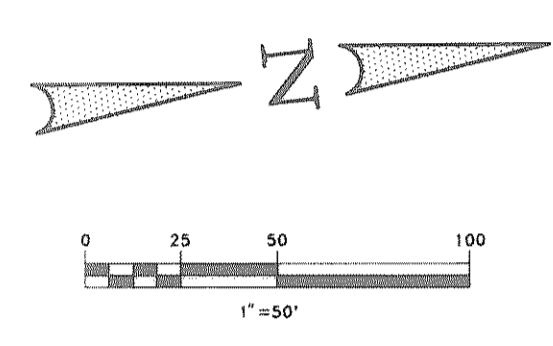
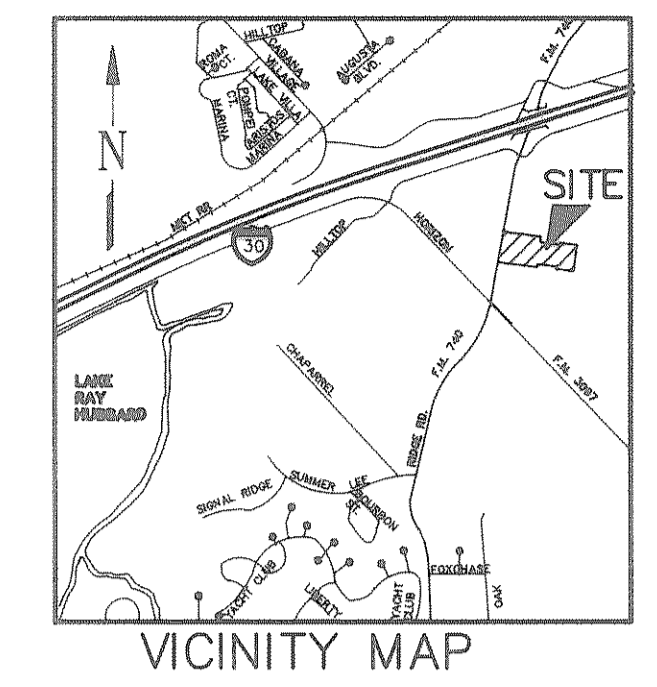
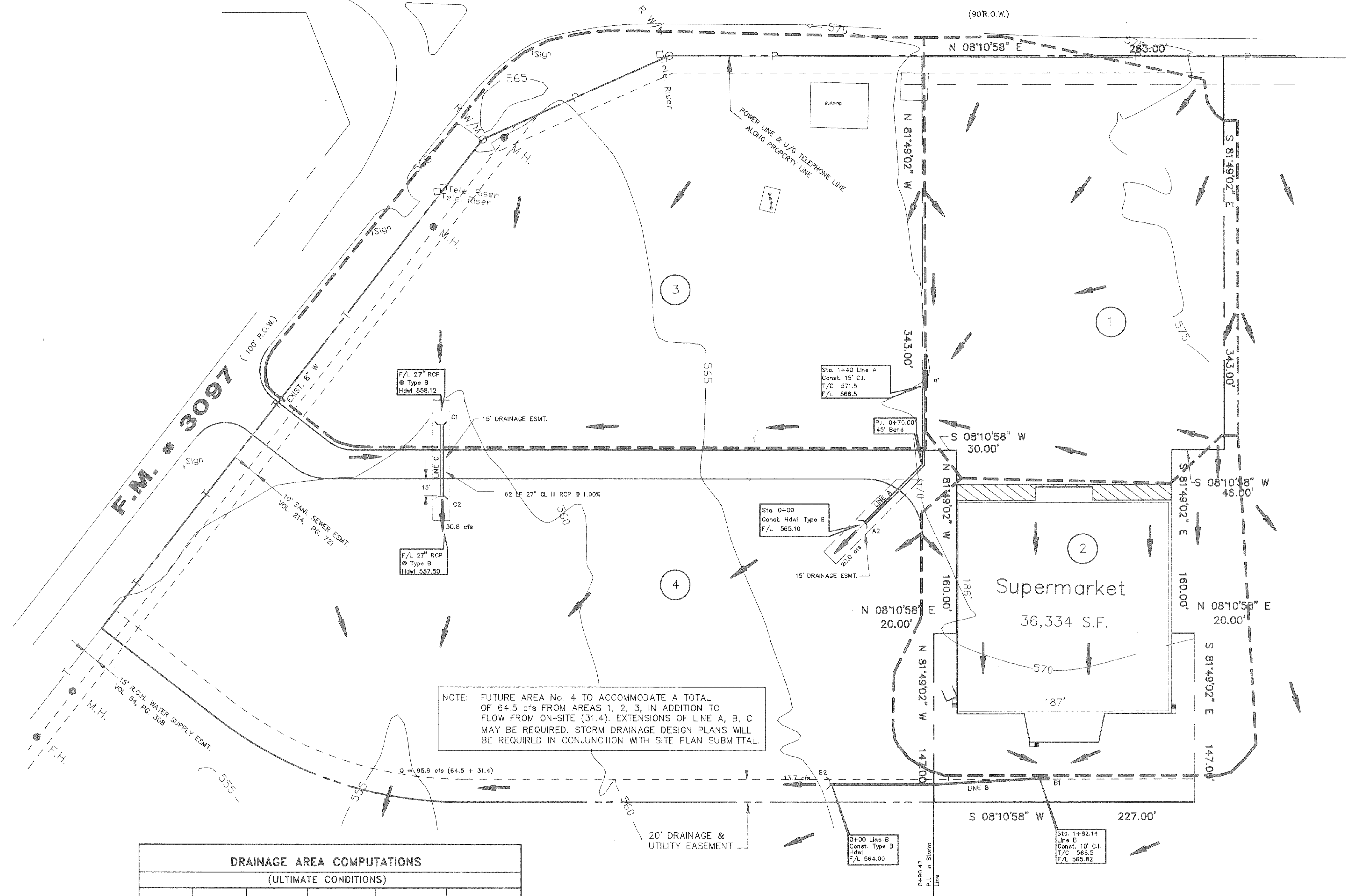


CARLISLE PLAZA ADDITION

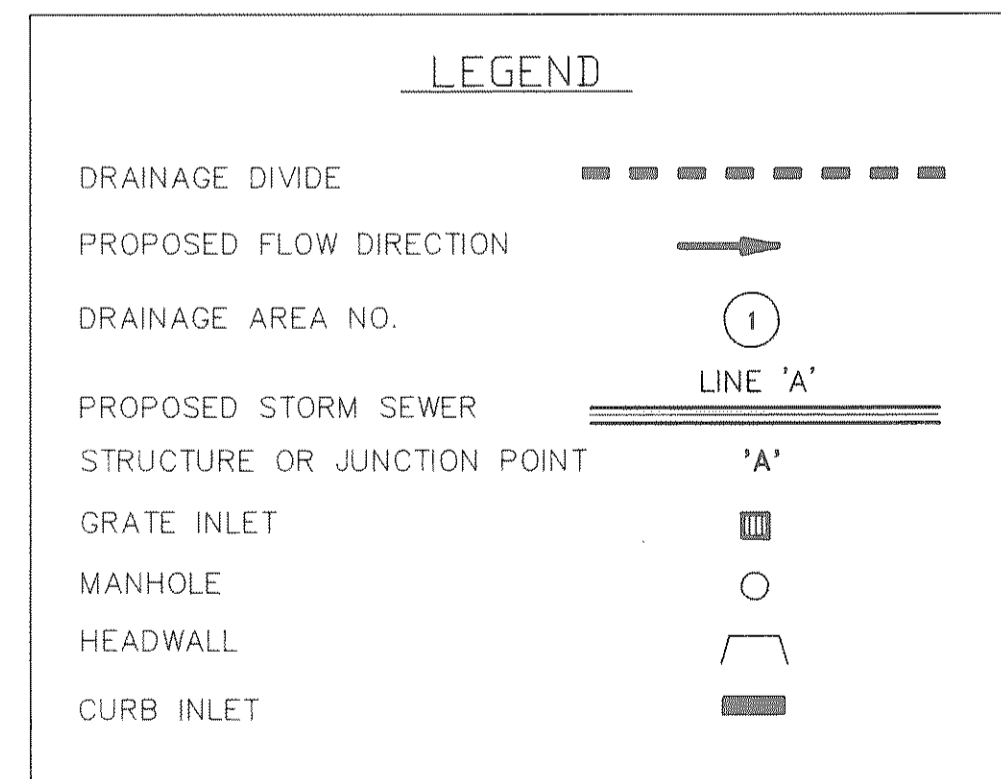
F.M. # 740 (RIDGE ROAD)



Winkelmann & Associates, Inc. hereby certifies that this plan, to the best of our knowledge is "AS BUILT". All modifications from the originally approved construction documents have been made as per information provided by the contractor. Winkelmann & Associates, Inc. does not certify as to the correctness or quality of construction as no field inspection was performed.

Michael Clark 1-7-92
WINKELMANN & ASSOCIATES, INC. DATE

NOTE: FUTURE AREA No. 4 TO ACCOMMODATE A TOTAL OF 64.5 cfs FROM AREAS 1, 2, 3, IN ADDITION TO FLOW FROM ON-SITE (31.4). EXTENSIONS OF LINE A, B, C MAY BE REQUIRED. STORM DRAINAGE DESIGN PLANS WILL BE REQUIRED IN CONJUNCTION WITH SITE PLAN SUBMITTAL.



DRAINAGE AREA COMPUTATIONS (ULTIMATE CONDITIONS)					
AREA NO.	AREA	RUNOFF	TIME OF CONC.	INTENSITY	DISCHARGE
	AC	'C'	MIN	I ₁₀₀ IN/HR	Q ₁₀₀ CFS
1	2.55	0.8	10	9.8	20.0
2	1.75	0.8	10	9.8	13.7
3	3.93	0.8	10	9.8	30.8
* 4	4.0	0.8	10	9.8	31.4

NOTE: RAINFALL INTENSITY VALUES FROM TECHNICAL PAPER 40, "RAINFALL FREQUENCY ATLAS OF THE UNITED STATES" BY THE U.S. WEATHER BUREAU, AS REPRESENTED IN FIGURE 3.1, ROCKWALL STANDARDS OF DESIGN

ENCLOSED STORM DRAINAGE SYSTEM DESIGN FOR A 100-YEAR DESIGN FREQUENCY, AS PER CITY OF ROCKWALL REQUEST, 3-21-91

STORM SEWER COMPUTATION																				
STRUCTURE	CONTRIBUTING AREA	100-YEAR RUNOFF					PIPE							STRUCTURE TYPE						
		#	AC	C	CA	A _T	CA _T	T _c min.	I ₁₀₀ in/hr	Q ₁₀₀ cfs	SIZE in.	type	"n"		HG SLOPE %	PIPE SLOPE %	LENGTH ft.	VEL. fps	TIME IN PIPE min.	Q _{cap} cfs
A1	A2	1	2.25	.8	1.8	2.25	1.8	10	9.8	20.0	24	RCP	.013	0.78	1.0	140	6.36	0.37	22.6	15' CURB INLET
B1	B2	2	1.75	.8	1.4	1.75	1.4	10	9.8	13.7	21	RCP	.013	0.75	1.0	182	5.7	0.53	15.8	10' CURB INLET
C1	C2	3	3.93	.8	3.14	3.93	3.14	10	9.8	30.8	27	RCP	.013	1.0	1.5	62	7.75	0.15	37.9	2-TYPE "B" HEADWALLS

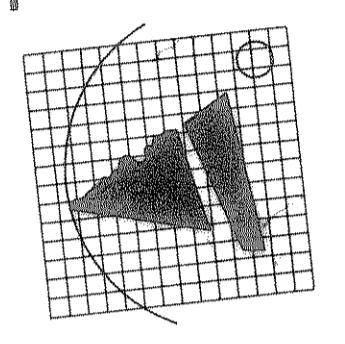
INLET DESIGN CALCULATIONS									
INLET NO.	AREA NO.	Q ₅ cfs	CARRY OVER FROM UPSTREAM INLET cfs	TOTAL GUTTER FLOW cfs	GUTTER CAPACITY cfs	GUTTER SLOPE %	INLET LENGTH ft	TYPE OF INLET	CARRY OVER TO DOWNSTREAM cfs
A1	1	20.0	—	—	—	SAG	15'	CURB	—
B1	2	13.7	—	—	—	SAG	10'	CURB	—

* FUTURE COMMERCIAL DEVELOPMENT

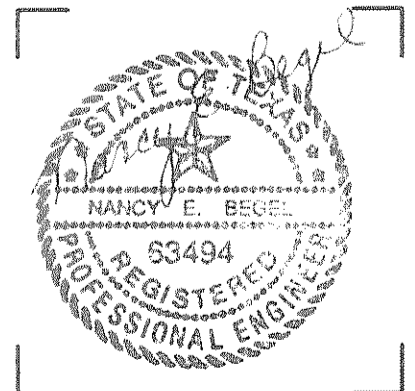
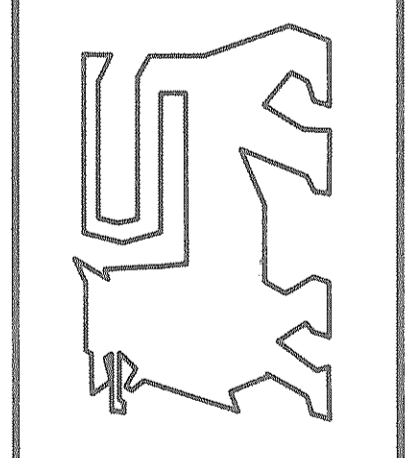
NO.	REVISION	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

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ARTECH
DESIGN GROUP INC.



FOOD LION, INC. SITE #50a
F.M. 740 @ F.M. 3097
Rockwall County
Rockwall, Texas



JOB NO.	06416.01
DATE	4-1-91
DRAWN	A.J.L./A.L.C.
CHK.	N.E.B.
DISC.	STMCOMPS.DWG
SHEET	C-2a
OF	
DRAINAGE PLAN	

2525 Broad Street, Suite 200, Chattanooga, TN 37408 615/265-4333 Fax 615/265-5413