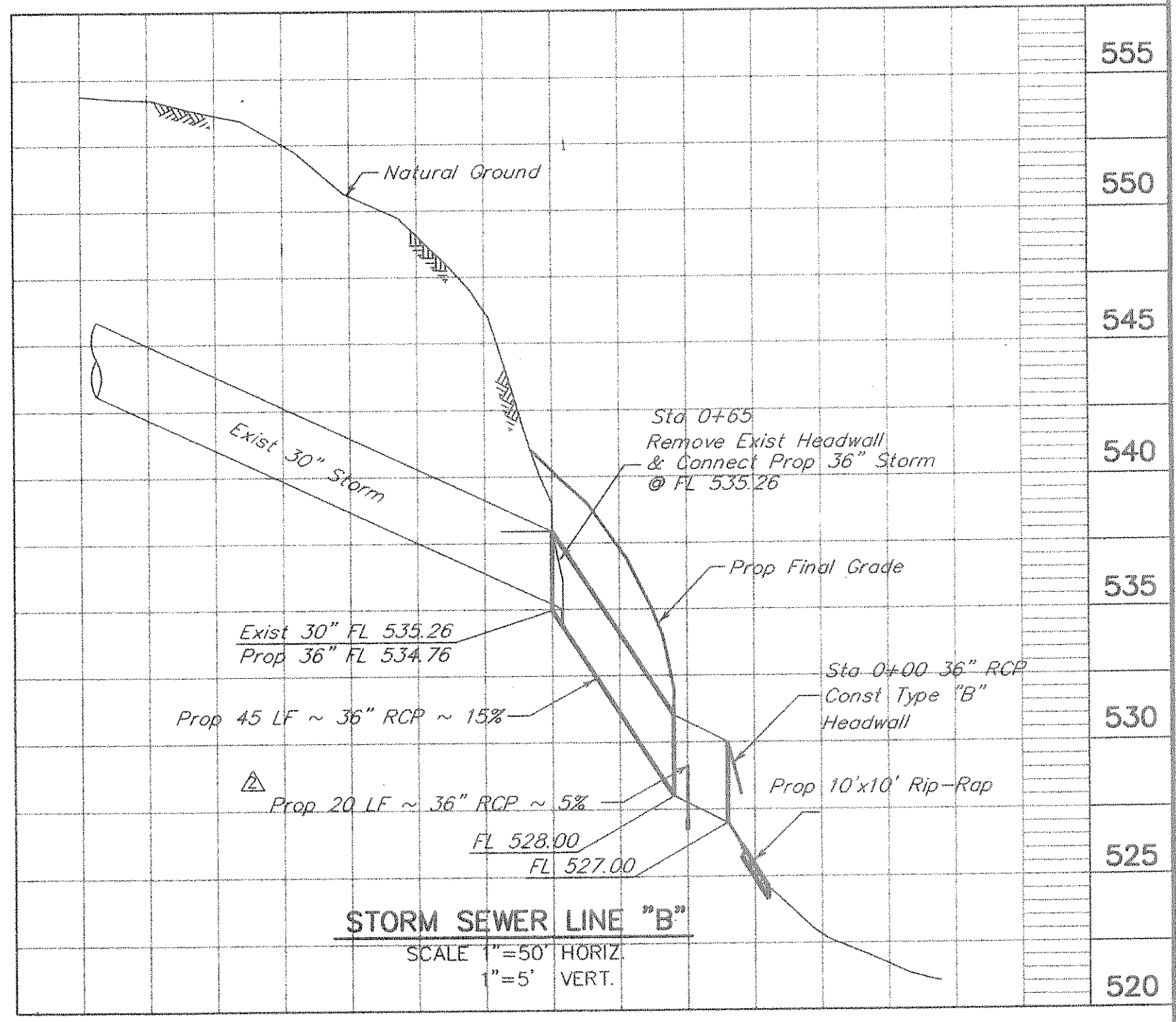


**PROJECT BENCHMARK**  
 "C" CUT IN THE CENTER OF A  
 16.0' WIDE INLET ON THE NORTH  
 SIDE OF HORIZON ROAD  
 APPROX. 330' WEST OF THE  
 INTERSECTION OF F.M. 740  
 AND HORIZON ROAD  
 ELEVATION = 557.58

DRAINAGE CALCULATION - ROCKWALL ECKERD

US Station	DS Station	Dist	Area #	DA	C	CA	Cum. CA	Tc	Freq.	I (in/hr)	Q (cfs)	Pipe S (ft/ft)	Hyd S (ft/ft)	Size (in)	V (ft/sec)	Head Loss Coeff.	Velocity Head Loss	Flow Time (min)	Time @ DS Sta.	US HGL	DS HGL	US FL + Crit. Depth	Critical Depth	US FL
7+01	2+45	456	15,18,19,20	2.53	1	2.02	2.02	10.00	100	9.80	19.84	0.051	0.01415	18	11.22	0.013	1.96	0.68	10.68	556.81	548.40	553.75	1.75	552.00
2+45	2+20	25	16,17	4.79	1	3.83	5.86	10.68	100	9.78	57.27	0.051	0.00774	30	11.67	0.013	0.16	0.04	10.71	547.55	547.20	548.40	2.50	545.90
2+20	1+60	60	3	0.29	0.8	0.23	6.09	10.71	100	9.76	59.42	0.046	0.00833	30	12.10	0.013	0.16	0.08	10.80	543.86	543.20	547.20	2.70	544.50
1+60	0+45	115	2	0.63	1	0.50	6.59	10.80	100	9.74	64.21	0.046	0.00972	30	13.08	0.013	0.38	0.15	10.94	539.10	537.60	543.20	2.70	540.50
Line "B"	0+65	65	all	0.00	1	0.00	6.59	10.94	100	9.72	64.07	0.150	0.00366	36	9.06	0.013	1.38	0.08	11.02	533.55	532.00	537.60	2.30	535.30



Drainage Flume Calculations

Drainage Area	Manning's "n"	Width(ft) of Flume	Depth(ft) of Flume	Depth(ft) of Flow	Critical Depth(ft)
1	0.012	5	0.5	0.106	0.434

Hydraulic Data

Drainage Area	C	I (in/hr)	A (acres)	Q (cfs)
1	0.8	9.8	1.03	8.1
2	0.8	9.8	0.63	4.9
3	0.8	9.8	0.03	0.2
4	0.8	9.8	1.01	7.9

**RECORD DRAWING**

NO.	DATE	REVISIONS	APP.
1	1/14/98	ADDED 20 LF OF 36" RCP	TMS
2	1/14/98	REVISED RETAINING WALL HEIGHT	TMS

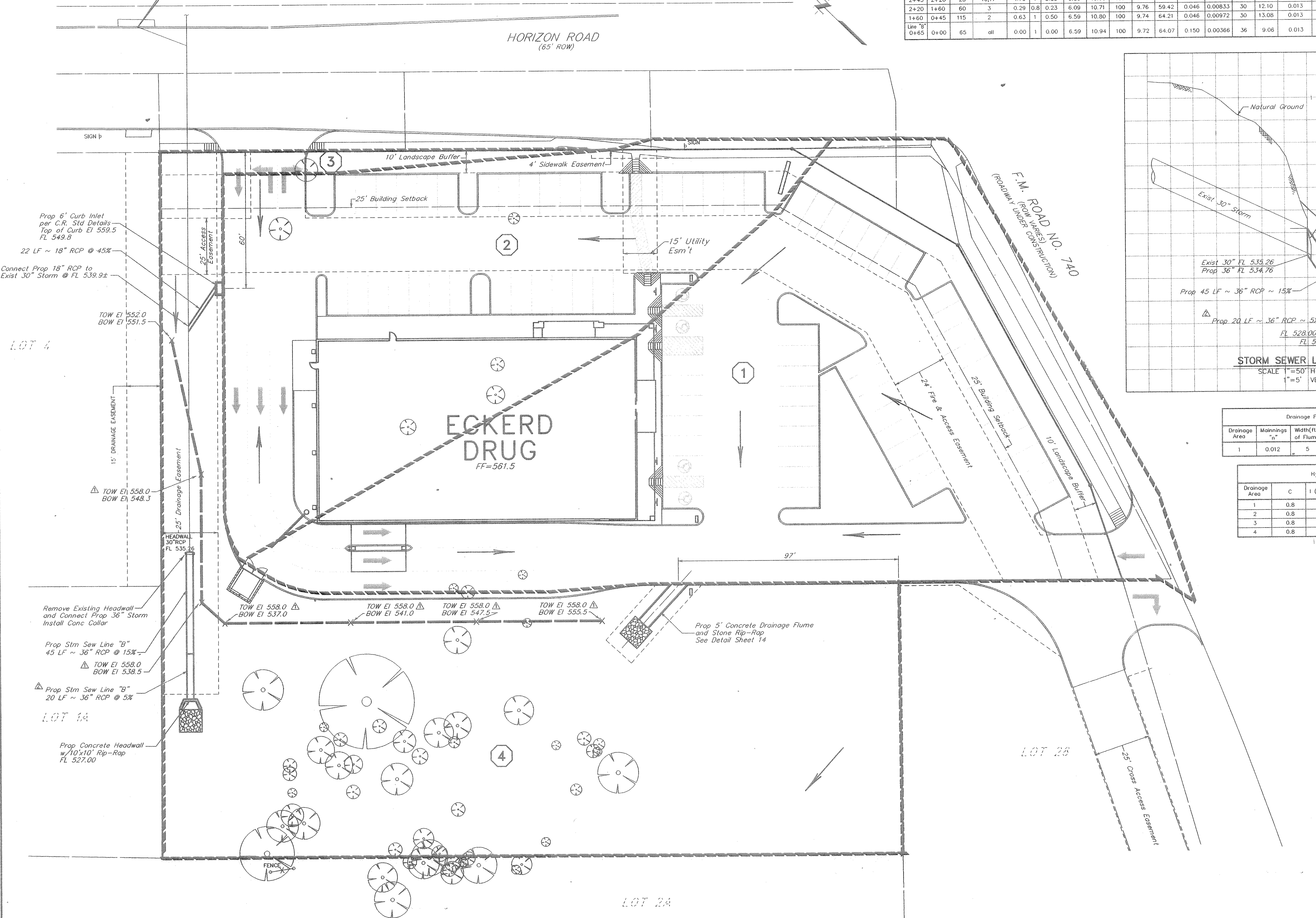
CNL DEVELOPMENT  
 ORLANDO, FLORIDA  
 ECKERD DRUGSTORE No. 2859R  
 ROCKWALL, TEXAS

**DRAINAGE PLAN**

**JONES & CARTER, INC.**  
 Consulting Engineers  
 12000 Ford Rd., Suite 100 Dallas, Texas 75224 (972) 468-3880

SCALE: 1"=20' DGN. BY: BPW  
 DATE: AUGUST 1997 DWN. BY: GSH  
 JOB NO. D0014-003 DWG. NO. D0014-069

THOMAS M. STROH  
 81145  
 REGISTERED PROFESSIONAL ENGINEER  
 1-14-98  
 SHEET NO. 7 OF 15



LOT 4

LOT 1A

LOT 2B

LOT 2A

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