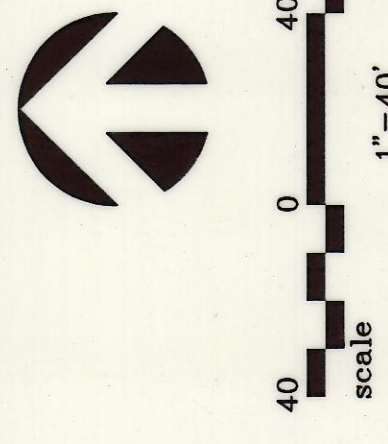


STORM SEWER CURVE DATA:

NUMBER	RADIUS	DELTA	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	100.00'	15°56'11"	27.81'	N 20°51'01" W	27.72'



NO.	DATE	REVISION
1	5/14/07	CONNECTION TO TREE DRAIN SHOWN.
2	10/10/07	REVISED INLET TYPE & STORM SEWER NOTES
3	11/16/07	REVISED INLET TYPE & STORM SEWER NOTES

STORM SYSTEM CALCULATIONS - LINE 'A'										
STATION	UP-STREAM	DOWN-STREAM	DISTANCE (ft)	D.A. (ft)	COLLECTED (GPM)	PIPE SLOPE (%)	SELECTED PIPE SIZE (in)	SELECTED PIPE SLOPE (%)	PIPE CAPACITY (GPM)	VELOCITY (ft/s)
4:01.01	3+90.45	11.6	6	0.70%	27	25.9	0.9	0.04%	6.5	0.69%
3+90.45	1+00.00	290.5	5	0.70%	27	25.9	0.9	0.04%	6.5	0.69%

STORM SYSTEM CALCULATIONS - LINE 'A-1'										
STATION	UP-STREAM	DOWN-STREAM	DISTANCE (ft)	D.A. (ft)	COLLECTED (GPM)	PIPE SLOPE (%)	SELECTED PIPE SIZE (in)	SELECTED PIPE SLOPE (%)	PIPE CAPACITY (GPM)	VELOCITY (ft/s)
0+27.31	0+14.68	12.6	6	1.57%	24	28.3	1.7	0.05%	7.0	0.65%
0+14.68	0+00.00	14.7	22.1	1.57%	24	28.3	1.7	0.05%	7.0	0.65%

STORM SYSTEM CALCULATIONS - LINE 'A-2'										
STATION	UP-STREAM	DOWN-STREAM	DISTANCE (ft)	D.A. (ft)	COLLECTED (GPM)	PIPE SLOPE (%)	SELECTED PIPE SIZE (in)	SELECTED PIPE SLOPE (%)	PIPE CAPACITY (GPM)	VELOCITY (ft/s)
1+04.20	0+00	104.2	AD	15, 12, 14, 16.9	1.46%	21	19.1	1.13%	7.0	1.13%

STORM SYSTEM CALCULATIONS - LINE 'B'										
STATION	UP-STREAM	DOWN-STREAM	DISTANCE (ft)	D.A. (ft)	COLLECTED (GPM)	PIPE SLOPE (%)	SELECTED PIPE SIZE (in)	SELECTED PIPE SLOPE (%)	PIPE CAPACITY (GPM)	VELOCITY (ft/s)
1+20.17	1+25.35	5.2	6	4.90%	18	23.2	2.4	0.17%	2.9	0.23%
1+00.00	1+20.17	10.2	AD	4.90%	18	23.2	2.4	0.17%	2.9	0.23%
1+00.00	1+00.00	10.0	AD	5.1	14.97%	18	46.2	0.24%	2.9	0.24%

STORM SYSTEM CALCULATIONS - LAT '1'										
STATION	UP-STREAM	DOWN-STREAM	DISTANCE (ft)	D.A. (ft)	COLLECTED (GPM)	PIPE SLOPE (%)	SELECTED PIPE SIZE (in)	SELECTED PIPE SLOPE (%)	PIPE CAPACITY (GPM)	VELOCITY (ft/s)
0+05.97	0+00	10.0	AD	1	28	3.20%	18	26.3	1.6	0.071%

STORM SYSTEM CALCULATIONS - AREA DRAINS FOR BUILDINGS									
DRAIN NUMBER	DISTANCE (ft)	D.A. (ft)	COLLECTED (GPM)	PIPE SLOPE (%)	SELECTED PIPE SIZE (in)	EXCESS CAPACITY (GPM)			
AD-1	180	13	0.8	0.8%	12	3.2			
AD-2	195	18	0.8	1.8%	12	4.8			
AD-3	140	12	2.9	1.0%	15	3.6			
AD-4	165	11.12	5.9	1.5%	15	9.7			
AD-5	10	2.9	4.6%	1.2	17	4.7			
AD-6	138	16	2.9	1.0%	15	3.6			
AD-7	145	15	1.0%	1.5	15	0.5			
AD-8A	40	14.15, 16.17	11.0	3.5%	15	12.1			
AD-9	21.0	14.17	5.0	2.1%	12	5.2			
AD-10	84	9	0.8	2.6%	12	5.8			

STORM SYSTEM CALCULATIONS - HEAD LOSS CALCULATIONS									
FROM TO	PIPE LENGTH (ft)	PIPE SIZE (in)	DIS. (ft)	VEL. (ft/s)	V. LOSS (ft)	H. LOSS (ft)	TOTAL LOSS (ft)	HEAD LOSS (ft)	DESIGN HEAD (ft)
Line A	3+97.46	4+01.01	3.55	3.70	0.013	0.00014	0.013	0.013	0.013
Line B	3+73.12	3+97.46	24.34	25.80	0.013	0.00694	0.013	0.013	0.013
Line C	1+05.97	3+73.12	285.15	25.80	0.013	0.00694	0.013	0.013	0.013
Line D	1+00	1+05.97	5.97	25.80	0.013	0.00694	0.013	0.013	0.013
Line E	0+14.64	0+27.31	12.67	5.20	0.013	0.00053	0.013	0.013	0.013
Line F	0+00	0+14.64	14.64	22.10	0.013	0.00694	0.013	0.013	0.013
Line G	0+00	0+99.20	99.20	16.90	0.013	0.01138	0.013	0.013	0.013
Line H	1+18.42	1+25.35	6.93	2.80	0.013	0.00071	0.013	0.013	0.013
Line I	1+11.39	1+18.42	7.03	6.50	0.013	0.00383	0.013	0.013	0.013
Line J	1+00	1+11.39	11.39	6.50	0.013	0.00383	0.013	0.013	0.013
Line K	1+00	1+00	0.00	6.50	0.013	0.00383	0.013	0.013	0.013
Line L	0+29.97	9.97	9.97	16.90	0.013	0.01138	0.013	0.013	0.013

STORM SYSTEM CALCULATIONS - AREA DRAINS FOR BUILDINGS									
DRAIN NUMBER	DISTANCE (ft)	D.A. (ft)	COLLECTED (GPM)	PIPE SLOPE (%)	SELECTED PIPE SIZE (in)	EXCESS CAPACITY (GPM)			
AD-1	180	13	0.8	0.8%	12	3.2			
AD-2	195	18	0.8	1.8%	12	4.8			
AD-3	140	12	2.9	1.0%	15	3.6			
AD-4	165	11.12	5.9	1.5%	15	9.7			
AD-5	10	2.9	4.6%	1.2	17	4.7			
AD-6	138	16	2.9	1.0%	15	3.6			
AD-7	145	15	1.0%	1.5	15	0.5			
AD-8A	40	14.15, 16.17	11.0	3.5%	15	12.1			
AD-9	21.0	14.17	5.0	2.1%	12	5.2			
AD-10	84	9	0.8	2.6%	12	5.8			

FROM TO	PIPE LENGTH (ft)	PIPE SIZE (in)	DIS. (ft)	VEL. (ft/s)	V. LOSS (ft)	H. LOSS (ft)	TOTAL LOSS (ft)	HEAD LOSS (ft)	DESIGN HEAD (ft)
Line A	3+97.46	4+01.01	3.55	3.70	0.013	0.00014	0.013	0.013	0.013
Line B	3+73.12	3+97.46	24.34	25.80	0.013	0.00694	0.013	0.013	0.013
Line C	1+05.97	3+73.12	285.15	25.80	0.013	0.00694	0.013	0.013	0.013
Line D	1+00	1+05.97	5.97	25.80	0.013	0.00694	0.013	0.013	0.013
Line E	0+14.64	0+27.31	12.67	5.20	0.013	0.00053	0.013	0.013	0.013
Line F	0+00	0+14.64	14.64	22.10	0.013	0.00694	0.013	0.013	0.013
Line G	0+00	0+99.20	99.20	16.90	0.013	0.01138	0.013	0.013	0.013
Line H	1+18.42	1+25.35	6.93	2.80	0.013	0.00071	0.013	0.013	0.013
Line I	1+11.39	1+18.42	7.03	6.50	0.013	0.00383	0.013	0.013	0.013
Line J	1+00	1+11.39	11.39	6.50	0.013	0.00383	0.013	0.013	0.013
Line K	1+00	1+00	0.00	6.50	0.013	0.00383	0.013	0.013	0.013
Line L	0+29.97	9.97	9.97	16.90	0.013	0.01138	0.013	0.013	0.013

Notes:
 1. HG elevation at connection to existing pipe in Dallas Parkway assumed to be the top of pipe.
 2. HG elevation at connection to existing pipe in Spectrum Drive taken from Spectrum Drive Extension Plans.

- STORM SEWER NOTES:**
- CONTRACTOR SHALL REFER TO LANDSCAPE PLANS FOR LOCATION OF ALL AREA DRAINS AND SUBSURFACE TREE DRAINS.
 - CONTRACTOR SHALL REFER TO BUILDING PLANS FOR LOCATION OF ALL ROOF DRAINS.
 - ALL LANDSCAPE AREA DRAINS SHALL BE CONNECTED WITH 6" PVC SDR-35 DIRECTLY TO ADJACENT PVC STORM SEWERS SHOWN IN THIS SHEET AT 45 DEGREE ANGLE.
 - ALL TREE WELL DRAINS SHALL BE CONNECTED WITH 4" PVC SDR-35 DIRECTLY TO ADJACENT PVC STORM SEWERS SHOWN IN THIS SHEET AT 90 DEGREE ANGLE.
 - ALL ROOF DRAINS SHALL BE CONNECTED WITH PVC SDR-35 (PIPE SIZE TO MATCH ROOF DRAIN SIZE) DIRECTLY TO ADJACENT PVC STORM SEWERS SHOWN IN THIS SHEET AT 45 DEGREE ANGLE.
 - CONTRACTOR TO CONTACT DIGESTERS AND POTABLE ALL CONSTRUCTION CONFLICTS WITH EXISTING UTILITIES AND IMMEDIATELY IF A CONFLICT IS IDENTIFIED.
 - HORIZONTAL ALIGNMENT OF ALL PVC PIPE FOR AREA DRAINS, SUBSURFACE TREE DRAINS AND ROOF DRAINS (BELOW GRADE) SHALL BE THE SHORTEST DIRECT ROUTE TO THE ADJACENT PVC STORM SEWER SHOWN ON THIS SHEET.
 - CONTRACTOR SHALL REFER TO LANDSCAPE COURTYARD PLANS FOR INFORMATION ON THE 10' COURTYARD DRAINS.

RECORD DRAWING
 BASED ON CONTRACTOR MARKUPS
 NOT FIELD SURVEY

DATE: FEBRUARY 2009 SCALE: 1"=40'
 DRAWN: G&A DESIGN: BRG REVIEWED: BRG DWG: 1057STORMPLN01
 MIXED USE DEVELOPMENT
 TOWN OF ADDISON
 STORM SEWER PLAN

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