

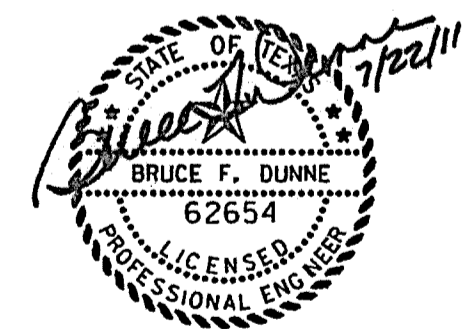
DRAINAGE AREA CALCULATIONS - PROPOSED																	
AREA NO.	AREA (acres)	RUNOFF COEFF.	CA	Tc (min)	I2 (in/hr)	Q2 (cfs)	I5 (in/hr)	Q5 (cfs)	I10 (in/hr)	Q10 (cfs)	I25 (in/hr)	Q25 (cfs)	I50 (in/hr)	Q50 (cfs)	I100 (in/hr)	Q100 (cfs)	COLLECTION POINT
C22	0.67	0.90	0.60	10.0	5.2	3.2	5.9	3.5	6.5	3.9	7.4	4.5	8.2	4.9	8.9	5.4	FUTURE STORM DRAIN
C23	0.50	0.95	0.48	10.0	5.2	2.5	5.9	2.8	6.5	3.1	7.4	3.5	8.2	3.9	8.9	4.2	FUTURE INLETS & STORM DRAIN
C24-1	0.51	0.90	0.46	10.0	5.2	2.4	5.9	2.7	6.5	3.0	7.4	3.4	8.2	3.7	8.9	4.1	FUTURE STORM DRAIN
C24-2	0.30	0.90	0.27	10.0	5.2	1.4	5.9	1.6	6.5	1.8	7.4	2.0	8.2	2.2	8.9	2.4	FUTURE STORM DRAIN
C25	0.49	0.90	0.44	10.0	5.2	2.3	5.9	2.6	6.5	2.9	7.4	3.3	8.2	3.6	8.9	3.9	FUTURE STORM DRAIN
C26	0.72	0.95	0.68	10.0	5.2	3.6	5.9	4.0	6.5	4.4	7.4	5.1	8.2	5.6	8.9	6.1	CURB INLET
C27	0.52	0.90	0.47	10.0	5.2	2.4	5.9	2.8	6.5	3.0	7.4	3.5	8.2	3.8	8.9	4.2	FUTURE STORM DRAIN
	3.7					17.8		20.0		22.1		25.3		27.7		30.2	

STORM DRAIN CALCULATIONS - 100 YR																			
M/I or INLET	DESIGN POINT	DISTANCE Between Points (ft)	Peak Flow in Pipe "Q" (cfs)	PIPE SIZE (in)	FRICTIONAL SLOPE "S" (ft/ft)	HYDRAULIC GRADIENT ELEVATIONS (ft MSL)		HEAD LOSS AT CHANGE IN SECTION					Elev Difference TC/FG - HGL at Des Pt		REMARKS				
						UPSTREAM	DNSTRM	V1 Flow IN (fps)	V2 Flow OUT (fps)	V2(2) 2g (ft)	V1(2) 2g (ft)	Kj Coeff Of Loss (const)	KA(1/2) 2g (ft)	Hj Head Loss Upstream (ft)		Elev of Hyd Grade (ft MSL)	TC/FG - HGL DIFF.		
LINE C1																			
	384.80	384.80	0.00	5.4	18	0.0061	559.85	559.85		3.06	0.14		1.25		0.18	560.03	560.49	0.46	GRATE INLET
	384.80	342.37	42.43	5.4	18	0.0026	559.85	559.74	0.00	3.06	0.14	0.00	0.75	0.14	0.00	559.85	565.20	5.35	45° WYE
	342.37	290.09	52.28	9.6	24	0.0018	559.70	559.61	3.06	3.06	0.14	0.14	0.25	0.11	0.04	559.74	565.93	6.19	MANHOLE W/ 90° BEND
	290.09	229.47	60.62	19.9	27	0.0041	559.50	559.25	3.06	5.00	0.39	0.14	0.75	0.28	0.11	559.61	564.70	5.09	45° WYE
	229.47	127.36	102.11	26.0	27	0.0070	559.15	558.43	5.00	6.54	0.66	0.39	0.25	0.57	0.10	559.25	564.58	5.33	MANHOLE W/ 90° BEND
	127.36	90.00	37.36	30.2	27	0.0095	558.38	558.02	6.54	7.60	0.90	0.66	0.00	0.90	0.00	558.38	562.75	6.37	TEMPORARY HEADWALL
	90.00	0.00	90.00	30.2	27	0.0095	555.46	554.60	7.60	7.60	0.90	0.90	0.75	0.22	0.67	555.13	559.60	3.47	45° WYE

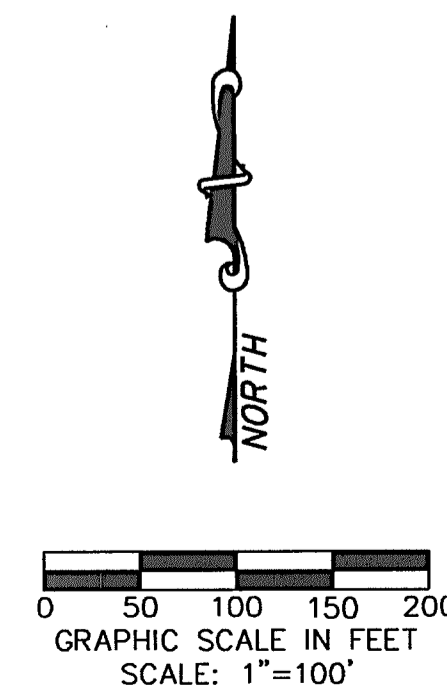
INLET CALCULATIONS														
INLET			DRAINAGE CALCS 100 YR				ROADWAY SECTION					INLET		COMMENTS
NO.	STATION	TYPE	AREA NO.	PEAK FLOW (CFS)	CARRY OVER (CFS)	TOTAL FLOW (CFS)	CROSS SLOPE (FT/FT)	LONG. SLOPE (FT/FT)	MAX DEPTH (FT)	SPREAD OF FLOW (FT)	LENGTH PROV. (FT)	INLET FLOW (CFS)	CARRY OVER (CFS)	
1	PONTE CIRCLE	CO-S	C26	6.10	0.00	6.10	0.0208	0.0208	0.34	16.7	10.0	6.10	0.00	

WARNING
 CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.
 BM #2 REF. ELEVATION = 547.84
 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.



- LEGEND**
- A17 DRAINAGE AREA DESIGNATION
 - MAJOR DRAINAGE AREA DIVIDE
 - MINOR DRAINAGE AREA DIVIDE
 - DIRECTION OF FLOW
 - INLET NUMBER



NO.	REVISION	BY	DATE

Addison! TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PAVING, DRAINAGE & UTILITY IMPROVEMENTS
PONTE AVENUE CIRCLE

DRAINAGE AREA MAP & CALCULATIONS

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners 250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5019-09	ICE	ICE	JULY 22, 2011	PW# 2011-03	11

PAVING, DRAINAGE & UTILITY IMPROVEMENTS - PONTE AVENUE CIRCLE