WinStorm (STORM DRAIN DESIGN) Version 3.05, Jan. 25, 2002
Run @ 5/29/2008 7:12:46 AM

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

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)
D-1	0.9	0.64	10.00	10.00	9.80	0.000	5.601
D-2	0.9	0.68	10.00	10.00	9.80	0.000	5.962
D-3	0.9	0.40	10.00	10.00	9.80	0.000	3.546
D-4	0.615	1.68	10.00	10.00	9.80	0.000	10.128
	0.9	0.81	Pavement				
	0.35	0.87	Undeveloped				
D-5	0.9	0.28	10.00	10.00	9.80	0.000	2.430
D-6	0.9	0.93	10.00	10.00	9.80	0.000	8.229
D-7	0.9	0.71	10.00	10.00	9.80	0.000	6.297
D-8	0.9	0.48	10.00	10.00	9.80	0.000	4.242
D-9	0.9	0.65	10.00	10.00	9.80	0.000	5.730
D-10	0.9	0.94	10.00	10.00	9.80	0.000	8.308
D-11	0.9	0.28	10.00	10.00	9.80	0.000	2.430
D-12	0.597	2.03	10.00	10.00	9.80	0.000	11.903
	0.9	0.91	Pavement				
	0.35	1.12	Undeveloped				
OSD1	0.5	5.85	20.00	20.00	8.33	0.000	24.374
D-13	0.9	0.44	10.00	10.00	9.80	0.000	3.889
D-14	0.9	0.44	10.00	10.00	9.80	0.000	3.889
D-15	0.9	0.25	10.00	10.00	9.80	0.000	2.184
D-16	0.9	0.25	10.00	10.00	9.80	0.000	2.184

On Grade Inlet Configuration Data

Inlet ID	Inlet Type	Inlet Length (ft)	Slopes Long (%)	Slopes Trans (%)	Gutter n	Gutter Depr. (ft)	Grate Width (ft)	Grate Type	Pond Width Allowed (ft)	Critic Elev. (ft)
D-1	Curb	15.00	0.90	2.00	0.016	0.25	n/a	n/a	14.00	534.63
D-2	Curb	10.00	0.60	2.00	0.016	0.25	n/a	n/a	14.00	531.41
D-3	Curb	15.00	1.65	2.00	0.016	0.25	n/a	n/a	14.00	529.25
D-4	Curb	15.00	2.97	2.00	0.016	0.25	n/a	n/a	14.00	510.89
D-6	Curb	15.00	3.25	2.00	0.016	0.25	n/a	n/a	14.00	507.08
D-7	Curb	10.00	0.90	2.00	0.016	0.25	n/a	n/a	14.00	534.54
D-8	Curb	15.00	0.60	2.00	0.016	0.25	n/a	n/a	14.00	532.60
D-9	Curb	15.00	1.51	2.00	0.016	0.25	n/a	n/a	14.00	529.63
D-10	Curb	15.00	2.97	2.00	0.016	0.25	n/a	n/a	14.00	510.89
D-12	Curb	15.00	3.25	2.00	0.016	0.25	n/a	n/a	14.00	507.08
D-13	Curb	10.00	1.05	2.00	0.016	0.25	n/a	n/a	14.00	503.01
D-14	Curb	10.00	1.05	2.00	0.016	0.25	n/a	n/a	14.00	503.01
D-15	Curb	10.00	1.21	2.00	0.016	0.25	n/a	n/a	14.00	503.13
D-16	Curb	10.00	1.21	2.00	0.016	0.25	n/a	n/a	14.00	503.13

On Grade Inlets Conmputation Data.

Inlet ID	Inlet Type	Total Q (cfs)	Intercept Capacity (cfs)	Q Bypass Allow (cfs)	Q Bypass Actual (cfs)	To Inlet ID	Required Length (ft)	Actual Length (ft)	Ponded Width (ft)
D-1	Curb	5.601	5.570	0.000	0.031	D-2	15.89	15.00	14.05
D-2	Curb	5.993	5.150	0.000	0.844	D-3	15.07	10.00	15.50
D-3	Curb	4.389	4.367	0.000	0.023	D-4	15.85	15.00	11.40
D-4	Curb	10.151	7.390	0.000	2.761	D-13	29.14	15.00	14.00
D-6	Curb	8.229	6.414	0.000	1.815	D-15	26.40	15.00	12.75
D-7	Curb	6.297	5.027	0.000	1.271	D-8	16.98	10.00	14.65
D-8	Curb	5.513	5.513	0.000	0.000	D-9	14.37	15.00	15.05
D-9	Curb	5.730	5.494	0.000	0.236	D-10	18.07	15.00	12.85
D-10	Curb	8.544	6.655	0.000	1.889	D-14	26.43	15.00	13.15
D-12	Curb	11.903	7.978	0.000	3.925	D-16	32.60	15.00	14.65
D-13	Curb	6.650	5.078	0.000	1.572	D-5	18.14	10.00	14.55
D-14	Curb	5.778	4.655	0.000	1.123	D-11	16.73	10.00	13.80
D-15	Curb	3.999	3.576	0.000	0.422	D-5	14.02	10.00	11.70
D-16	Curb	6.109	4.721	0.000	1.388	D-11	17.82	10.00	13.70

Sag Inlets Configuration Data.

Inlet ID	Inlet Type	Length/ Perim. (ft)	Grate Area (sf)	Left-Slope Long (%)	Left-Slope Trans (%)	Right-Slope Long (%)	Right-Slope Trans (%)	Gutter n	Gutter DeprW (ft)	Depth Allowed (ft)	Critic Elev. (ft)
D-5	Curb	15.00	n/a	0.10	2.00	0.10	2.00	0.016	2.00	0.42	502.51
D-11	Curb	15.00	n/a	0.10	2.00	0.10	2.00	0.016	2.00	0.42	502.51
OSD1	Curb	16.00	n/a	0.50	2.00	0.50	2.00	0.016	2.00	0.42	528.00

Sag Inlets Computation Data.

Inlet ID	Inlet Type	Length (ft)	Grate Perim (ft)	Grate Area (sf)	Total Q (cfs)	Inlet Capacity (cfs)	Total Head (ft)	Ponded Width Left (ft)	Ponded Width Right (ft)
D-5	Curb	15.00	n/a	n/a	4.424	11.503	0.220	14.95	14.95
D-11	Curb	15.00	n/a	n/a	4.940	11.503	0.237	15.60	15.60
OSD1	Curb	16.00	n/a	n/a	24.374	16.350	0.671	20.95	20.95

END

COMPUTATION SHEETS

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

ORIGINAL DRAWING SEALED & SIGNED BY

T.H. Gaertner, P.E.

TX NO. 37124

NO.	REVISION	BY	DATE

City of Rockwall, Texas

205 BYPASS
PHASE 2

HYDRAULIC DATA
SYSTEM D INLETS

TCB | AECOM
TCB INC.
WWW.TCB.AECOM.COM
17300 DALLAS PARKWAY, SUITE 1010
DALLAS, TEXAS 75248

Unit	PW-DAL-FW	Scale:	Horz: AS SHOWN Vert: AS SHOWN	Date	11/23/2009
Designed	SDB	Checked	TCB	Project No.	60004153
Drawn	FG	Approved	TCB	Sheet	51 of 142

P:\4328\60004153-205Bypass\CADD\Sheets\Phase 2- SH 66 To 120+00\Record Drawing 10_7_09\05_056Hydraul1cdata-01.dgn
11/23/2009