

PROJECT NAME : SYSTEM G INLETS
JOB NUMBER :
PROJECT DESCRIPTION :
DESIGN FREQUENCY : 100 Years
MEASUREMENT UNITS: ENGLISH

COMPUTATION SHEETS

- TIME OF CONCENTRATION IS DETERMINED ACCORDING TO CITY OF ROCKWALL CRITERIA.

OUTPUT FOR DESIGN FREQUENCY of: 100 Years

Runoff Computation for Design Frequency.

ID	C Value	Area (acre)	Tc (min)	Tc Used (min)	Intensity (in/hr)	Supply Q (cfs)	Total Q (cfs)
G-1	0.9	0.55	10.00	10.00	9.80	0.000	4.860
G-2	0.9	0.28	10.00	10.00	9.80	0.000	2.430
G-3	0.9	0.83	10.00	10.00	9.80	0.000	7.321
G-4	0.9	0.55	10.00	10.00	9.80	0.000	4.860
G-5	0.9	0.28	10.00	10.00	9.80	0.000	2.430
G-6	0.9	0.93	10.00	10.00	9.80	0.000	8.203
G-7	0.9	0.26	10.00	10.00	9.80	0.000	2.308
G-8	0.9	0.26	10.00	10.00	9.80	0.000	2.308
G-9	0.9	0.22	10.00	10.00	9.80	0.000	1.942
G-10	0.9	0.22	10.00	10.00	9.80	0.000	1.942

On Grade Inlet Configuration Data

Inlet ID	Inlet Type	Inlet Length (ft)	Inlet Long Slopes (%)	Inlet Trans Slopes (%)	Gutter n	Gutter Depr. (ft)	Gutter Width (ft)	Gutter Type	Pond Width (ft)	Critic Elev. (ft)
G-1	Curb	10.00	0.54	2.00	0.016	0.25	n/a	n/a	14.00	541.49
G-3	Curb	10.00	2.00	2.00	0.016	0.25	n/a	n/a	14.00	543.60
G-4	Curb	10.00	0.54	2.00	0.016	0.25	n/a	n/a	14.00	541.49
G-6	Curb	10.00	2.00	2.00	0.016	0.25	n/a	n/a	14.00	543.60
G-7	Curb	10.00	0.54	2.00	0.016	0.25	n/a	n/a	14.00	540.46
G-8	Curb	10.00	0.54	2.00	0.016	0.25	n/a	n/a	14.00	540.46
G-9	Curb	10.00	1.21	2.00	0.016	0.25	n/a	n/a	14.00	540.66
G-10	Curb	10.00	1.21	2.00	0.016	0.25	n/a	n/a	14.00	540.66

On Grade Inlets Computation Data.

Inlet ID	Inlet Type	Total Q (cfs)	Intercept Capacity (cfs)	Q Allow (cfs)	Q Actual (cfs)	To Inlet ID	Required Length (ft)	Actual Length (ft)	Ponded Width (ft)
G-1	Curb	4.860	4.503	0.000	0.357	G-8	13.06	10.00	14.65
G-3	Curb	7.321	4.840	0.000	2.480	G-10	22.13	10.00	13.35
G-4	Curb	4.860	4.503	0.000	0.357	G-7	13.06	10.00	14.65
G-6	Curb	8.203	5.157	0.000	3.046	G-9	23.63	10.00	13.95
G-7	Curb	2.665	2.665	0.000	0.000	G-5	9.28	10.00	11.70
G-8	Curb	2.665	2.665	0.000	0.000	G-2	9.28	10.00	11.70
G-9	Curb	4.988	4.154	0.000	0.834	G-5	15.88	10.00	12.70
G-10	Curb	4.422	3.834	0.000	0.589	G-2	14.84	10.00	12.15

Sag Inlets Configuration Data.

Inlet ID	Inlet Type	Inlet Length/Perim (ft)	Grate Area (sf)	Left-Slope Long Trans (%)	Right-Slope Long Trans (%)	Gutter n	Gutter DeprW (ft)	Depth Allowed (ft)	Critic Elev. (ft)		
G-2	Curb	15.00	n/a	0.10	2.00	0.10	2.00	0.016	2.00	0.42	540.05
G-5	Curb	15.00	n/a	0.10	2.00	0.10	2.00	0.016	2.00	0.42	540.05

Sag Inlets Computation Data.

Inlet ID	Inlet Type	Inlet Length (ft)	Grate Perim (ft)	Grate Area (sf)	Total Q (cfs)	Inlet Capacity (cfs)	Total Head (ft)	Ponded Left (ft)	Ponded Right (ft)
G-2	Curb	15.00	n/a	n/a	3.018	11.503	0.171	12.95	12.95
G-5	Curb	15.00	n/a	n/a	3.264	11.503	0.180	13.35	13.35

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RECORD DRAWING

This drawing is a compilation of the original sealed engineering drawing and modifications by addenda, change orders and information furnished by the contractor. Information shown that was provided by the contractor and others not associated with the design engineer cannot be verified for accuracy or completeness. Original sealed drawing is on file at the office of AECOM USA Group, Inc., TBPE REG. NO. F-3082

ORIGINAL DRAWING
SEALED & SIGNED BY

T.H. Gaertner, P.E.
TX NO. 37124

NO.	REVISION	BY	DATE						
City of Rockwall, Texas									
205 BYPASS PHASE 3									
HYDRAULIC DATA SYSTEM G INLETS									
		<small>TCB INC. WWW.TCB.AECOM.COM 17300 DALLAS PARKWAY, SUITE 1010 DALLAS, TEXAS 75248</small>							
Unit	PW-DAL-FW	Scales	Horz: AS SHOWN Vert: AS SHOWN	Date	11/23/2009				
Designed	SB	Checked	TCB	Project No.	60004153				
Drawn	FG	Approved	TCB	Sheet	69 of 215				