

Tab 2.11
 Sump Inlets in John Street Double Type "A" Inlet Capacity Calculations
 John Street Feasibility Design Analysis Report

Curb Opening (Treated As Orifice)	
Orifice Calcs	
$Q_o = .6Av\sqrt{2gh}$	
A = Open area of weir (sq. ft)	5.5
g = 32.2 (ft/s ²)	32.20
H = Head (ft)	0.67
clogging factor =	0%
Qw = Capacity (cfs) Number of Inlets	21.6 4
Total Discharge (cfs):	86.5

Notes:
 Type "A" Double curb opening is approximately 6 inches (0.5 feet) tall by 26 inches wide (11 feet). 8 inch (0.67 feet) curb height, or head available.

Grate (Treated As Weir)	
Weir Flow Calcs	
$Q_w = 2.7L(H)^{1.5}$	
P = Perimeter (ft)	
H = Head (ft)	0.67
coefficient of discharge =	2.70
clogging factor =	15%
Qw = Capacity (cfs)	0.0

Notes:

Grate (Treated As Orifice)	
Orifice Calcs	
$Q_o = .6Av\sqrt{2gh}$	
A = Open area of grate (sq. ft)	14.6
g = 32.2 (ft/s ²)	32.20
H = Head (ft)	0.67
clogging factor =	15%
Qo = Capacity (cfs) Number of Inlets Total Discharge (cfs):	48.9 4 195.5

Notes:
 Total length of grate is 81 inches (6.75 feet), then grate width total is 21 inches (2.17 feet).

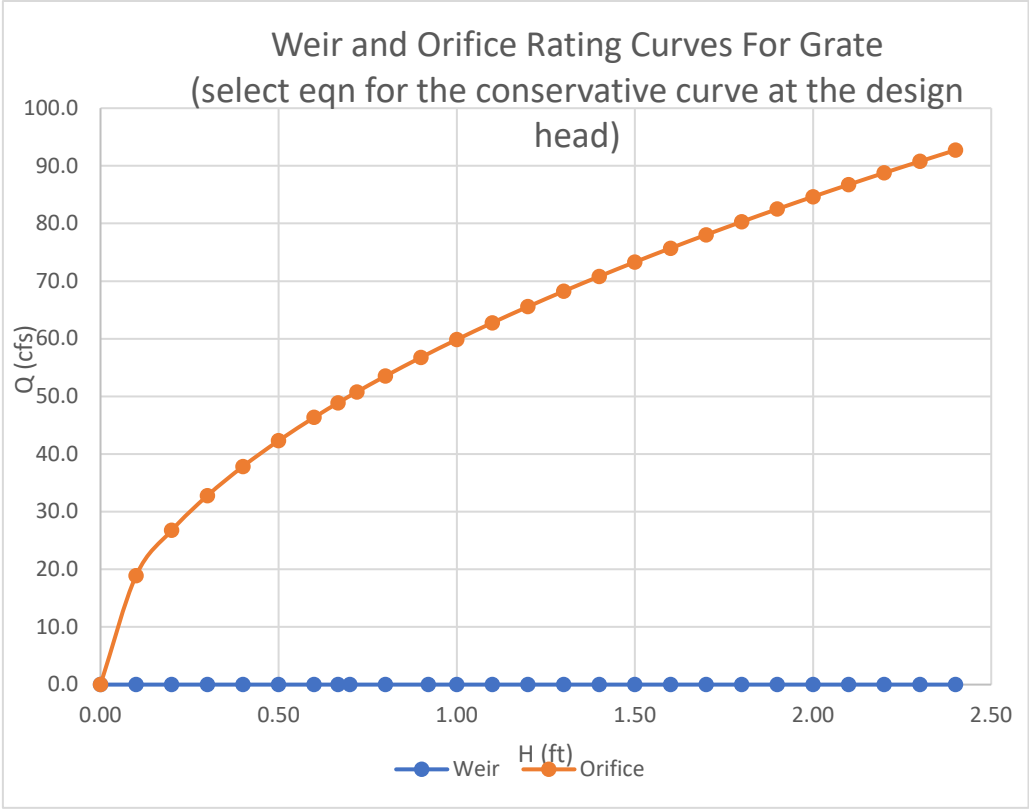


Table 2.12
Sump Inlets in Williams Street Double Type "A" Inlet Capacity Calculations
John Street Feasibility Design Analysis Report

Curb Opening (Treated As Orifice)	
Orifice Calcs	
Qo = .6Av2gh	
A = Open area of weir (sq. ft)	5.5
g = 32.2 (ft/s2)	32.20
H = Head (ft)	0.67
clogging factor =	0%
Qw = Capacity (cfs)	21.6
Number of Inlets	4
Total Discharge (cfs):	86.5

Notes:
Type "A" Double curb opening is approximately 6 inches (0.5 feet) tall by 26 inches wide (11 feet). 8 inch (0.67 feet) curb height, or head available.

Grate (Treated As Weir)	
Weir Flow Calcs	
Qw = 2.7L(H)1.5	
P = Perimeter (ft)	
H = Head (ft)	0.67
coefficient of discharge =	2.70
clogging factor =	15%
Qw = Capacity (cfs)	0.0

Notes:

Grate (Treated As Orifice)	
Orifice Calcs	
Qo = .6Av2gh	
A = Open area of grate (sq. ft)	14.6
g = 32.2 (ft/s2)	32.20
H = Head (ft)	0.67
clogging factor =	15%
Qo = Capacity (cfs)	48.9
Number of Inlets	4
Total Discharge (cfs):	195.5

Notes:
Total length of grate is 81 inches (6.75 feet), then grate width total is 21 inches (2.17 feet).

