

Storm Sewer Design Calculations - WI DSPS Area Method

PROJECT Victor Haen Elementary - Site Improvements
LOCATION Kaukauna

CALCULATIONS BY GMC
DATE 5/1/2025
CHECKED BY GMC
DATE 5/1/2025



Structures		Areas (SF)			Design Flow Rate (GPM)					Pipe Selections		Pipe Flow Characteristics					
from	to	Grass	Paved / Gravel	Roof	Grass	Paved / Gravel	Roof	Pipe Flow	Total	size or diameter, inches	Slope, %	Capacity, Qfull, gpm	VelocityFull, Vfull, fps	Q/Qfull	approx. depth of flow, in	V/Vfull	V, actual, fps
ST #1	Ex 10"	0	782	0	0	24	0	0	24	4	7.50	252	6.43	0.10	0.82	0.64	4.12
ST #2	Ex 15"	14436	6672	0	139	205	0	0	344	8	1.04	597	3.81	0.58	3.53	0.95	3.61
ST #3	ST #5									6	4.62	Ex. Bldg Flow Unknown					
ST #4	EW #1				0	0	0	0	1184	12	0.26	Flow from Bldg Plumbing Designer					
6" INLET	ST #5				0	0	0	0	373	6	0.50	Engineered for Rate Control					