

APPENDIX D

Water and Wastewater Design Flow Calculations



Project Dover Greens – Full Build Project # 29273.00

Location Dover, New York

Calculated by CJO Date 5/23/16

Checked by MWJ Date 5/23/16

Title Water and Wastewater Design Flow Calculations

Description / Classification	Type of Use (NYSDEC)	Quantity	Unit	Gallons Per Day*	Total (gpd)
University Dormed Students (80%) / Dormed Student	School Boarding	2,000	Per Student	75	150,000
University Day Students (20%) / Day Student	School - Day	500	Per Student	15	7,500
University Staff (1 staff / 5 students) / Staff	Employee	500	Per Employee	15	7,500
Resident Staff Families / Staff	Employee	156	Per Employee	15	2,340
Partner Organization / Staff	Office Building	225	Per Employee	15	3,375
Day Care / Family Center	Day Care	75	Per Child	20	1,500
K-12 Primary School Students / Day Students	School - Day	210	Per Student	22	4,620
K-12 Primary School Staff / Staff	Employee	42	Per Employee	15	630
University Dormed Cafeteria	24- Hour Restaurant	588	Per Seat	50	29,400
				Total	206,865

**Numbers based upon Section B.6.b "Design Flows" found in the NYSDEC Design Standards for Intermediate Sized Wastewater Treatment Systems*



Project Dover Greens – Phase 1 Project # 29273.00
 Location Dover, New York
 Calculated by CJO Date 5/23/16
 Checked by MWJ Date 5/23/16
 Title Water and Wastewater Design Flow Calculations

Description / Classification	Type of Use (NYSDEC)	Quantity	Unit	Gallons Per Day*	Total (gpd)
University Dormed Students (80%) / Dormed Student	School Boarding	105	Per Student	75	7,875
University Day Students (20%) / Day Student	School - Day	26	Per Student	15	390
University Staff (1 staff / 5 students) / Staff	Employee	50	Per Employee	15	750
Resident Staff Families / Staff	Employee	68	Per Employee	15	1,020
Partner Organization / Staff	Office Building	135	Per Employee	15	2,025
Day Care / Family Center	Day Care	20	Per Child	20	400
K-12 Primary School Students / Day Students	School - Day	20	Per Student	22	440
K-12 Primary School Staff / Staff	Employee	4	Per Employee	15	60
University Dormed Cafeteria	24- Hour Restaurant	588	Per Seat	50	29,400
				Total	42,360

*Numbers based upon Section B.6.b "Design Flows" found in the NYSDEC Design Standards for Intermediate Sized Wastewater Treatment Systems