WinStorm (STORM DRAIN DESIGN) Version 3.05, Jan. 25, 2002
Run @ 10/10/2007 3:45:32 PM

PROJECT NAME : SYSTEM L,M,N and O INLETS
JOB NUMBER :
PROJECT DESCRIPTION :
DESIGN FREQUENCY : 25 Years
MEASUREMENT UNITS: ENGLISH

OUTPUT FOR DESIGN FREQUENCY of: 25 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)
L-1	0.9	1.15	10.00	10.00	8.25	0.000	8.539
L-17	0.9	0.37	10.00	10.00	8.25	0.000	2.747
M-18	0.9	0.73	10.00	10.00	8.25	0.000	5.420
N-19	0.9	0.42	10.00	10.00	8.25	0.000	3.119
N-20	0.9	0.39	10.00	10.00	8.25	0.000	2.896
~~O-21~~	~~0.9~~	~~0.85~~	~~10.00~~	~~10.00~~	~~8.25~~	~~0.000~~	~~6.296~~
~~O-22~~	~~0.9~~	~~0.18~~	~~10.00~~	~~10.00~~	~~8.25~~	~~0.000~~	~~1.337~~
~~O-15~~	~~0.9~~	~~0.22~~	~~10.00~~	~~10.00~~	~~8.25~~	~~0.000~~	~~1.611~~
~~O-2~~	~~0.9~~	~~0.54~~	~~10.00~~	~~10.00~~	~~8.25~~	~~0.000~~	~~3.972~~
N-1	0.9	0.27	10.00	10.00	8.25	0.000	2.012
~~O-3~~	~~0.9~~	~~0.42~~	~~10.00~~	~~10.00~~	~~8.25~~	~~0.000~~	~~3.081~~
L-2	0.9	1.16	10.00	10.00	8.25	0.000	8.613
L-9	0.9	0.37	10.00	10.00	8.25	0.000	2.747
~~O-23~~	~~0.9~~	~~0.25~~	~~10.00~~	~~10.00~~	~~8.25~~	~~0.000~~	~~1.834~~
M-10	0.9	0.74	10.00	10.00	8.25	0.000	5.495
N-11	0.9	0.37	10.00	10.00	8.25	0.000	2.777
N-12	0.9	0.41	10.00	10.00	8.25	0.000	3.015
~~O-13~~	~~0.9~~	~~0.81~~	~~10.00~~	~~10.00~~	~~8.25~~	~~0.000~~	~~5.992~~
O-14	0.9	0.50	10.00	10.00	8.25	0.000	3.713
N-24	0.9	0.28	10.00	10.00	8.25	0.000	2.086
N-25	0.9	0.73	10.00	10.00	8.25	0.000	5.383
N-26	0.9	0.74	10.00	10.00	8.25	0.000	5.495

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)
L-1	Curb	15.00	4.81	2.00	0.016	0.25	n/a	n/a	14.00	470.52
L-17	Curb	15.00	2.42	2.00	0.016	0.25	n/a	n/a	14.00	460.65
M-18	Curb	15.00	1.00	2.00	0.016	0.25	n/a	n/a	14.00	454.90
N-19	Curb	10.00	0.50	2.00	0.016	0.25	n/a	n/a	14.00	451.00
N-20	Curb	10.00	0.50	2.00	0.016	0.25	n/a	n/a	14.00	449.61
~~O-21~~	~~Curb~~	~~15.00~~	~~0.50~~	~~3.00~~	~~0.016~~	~~0.25~~	~~n/a~~	~~n/a~~	~~14.00~~	~~451.06~~
~~O-22~~	~~Curb~~	~~15.00~~	~~0.50~~	~~3.00~~	~~0.016~~	~~0.25~~	~~n/a~~	~~n/a~~	~~14.00~~	~~449.80~~
~~O-2~~	~~Curb~~	~~10.00~~	~~0.50~~	~~2.00~~	~~0.016~~	~~0.25~~	~~n/a~~	~~n/a~~	~~14.00~~	~~449.56~~
~~O-3~~	~~Curb~~	~~10.00~~	~~0.50~~	~~3.00~~	~~0.016~~	~~0.25~~	~~n/a~~	~~n/a~~	~~14.00~~	~~448.24~~
L-2	Curb	15.00	4.81	2.00	0.016	0.25	n/a	n/a	14.00	470.52
L-9	Curb	15.00	2.42	2.00	0.016	0.25	n/a	n/a	14.00	460.65
M-10	Curb	15.00	1.00	2.00	0.016	0.25	n/a	n/a	14.00	454.90
N-11	Curb	10.00	0.50	2.00	0.016	0.25	n/a	n/a	14.00	449.62
N-12	Curb	10.00	0.50	2.00	0.016	0.25	n/a	n/a	14.00	451.00
~~O-13~~	~~Curb~~	~~15.00~~	~~0.50~~	~~3.00~~	~~0.016~~	~~0.25~~	~~n/a~~	~~n/a~~	~~14.00~~	~~449.02~~
~~O-14~~	~~Curb~~	~~10.00~~	~~0.50~~	~~3.00~~	~~0.016~~	~~0.25~~	~~n/a~~	~~n/a~~	~~14.00~~	~~447.87~~
N-25	Curb	10.00	1.00	2.00	0.016	0.25	n/a	n/a	14.00	449.78
N-26	Curb	10.00	1.00	2.00	0.016	0.25	n/a	n/a	14.00	449.77

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)
L-1	Curb	8.539	6.168	0.000	2.371	L-17	29.46	15.00	12.00
L-17	Curb	5.118	4.823	0.000	0.296	M-18	18.87	15.00	11.25
M-18	Curb	5.716	5.644	0.000	0.071	N-26	16.44	15.00	13.85
N-19	Curb	3.119	3.119	0.000	0.000	N-20	9.95	10.00	12.55
N-20	Curb	2.896	2.896	0.000	0.000	N-24	9.56	10.00	12.25
~~O-21~~	~~Curb~~	~~6.296~~	~~6.296~~	~~0.000~~	~~0.000~~	~~O-14~~	~~13.16~~	~~15.00~~	~~12.70~~
~~O-22~~	~~Curb~~	~~1.337~~	~~1.337~~	~~0.000~~	~~0.000~~	~~O-23~~	~~5.72~~	~~15.00~~	~~7.10~~
~~O-2~~	~~Curb~~	~~3.972~~	~~3.878~~	~~0.000~~	~~0.094~~	~~O-23~~	~~11.43~~	~~10.00~~	~~13.75~~
~~O-3~~	~~Curb~~	~~3.081~~	~~3.081~~	~~0.000~~	~~0.000~~	~~O-15~~	~~8.90~~	~~10.00~~	~~9.70~~
L-2	Curb	8.613	6.198	0.000	2.415	L-9	29.61	15.00	12.05
L-9	Curb	5.162	4.853	0.000	0.309	M-10	18.97	15.00	11.30
M-10	Curb	5.804	5.718	0.000	0.086	N-25	16.60	15.00	13.95
N-11	Curb	2.777	2.777	0.000	0.000	N-1	9.33	10.00	12.05
N-12	Curb	3.015	3.015	0.000	0.000	N-11	9.77	10.00	12.40
~~O-13~~	~~Curb~~	~~5.992~~	~~5.992~~	~~0.000~~	~~0.000~~	~~O-14~~	~~12.80~~	~~15.00~~	~~12.47~~
~~O-14~~	~~Curb~~	~~3.713~~	~~3.713~~	~~0.000~~	~~0.000~~	~~O-15~~	~~9.85~~	~~10.00~~	~~10.43~~
N-25	Curb	5.469	4.525	0.000	0.943	N-24	16.04	10.00	13.65
N-26	Curb	5.566	4.580	0.000	0.986	N-1	16.19	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)
~~O-15~~	~~Curb~~	~~15.00~~	~~n/a~~	~~0.10~~	~~3.00~~	~~0.10~~	~~3.00~~	~~0.016~~	~~2.00~~	~~0.42~~	~~447.79~~
N-1	Curb	15.00	n/a	0.10	2.00	0.10	2.00	0.016	2.00	0.42	449.23
N-24	Curb	15.00	n/a	0.10	2.00	0.10	2.00	0.016	2.00	0.42	449.23
~~O-23~~	~~Curb~~	~~15.00~~	~~n/a~~	~~0.10~~	~~2.80~~	~~0.10~~	~~2.80~~	~~0.016~~	~~2.00~~	~~0.42~~	~~449.54~~

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)
~~O-15~~	~~Curb~~	~~15.00~~	~~n/a~~	~~n/a~~	~~1.611~~	~~11.503~~	~~0.112~~	~~7.93~~	~~7.93~~
N-1	Curb	15.00	n/a	n/a	2.998	11.503	0.170	12.90	12.90
N-24	Curb	15.00	n/a	n/a	3.030	11.503	0.171	12.95	12.95
~~O-23~~	~~Curb~~	~~15.00~~	~~n/a~~	~~n/a~~	~~1.928~~	~~11.503~~	~~0.127~~	~~8.86~~	~~8.86~~

END

NORMAL TERMINATION OF WINSTORM.

COMPUTATION SHEETS

1. THIS OUTPUT FILE SHOWS RESULTS FOR ROCKWALL'S 25-YR DISCHARGE CONDITIONS TO SIZE AND PLACE INLETS.
2. ALL COMPUTATIONS ARE BASED ON EXISTING WATERSHED CONDITIONS
3. MAXIMUM ALLOWABLE PONDED WIDTH USED FOR DESIGN IS 14' PER CITY OF ROCKWALL VARIANCE.

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
1	DELETE O INLETS	THG	2/11/08

City of Rockwall, Texas

205 BYPASS
PHASE 6

HYDRAULIC DATA
SYSTEM L,M&N INLETS- 25 YR FLOWS

5 OF 10

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

Unit PW-DAL-FW	Scale: Horz: AS SHOWN Vert: AS SHOWN	Date	11/24/2009
Designed RI	Checked TCB	Project No.	60004153
Drawn EG	Approved TCB	Sheet	72A of 216

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11/24/2009