential	Summary		
/illage 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
odge Clubhouse	F	Phase 1 Non-Resident	ial Summary		
Lodge Clubhouse Restaurant	Number of Seats	Phase 1 Non-Resident	tial Summary 35	20%	4,676
			· · · · · · · · · · · · · · · · · · ·	20% 20%	4,676 48
Restaurant	Number of Seats	167	35		•
Restaurant Store / Pro Shop	Number of Seats Employee	167 4	35 15	20%	48
Restaurant Store / Pro Shop Pool	Number of Seats Employee Swimmer	167 4 50 <sup>2</sup>	35 15 10	20%	48 400
Restaurant Store / Pro Shop Pool Sales House - General Store	Number of Seats Employee Swimmer	167 4 50 <sup>2</sup>	35 15 10	20%	48 400
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn	Number of Seats  Employee  Swimmer  SF	167 4 50 <sup>2</sup> 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	Number of Seats  Employee  Swimmer  SF  Each	167 4 50 <sup>2</sup> 5,000	35 15 10 0.1	20% 20% 20% 20%	48 400 400 640
Restaurant Store / Pro Shop Pool Sales House - General Store Activity Barn Bathrooms Pool	Number of Seats  Employee  Swimmer  SF  Each	167 4 50 <sup>2</sup> 5,000	35 15 10 0.1	20% 20% 20% 20%	48 400 400 640
Restaurant Store / Pro Shop Pool Gales House - General Store Activity Barn Bathrooms Pool Pool Fitness	Number of Seats  Employee  Swimmer  SF  Each  Swimmer	167 4 50 <sup>2</sup> 5,000 2 <sup>2</sup> 50 <sup>2</sup>	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	Number of Seats  Employee  Swimmer  SF  Each  Swimmer  Swimmer	167 4 50 <sup>2</sup> 5,000 2 <sup>2</sup> 50 <sup>2</sup>	35 15 10 0.1 400 10	20% 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 Bathrooms	Number of Seats  Employee Swimmer SF  Each Swimmer  Swimmer  Each	167 4 50° 5,000 2° 50° 50° 2° 2° 8° 11,500	35 15 10 0.1 400 10	20% 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 Fitness Pool Bathrooms Showers	Number of Seats  Employee Swimmer SF  Each Swimmer  Swimmer  Each Each Each	167 4 50° 5,000 2° 50° 50° 50° 2° 8° 2° 8°	35 15 10 0.1 400 10 400 400 10	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 Fitness Pool Bathrooms Showers Golf Maintenance Building	Number of Seats  Employee Swimmer SF  Each Swimmer  Swimmer  Each Each SSF	167 4 50° 5,000 2° 50° 50° 2° 2° 8° 11,500	35 15 10 0.1 400 10 400 400 10 0.1	20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 640 64 920
Restaurant Store / Pro Shop Pool Gales House - General Store Activity Barn Bathrooms Pool Pool Fitness Pool Bathrooms Showers Golf Maintenance Building Golf Academy	Number of Seats  Employee Swimmer SF  Each Swimmer  Swimmer  Each Each SSF	167 4 50° 5,000 2° 50° 50° 2° 2° 8° 11,500	35 15 10 0.1 400 10 400 400 10 0.1	20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 640 64 920
Restaurant Store / Pro Shop Pool Gales House - General Store Activity Barn Bathrooms Pool Pool Fitness Pool Bathrooms Showers Golf Maintenance Building Golf Academy Lake Pavilion	Number of Seats  Employee Swimmer SF  Each Swimmer  Swimmer  Each Each Each SSF  Sudent	167 4 50² 5,000  2² 50² 50²  2² 11,500 40²	35 15 10 0.1 400 10 10 400 10 0.1 10	20% 20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 640 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	Number of Seats  Employee Swimmer SF  Each Swimmer  Swimmer  Each Each Each SSF  Sudent	167 4 50² 5,000  2² 50² 50²  2² 11,500 40²	35 15 10 0.1 400 10 10 400 10 0.1 10	20% 20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 640 64 920 320
Restaurant Store / Pro Shop Pool Gales House - General Store Activity Barn Bathrooms Pool Pool Fitness Pool Bathrooms Showers Golf Maintenance Building Golf Academy Lake Pavilion Bathrooms Comfort Stations	Number of Seats  Employee Swimmer SF  Each Swimmer  Swimmer  Each Each Sach Each Each Each Each Each Each	167 4 50² 5,000  2² 50² 50² 2² 40² 2² 2² 8² 11,500 40²	35 15 10 0.1 400 10 400 10 0.1 10	20% 20% 20% 20% 20% 20% 20% 20% 20% 20%	48 400 400 640 400 640 64 920 320 640

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

 <sup>1 -</sup> 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) <sup>1</sup>	Flow Reduction Credit	Average Daily Flow (GPD)
		Phase 2 Sumi	mary		1
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

#### Daily Wastewater Design Flows Phase 3 Silo Ridge Resort Community

Project Component	Flow	Unit Quantity	Flow Generation Rate (GPD) <sup>1</sup>	Flow Reduction Credit	Average Daily Flow (GPD)
		Phase 3 Sumi	nary		
Winery Building					
Restaurant	Number of Seats	80	35	20%	2,240
Winery	Allowance	1	2000 <sup>2</sup>	20%	1,600
Vineyard Cottages Pool and Ca	bana				
Pool	Swimmer	50 <sup>2</sup>	10	20%	400
Bathrooms	Each	2 <sup>2</sup>	400	20%	640
Single Family	•				1
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.

<sup>1 -</sup> Hydraulic Loading Rates as per NYSDEC Design Standards for Wastewater Treatment Works 1988

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