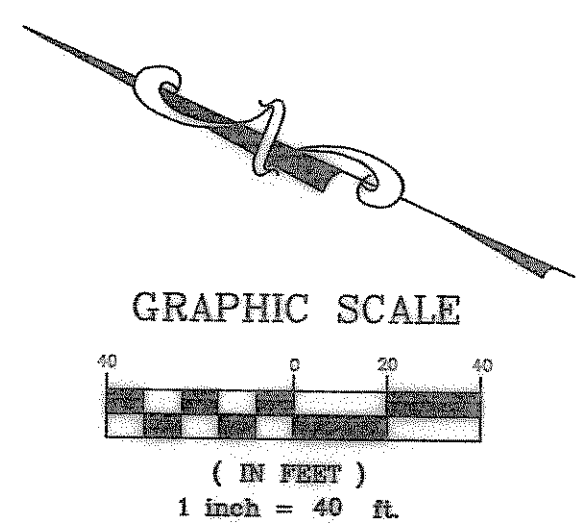


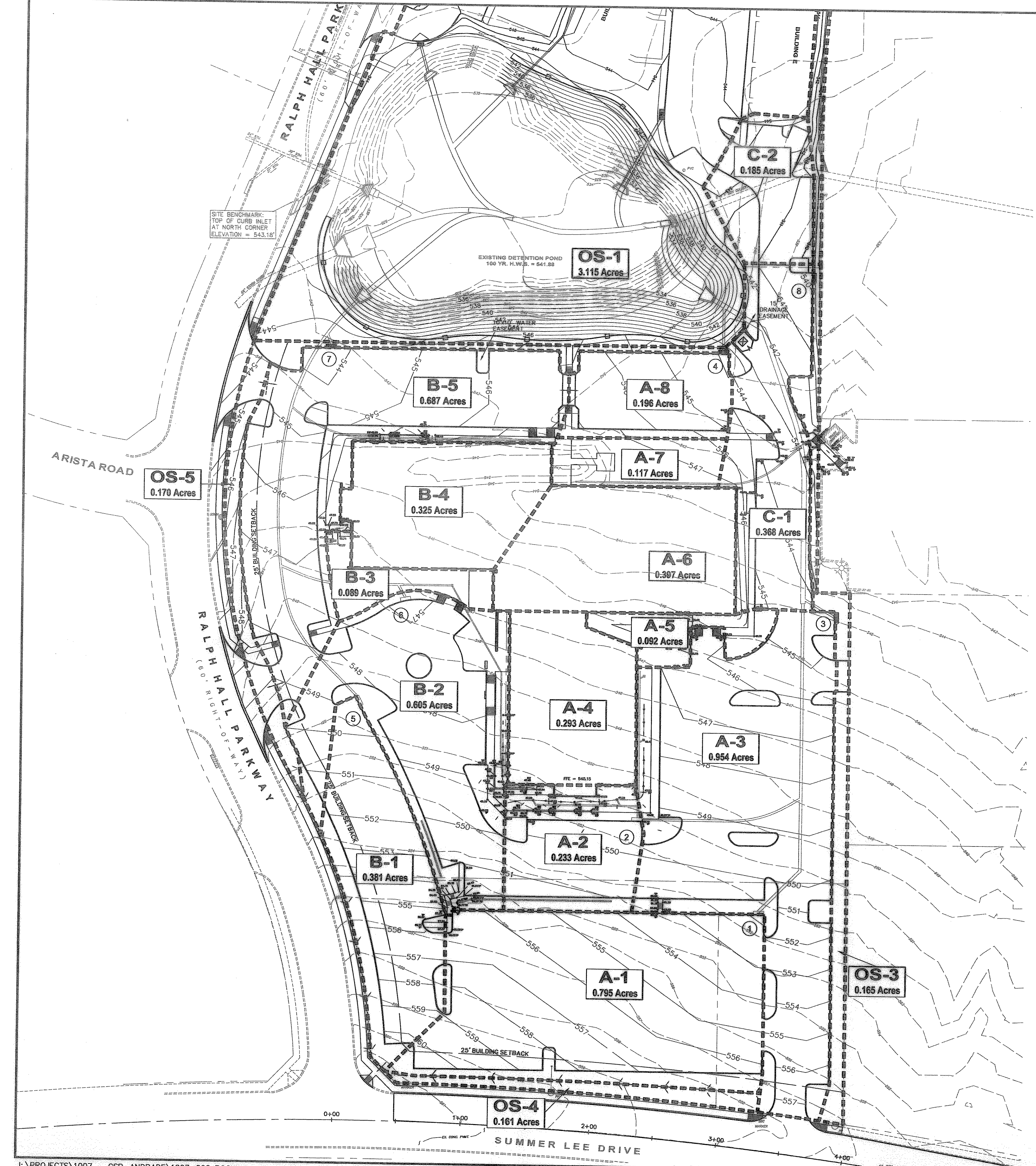


TOCS
1-800-245-4545
tocs@t-oll.com



SITE BENCHMARK:
TOP OF CURB INLET
AT NORTH CORNER
ELEVATION = 543.18'

EXISTING DETENTION POND
100 YR. H.W.B. = 541.89

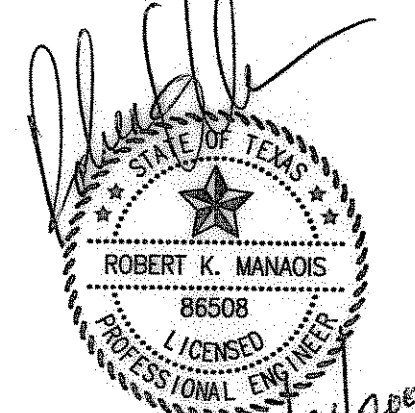


DRAINAGE AREA CALCULATIONS								
Subarea	Design Storm (yr)	T _c (min)	I ₁₀₀ (in/hr)	C	Area (acres)	CA	Q ₁₀₀ (cfs)	Comments
A-1	100	10.0	9.8	0.90	0.795	0.72	7.01	DRAINS TO STORM LINE 'A'
A-2	100	10.0	9.8	0.90	0.233	0.21	2.06	DRAINS TO STORM LINE 'A'
A-3	100	10.0	9.8	0.90	0.954	0.86	8.41	DRAINS TO STORM LINE 'A'
A-4	100	10.0	9.8	0.90	0.293	0.26	2.58	DRAINS TO STORM LINE 'A'
A-5	100	10.0	9.8	0.90	0.092	0.08	0.81	DRAINS TO STORM LINE 'A'
A-6	100	10.0	9.8	0.90	0.369	0.33	3.25	DRAINS TO STORM LINE 'A'
A-7	100	10.0	9.8	0.90	0.117	0.11	1.03	DRAINS TO STORM LINE 'A'
A-8	100	10.0	9.8	0.90	0.196	0.18	1.73	DRAINS TO STORM LINE 'A'
SUBTOTAL - A					3.049	2.74	26.89	STORM LINE 'A'
B-1	100	10.0	9.8	0.90	0.381	0.34	3.36	DRAINS TO STORM LINE 'B'
B-2	100	10.0	9.8	0.90	0.605	0.54	5.34	DRAINS TO STORM LINE 'B'
B-3	100	10.0	9.8	0.90	0.089	0.08	0.78	DRAINS TO STORM LINE 'B'
B-4	100	10.0	9.8	0.90	0.325	0.29	2.87	DRAINS TO STORM LINE 'B'
B-5	100	10.0	9.8	0.90	0.687	0.62	6.06	DRAINS TO STORM LINE 'B'
SUBTOTAL - B					2.087	1.88	18.41	STORM LINE 'B'
C-1	100	10.0	9.8	0.90	0.368	0.33	3.24	DRAINS TO STORM LINE 'C' - BYPASSES POND
C-2	100	10.0	9.8	0.90	0.185	0.17	1.63	DRAINS TO STORM LINE 'C' - BYPASSES POND
SUBTOTAL - C					0.553	0.50	4.87	STORM LINE 'C' - BYPASSES POND
OS-1	100	10.0	9.8	0.90	3.115	2.80	27.47	ONSITE - DRAINS TO POND
OS-2	100	10.0	9.8	0.80	0.194	0.16	1.52	OFFSITE - ALLOWED TO BYPASS POND
OS-3	100	10.0	9.8	0.80	0.165	0.13	1.29	ONSITE - ALLOWED TO BYPASS POND
OS-4	100	10.0	9.8	0.80	0.161	0.13	1.26	ONSITE - ALLOWED TO BYPASS POND
OS-5	100	10.0	9.8	0.90	0.170	0.15	1.50	ONSITE - DRAINS TO POND
SUBTOTAL					3.805	3.37	33.05	

INLET DESIGN CALCULATIONS														
INLET NO.	DRAINAGE AREA	DESIGN STORM (yrs)	AREA RUNOFF				CARRYOVER FROM	TOTAL FLOW (cfs)	SELECTED INLET		INLET DEPTH OF FLOW (feet)	INLET CAPACITY (cfs)	CARRYOVER TO	
			T _c (min)	I (in/hr)	C	A (Acres)			Q (cfs)	LI (feet)				TYPE
1	A-1	100	10	9.8	0.9	0.80	7.01	0.00	7.01	5'	CURB	0.4'	8.75	0.00
2	A-2	100	10	9.8	0.9	0.23	2.06	0.00	2.06	5'	CURB	0.4'	8.75	0.00
3	A-3	100	10	9.8	0.9	0.95	8.41	0.00	8.41	5'	CURB	0.4'	8.75	0.00
4	A-8	100	10	9.8	0.9	0.20	1.73	0.00	1.73	5'	CURB	0.4'	8.75	0.00
5	B-1	100	10	9.8	0.9	0.38	3.36	0.00	3.36	5'	CURB	0.4'	8.75	0.00
6	B-2	100	10	9.8	0.9	0.61	5.34	0.00	5.34	5'	CURB	0.4'	8.75	0.00
7	B-5	100	10	9.8	0.9	0.69	6.06	0.00	6.06	5'	CURB	0.4'	8.75	0.00
8	C-1,C-2	100	10	9.8	0.9	0.55	4.87	0.00	4.87	5'	CURB	0.4'	8.75	0.00

① - DENOTES CORRESPONDING INLET NUMBER ON PLAN

BENCHMARK:
BOX CUT IN NW CURB RETURN AT
THE INTERSECTION OF WESTWOOD
AND ROCKWALL PARKWAY.
ELEVATION = 537.56



RECORD DRAWING
RECORD INFORMATION PROVIDED BY
C. F. JORDAN, L.P., DALLAS, TEXAS
ELEVATION VERIFICATION PERFORMED BY
dMAC SURVEYING & MAPPING, DENTON, TEXAS

REV.	DATE	REMARKS	BY

ONSITE DRAINAGE AREA MAP
ROCKWALL MEDICAL CENTER PHASE II
CITY OF ROCKWALL, TEXAS

RKM RKM Consulting Engineers, Inc.
14673 Midway Road, Suite 203
Addison, Texas 75001
phone (214) 432-9070
fax (214) 432-9069

CHECKED	DESIGN	DRAWN	JOB	DATE	SCALE	SHEET
RKM	RKM	RKM	1007-002	06/21/05	1" = 40'	11

OF 17