

APPLICATION AND  
FINAL PLAT CHECKLIST

DATE: 11-13-84

Name of Proposed Subdivison ROCKWALL TOWNE CENTER <sup>RE</sup>

Name of Subdivider ROCKWALL VILLAGE LIMITED

Address 8235 DOUGLAS AVE, SUITE 816  
PALLAS, TX. 75225 Phone (214) 528-1905

Owner of Record ROCKWALL VILLAGE LIMITED

Address SEE ABOVE Phone SEE ABOVE

Name of Land Planner/Surveyor/Engineer WIER & ASSOC., INC.

Address 3908 SOUTH FREEWAY  
FT. WORTH, TX. 76110 Phone (817) 429-9007

Total Acreage 5.1974 AC. Current Zoning COMMERCIAL

Number of Lots/Units 3 Signed Rudy M. Garcia

The final Plat shall generally conform to the Preliminary Plat, as approved by the City Council and shall be drawn to legibly show all data into a satisfactory scale, usually not smaller than one inch equals 100 feet.

The following Final Plat Checklist is a summary of the requirements listed under Section VIII of the Rockwall Subdivision Ordinance. Section VIII should be reviewed and followed when preparing a Final Plat. The following checklist is intended only as a reminder and a guide for those requirements.

INFORMATION

<u>Provided or</u>	<u>Not</u>
<u>Shown on Plat</u>	<u>Applicable</u>

- |          |               |   |
|----------|---------------|---|
| <u>✓</u> | <u>      </u> | 1. Title or name of subdivison, written and graphic scale, north point, date of plat, and key map       |
| <u>✓</u> | <u>      </u> | 2. Location of the subdivision by City, County and State  |
| <u>✓</u> | <u>      </u> | 3. Location of subdivision tied to a USGS monument, Texas highway monument or other approved benchmark  |
| <u>✓</u> | <u>      </u> | 4. Accurate boundary survey and property description with tract boundary lines indicated by heavy lines |
| <u>✓</u> | <u>      </u> | 5. Accurate plat dimensions with all engineering information necessary to reproduce plat on the ground  |



ENGINEERING DRAWINGS CHECKLIST

Date: 11-13-84

Name of Proposed Subdivision ROCKWALL TOWNE CENTRE

Name of Subdivider ROCKWALL VILLAGE LIMITED

Address 8235 DOUGLAS AVE. SUITE 816 DALLAS, TX. Phone (214) 528-1905

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Total Acreage 5.1974 AC Current Zoning COMMERCIAL

Number of Lots/Units 3 Signed Rudy M. Garcia

The engineering drawings submitted for review and approval of the proposed utilities shall be complete design drawings and shall comply with the Standards of Design, the Standard Specifications for Construction and the Standard Details. These drawings will be submitted with the final plat.

The following Engineering Drawings Checklist is a summary of the requirements contained in the Standards mentioned. In all cases, the engineering drawings should conform to good engineering practices.

The drawings should be placed in the order of the following checklist.

The applicant should submit three (3) sets of all engineering drawings to the City for review. Any resubmissions should contain the marked up set of drawings returned to the applicant.

After completion, the City should be provided with the original and two copies of the as-built drawings showing all corrections as approved by the City.

The drawings must be accompanied by documentation from all utility companies verifying their agreement with the easements shown.

FOR CITY USE ONLY

Date Submitted: 11/19  
Sent to Engineer: 11/19  
Engineering Approval: \_\_\_\_\_  
P & Z Approval: \_\_\_\_\_  
City Council Approval: \_\_\_\_\_  
Pre-Construction: \_\_\_\_\_  
As Built Submitted: \_\_\_\_\_

Case No: \_\_\_\_\_  
Fee Paid: 310.00  
Availability Pd: \_\_\_\_\_

FOR CITY USE ONLY

Information  
Included  
on Plans

Information  
Sufficient  
for Review

Item

WATER DISTRIBUTION

*demanded*  
1. The plans shall show existing and proposed water supply improvements, including size of pipelines, location of valves and location of fire hydrants and fire flow calculations.

2. The plans shall identify the source of water supply.

3. The water distribution system details shall comply with the Standard Details for the City of Rockwall and the Water Distribution Plan.

WASTEWATER COLLECTION

1. The plans shall show existing and proposed wastewater collection improvements.

2. The drainage calculations for the wastewater collection system shall be included. These calculations shall include the collection area by number, the area served in acres, the type of units served, the maximum, dry weather flow in million gallons per day (MGD), the infiltration/inflow allowance in MGD and the total accumulated wastewater flow in MGD.

3. Where proposed facilities tie into existing facilities, the plans shall show the flow line of the existing facilities and how the proposed facilities affect the system.

4. Where a portion of the proposed wastewater collection system will service areas outside the project, the plans shall clearly indicate how the design of the common pipeline is determined.

5. The details of the wastewater collection system shall comply with the Standard Details of the City of Rockwall.

6. If a wastewater collection system will not be provided, the plans should indicate how the wastewater will be collected and treated.

FOR CITY USE ONLY

Information  
Included  
on Plans

Information  
Sufficient  
for Review

Item

_____	_____
_____	_____
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UTILITY PLAN:

1. Plan view shall show relationship of all existing and proposed utilities, including streets, storm drainage, water distribution pipelines, sewer pipelines, natural gas pipelines, electric lines, telephone cables and television cables.
2. Plan view shall also include all existing and proposed easements and rights-of-ways.
3. Plan view shall show street lighting.

STREETS:

1. Paving plan shall show plan and profile of existing and proposed street improvements.
2. Paving profile shall show existing ground grade and the grade of the right and left curb and the existing and proposed utilities.
3. Paving plan shall show existing grade and proposed grade.
4. Paving plan shall show paving width and street classification with standard curve data.
5. Paving details shall comply with the Standard Details for the City of Rockwall.

STORM DRAINAGE:

1. The drainage area map showing the entire watershed on which the project is located shall be included. This map shall show contours at a minimum of 5 foot intervals and be on a scale no larger than 1 inch = 2000 feet.

FOR CITY USE ONLY

Information  
Included  
on Plans

Information  
Sufficient  
for Review

Item

\_\_\_\_\_

2. A drainage area map of the project site with contours at a minimum of 2 feet intervals shall be included. This map shall show the existing topography of the project site and the proposed grading plan of the site. Drainage contributing from areas outside the project site shall be specifically addressed.

\_\_\_\_\_

3. The drainage calculations for the site shall be provided on the plans as per the standard table. This calculation shall identify the sub-drainage area by number, the contributing area in acres, the time of concentration in minutes, the coefficient of runoff, the storm frequency and duration, the storm intensity in inches per hour and the accumulated runoff in cubic feet per second.

\_\_\_\_\_

4. The direction of storm water flow on the site shall be shown on the drainage area map.

\_\_\_\_\_

5. The drainage facilities shall be designed for ultimate watershed development as shown on the Growth and Management Plan even though the project may be developed in phases or the topography is such that other developments contribute to the proposed site.

\_\_\_\_\_

6. Where phased development will occur, the drainage plans and calculations shall show how the drainage will be controlled during intermediary construction.

\_\_\_\_\_

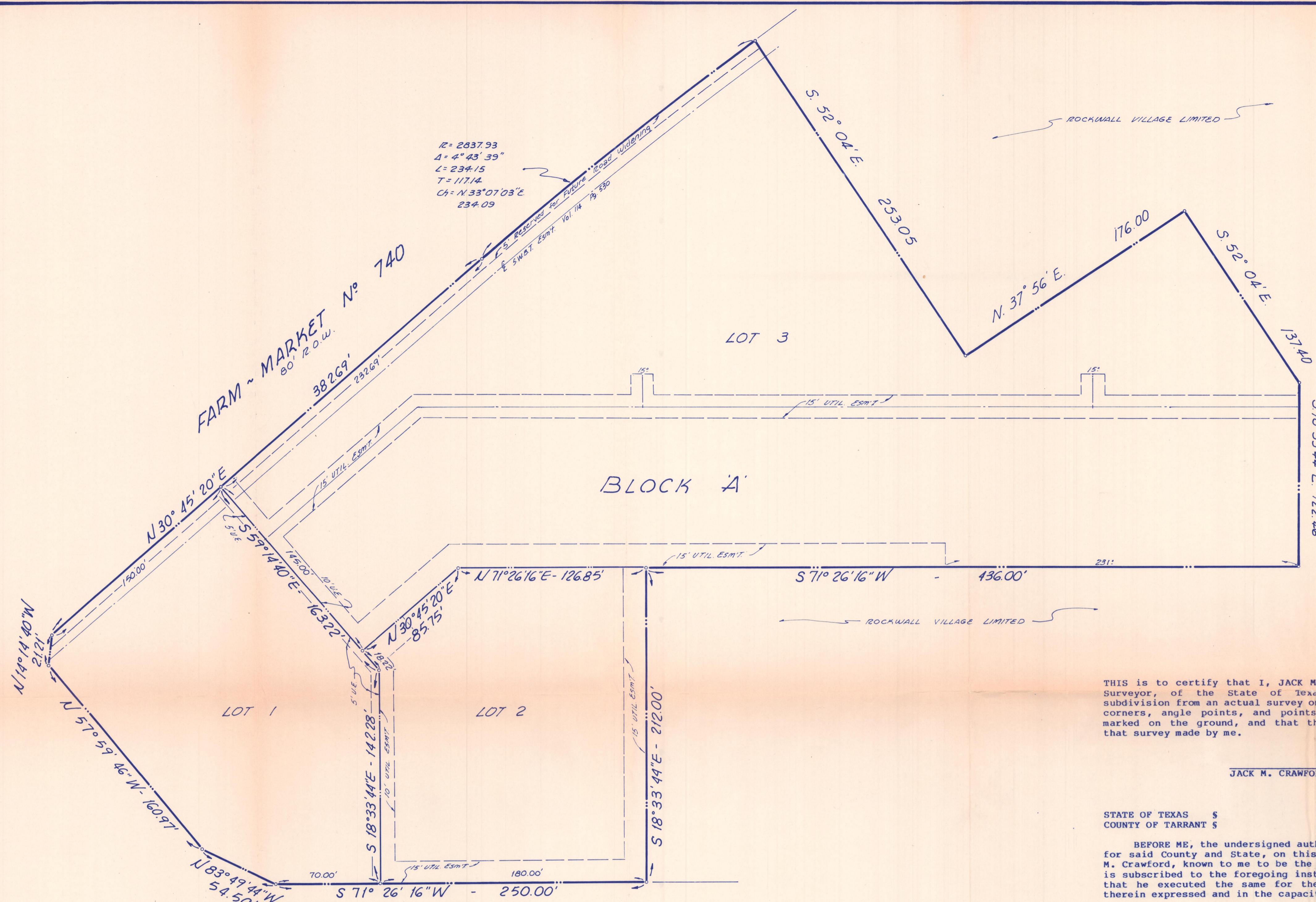
7. Where the storm drainage facilities tie into existing facilities, the plans shall show how this project will affect those existing facilities.

\_\_\_\_\_

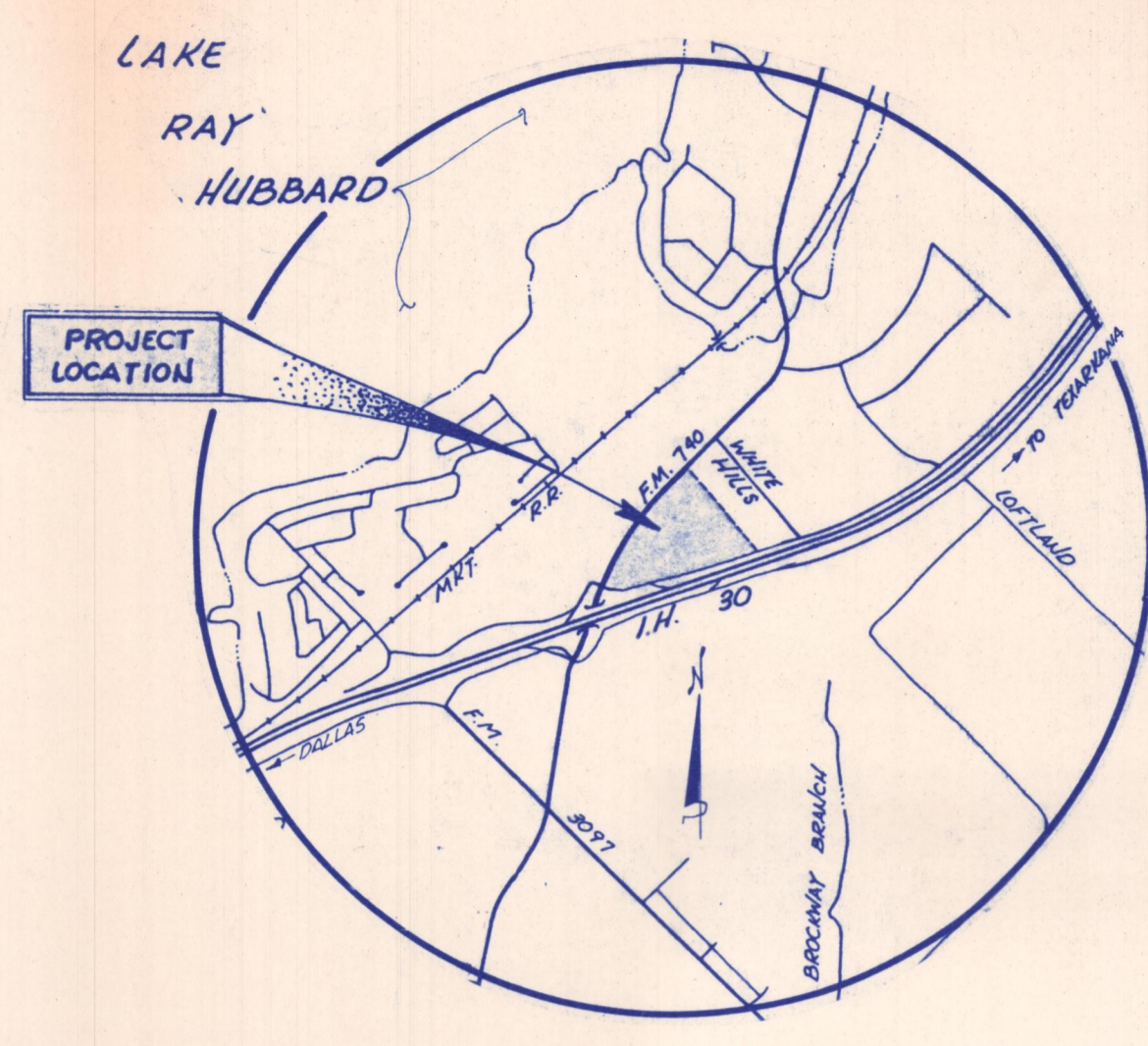
8. All existing and proposed drainage easements on the project site shall be shown.

\_\_\_\_\_

9. The storm drainage details shall comply with the Standard Details for the City of Rockwall.



$R = 2837.93$   
 $\Delta = 4^\circ 43' 39''$   
 $L = 234.15$   
 $T = 117.14$   
 $CH = N 33^\circ 07' 03'' E$   
 $234.09$



VICINITY MAP  
N.T.S.

I hereby certify that the above and foregoing Plat of \_\_\_\_\_ Addition to the City of Rockwall, Texas, was approved by The City Council of the City of Rockwall on the \_\_\_\_\_ day of \_\_\_\_\_, 1984.

This approval shall be invalid unless the approval Plat for such Addition is recorded in the office of the County Clerk of Rockwall County, Texas, within thirty (30) days from said date of final approval.

Said Addition shall be subject to all the requirements of the Platting Ordinance of the City of Rockwall.

Witness my hand this \_\_\_\_\_ day of \_\_\_\_\_, 1984.

\_\_\_\_\_  
City Secretary, City of Rockwall, Texas

THIS is to certify that I, JACK M. CRAWFORD, Registered Public Surveyor, of the State of Texas, have platted the above subdivision from an actual survey on the ground; and that all lot corners, angle points, and points of curve shall be properly marked on the ground, and that this plat correctly represents that survey made by me.

JACK M. CRAWFORD, REGISTERED PUBLIC SURVEYOR

STATE OF TEXAS §  
COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared Jack M. Crawford, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE \_\_\_\_\_ day of \_\_\_\_\_, 1984.

\_\_\_\_\_  
Notary Public, Tarrant, Texas

STATE OF TEXAS §  
COUNTY OF ROCKWALL §

WHEREAS, Rockwall Village Limited, is the owner of a 5.1974 acre tract of land situated in the James Smith Survey, Abstract No. 200 and the E. P. Gaines Chisum Survey, Abstract No. 64, in the City of Rockwall, Rockwall County, Texas, and being a part of a tract of land conveyed to Earl Hollandsvors from G. B. Mann and wife by deed dated July 13, 1966, recorded in Volume 76, Page 270, of the Deed Records of Rockwall county, Texas, and being more particularly described as follows:

BEGINNING at an iron rod for a corner at the intersection of the Southeast right-of-way line of F.M. Road No. 740, and the Northerly right-of-way line of Interstate Highway No. 30;

THENCE North 30° 45' 20" East with the Southeast right-of-way line of F.M. Road No. 740 a distance of 382.69 feet to an iron rod for a corner at the point of curvature of a circular Curve to the Right having a radius of 2837.93 feet, and a central angle of 04° 43' 39";

THENCE in a Northeasterly direction along said curve continuing with said right-of-way line a distance of 234.15 feet to an iron rod for a corner at the point of tangency of said curve;

THENCE S 52° 04' 00" E, a distance of 253.05 feet to a point for corner;

THENCE N 37° 56' 00" E, a distance of 176.00 feet to a point for corner;

THENCE N 52° 04' 00" E, a distance of 137.40 feet to a point for corner;

THENCE S 18° 33' 44" E, a distance of 122.46 feet to a point for corner;

THENCE S 71° 26' 16" W, a distance of 436.00 feet to a point for corner;

THENCE S 18° 33' 44" E, a distance of 212.00 feet to a point on Northerly right-of-way line of Interstate Highway 30, service road.

THENCE Southwesterly with said right-of-way the following calls and distances:

S 71° 26' 16" W, 250.00 feet;  
N 83° 49' 44" W, 54.5 feet;  
N 57° 59' 46" W, 160.97 feet;  
N 14° 14' 40" W, 21.21 feet to the PLACE OF BEGINNING and containing 5.1974 acres of land.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS: THAT, ROCKWALL VILLAGE LIMITED, does hereby adopt this plat designating the herein described property as Lot 1, 2, 3, Block A, Rockwall Towne Centre City of Rockwall, Rockwall County, Texas, and does hereby dedicate to the public use forever, the streets and easements shown hereon and agree to build the improvements indicated by the plans.

By: DAVID DUNNING, VENTURE MANAGER

STATE OF TEXAS §  
COUNTY OF DALLAS §

Before me, the undersigned Notary Public in and for said County and State on this day personally appeared. David Dunning, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledge to me that he executed the same for the purpose and considerations therein expressed, and in the capacity therein,

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 1984.

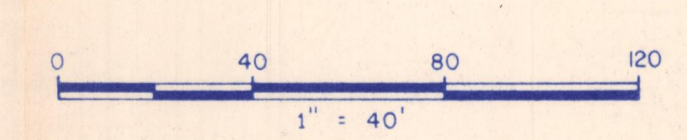
\_\_\_\_\_  
NOTARY PUBLIC IN AND FOR DALLAS COUNTY

1. Recommended for Final Approval:

\_\_\_\_\_  
Chairman, Planning & Zoning Commission Date

2. Approved:

\_\_\_\_\_  
Mayor, City of Rockwall, Texas Date



ROCKWALL TOWNE CENTRE  
FIRST FILING  
A 5.1974 ACRE SUBDIVISION OUT  
OF THE  
E.P. GAINES CHISUM SURVEY, A-64  
and the  
JAMES SMITH SURVEY, A-200  
CITY OF ROCKWALL ... ROCKWALL COUNTY ... TEXAS

SURVEYORS:  
BRITTAIN & CRAWFORD  
3908 SOUTH FWY.  
FORT WORTH, TEXAS  
76110  
PHONE: 429-5112

ENGINEERS:  
WIER & ASSOCIATES, INC.  
ARLINGTON, TEXAS  
601 HATFIELD CENTRE CIR.  
METRO (817) 265-2006  
FORT WORTH, TEXAS  
3908 SOUTH FREEWAY  
METRO (817) 926-0213  
METRO (817) 429-9007



**TRAFFIC IMPACT STUDY  
ROCKWALL TOWNE CENTRE**



**PAWA-Winkelmann  
& Associates, Inc.**

CIVIL / TRANSPORTATION ENGINEERS · PLANNERS · SURVEYORS

## TECHNICAL MEMORANDUM

TO: Mrs. Julie Couch  
Assistant City Administrator  
City of Rockwall, Texas

FROM: Mr. Richard R. Larkins, P.E.  
PAWA-Winkelmann & Associates, Inc.

SUBJECT: Traffic Impact Study  
Rockwall Towne Centre

DATE: March 12, 1985

We are pleased to submit to you the findings of our traffic analysis for the proposed retail development on the northeast corner of F.M. 740 and I.H. 30. This memorandum investigates the projected trip generation and distribution for the development, its related access needs, and internal circulation requirements.

### THOROUGHFARE DEVELOPMENT PLAN

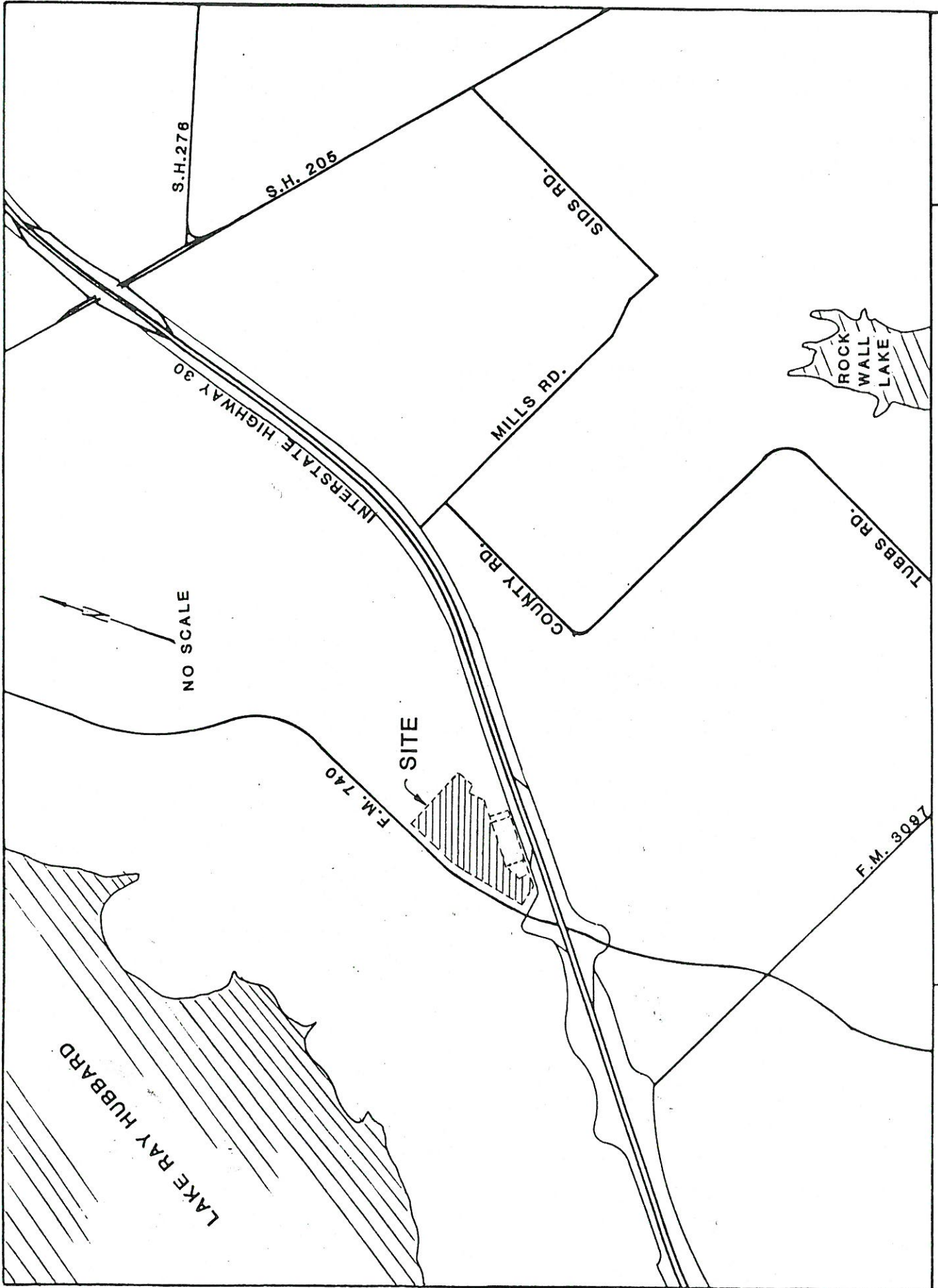
The following thoroughfares serve the vicinity of the proposed retail development (See Figure 1):

- + I.H. 30 - An existing four-lane, east-west interstate highway with two-way frontage roads immediately to the south of the proposed development. This facility is under the jurisdiction of the State Department of Highways and Public Transportation (SDHPT) and is currently scheduled to be improved. The improvements will consist of mainline modifications with ramp relocations and one way frontage roads.
- + F.M. 740 - An existing two-lane roadway which serves as the northern and eastern boundaries for the proposed development. The thoroughfare plan for the City of Rockwall shows this facility being developed as a four lane divided minor arterial roadway with 90 feet of right-of-way.

### TRIP DISTRIBUTION AND GENERATION

PAWA-Winkelmann & Associates, Inc. evaluated the projected traffic volumes on the major roadways in the study area in order to assign the estimated approach distribution of vehicular trips to the proposed retail development. The estimated approach distributions are sixty percent from the north, fifteen percent from the south, five percent from the east, and twenty percent from the west (Figure 2).

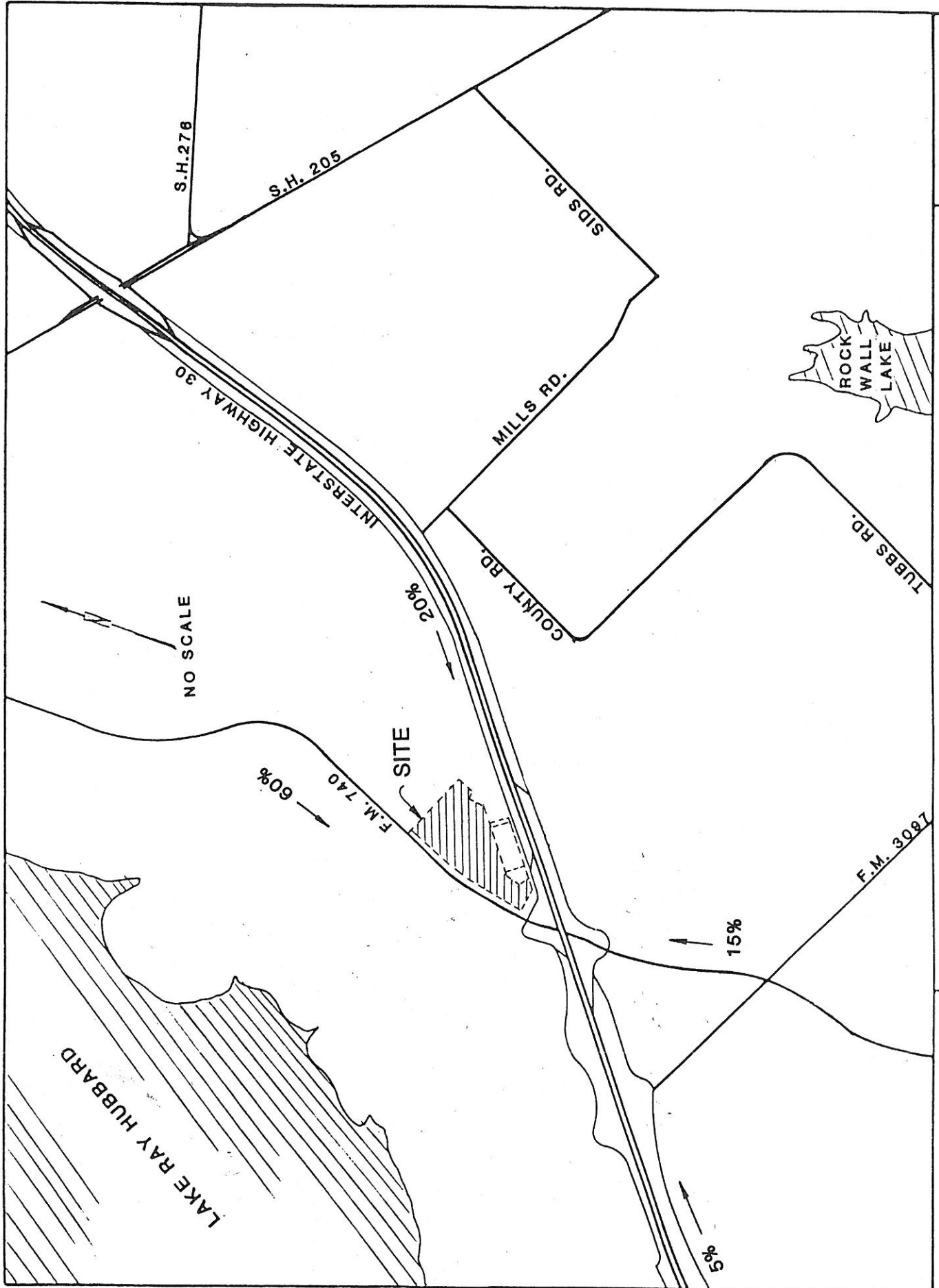
In order to determine the access requirements of the planned retail center, the number of trips in and out of the development were projected using the Institute of Transportation Engineers (ITE) Trip Generation Report (3rd Edition, 1982).



ROCKWALL TOWNE CENTER - VICINITY MAP

PAWA-Winkelmann  
& Associates, Inc.





ROCKWALL TOWNE CENTER - ESTIMATED TRIP DISTRIBUTION

### TRIP GENERATION TABLE

USE/SIZE (G.S.F.)	WEEKDAY TOTAL	A.M. PEAK		P.M. PEAK	
		IN	OUT	IN	OUT
PHASE I:					
Retail/31,600	3,773	50	44	230	232
Service Station/1,000	<u>748</u>	<u>11</u>	<u>11</u>	<u>12</u>	<u>12</u>
TOTAL	4,521	61	55	242	244
PHASE I & II:					
Retail/97,000	6,470	88	78	272	301
Service Station/1,000	748	11	11	12	12
Supermarket/64,000	<u>8,032</u>	<u>25</u>	<u>11</u>	<u>290</u>	<u>566</u>
TOTAL	15,250	124	100	574	879

The projections shown above are based on the size of the development times the corresponding trip generation factor for an average weekday.

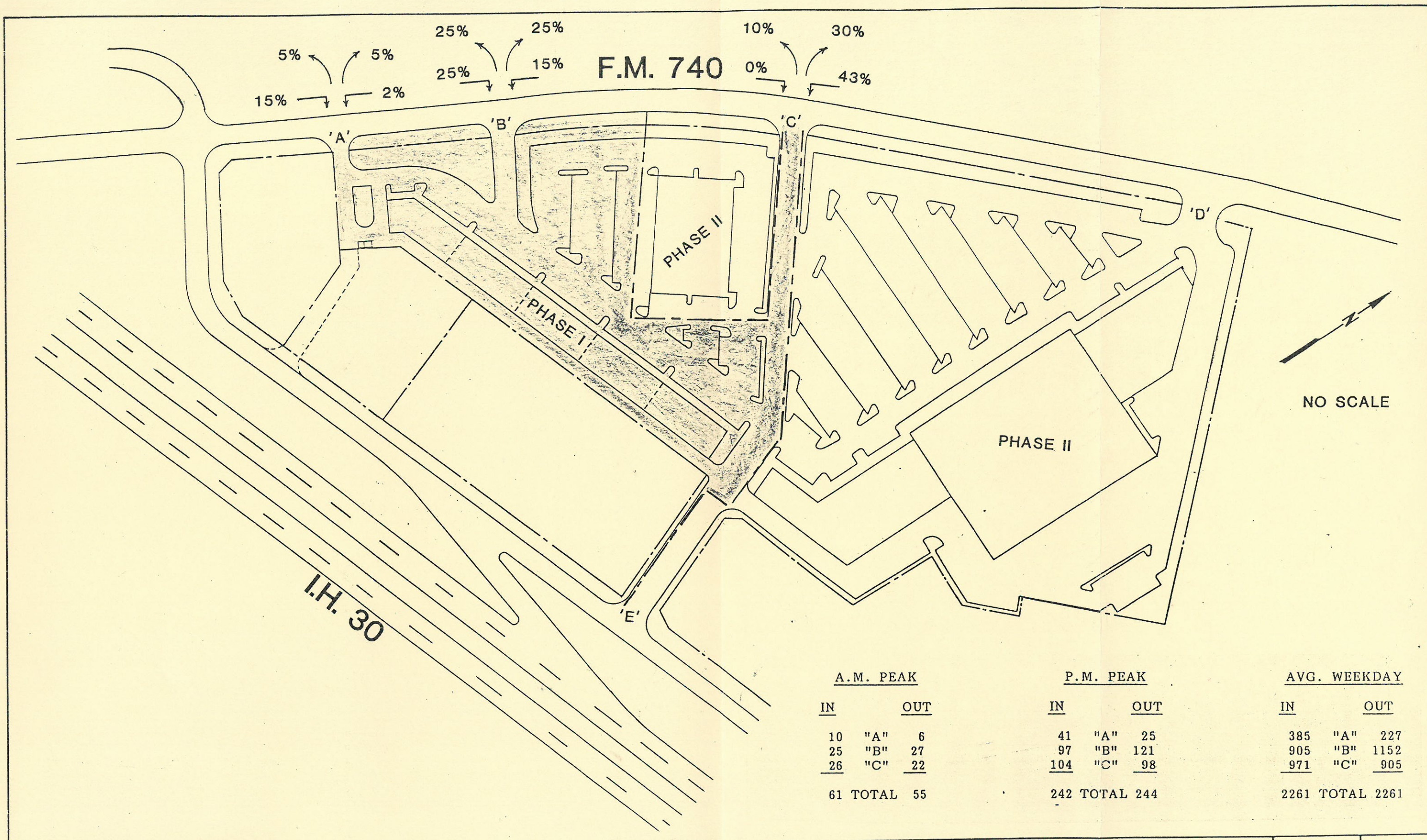
### INTERNAL CIRCULATION & ACCESS

#### PHASE I

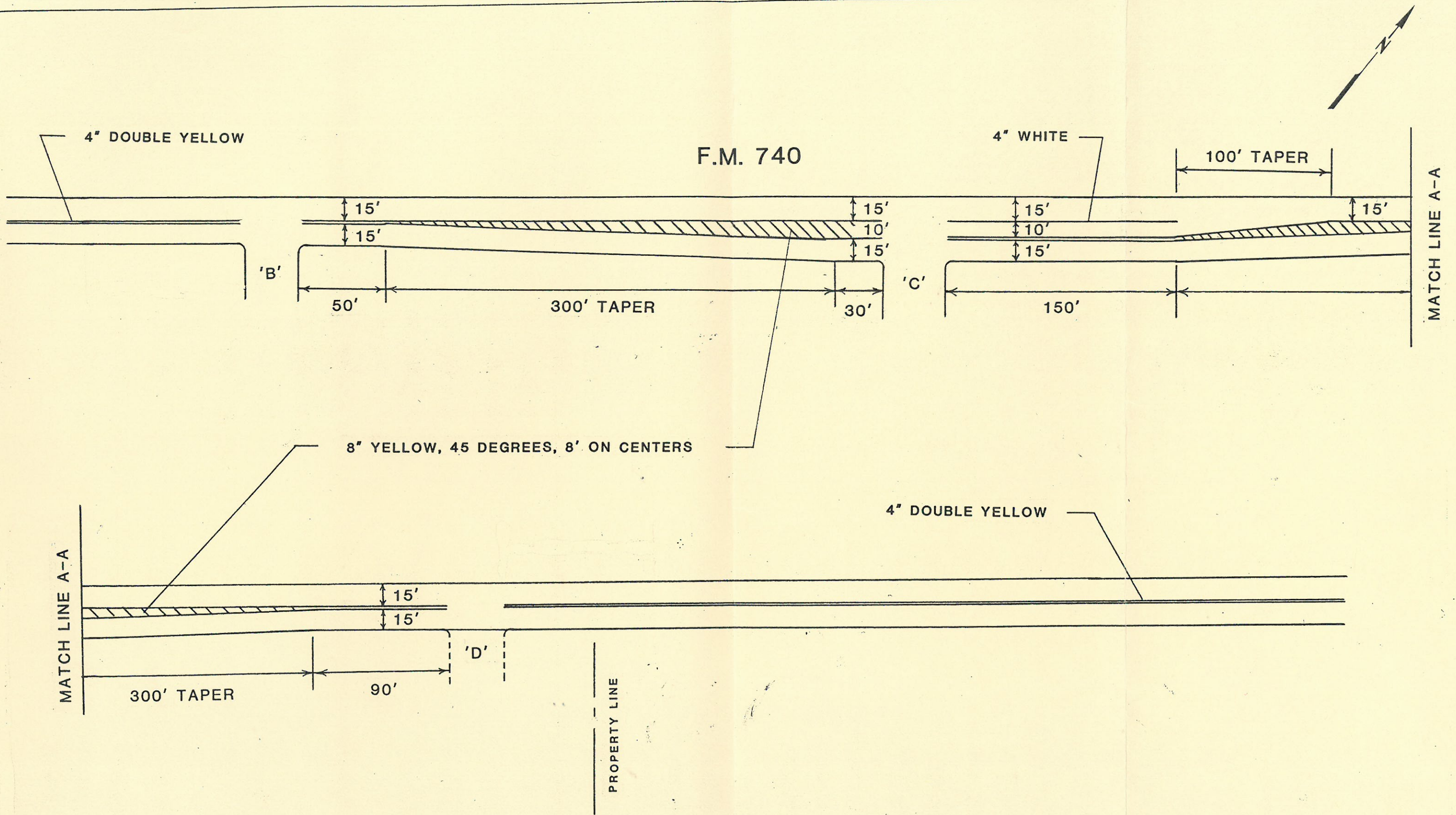
An analysis of the internal circulation of the shopping center and the thoroughfare system serving the complex allows the trips generated by the development to be distributed. Figure 3 depicts the distribution of trips generated by Phase I of the retail development.

It is estimated that forty-five percent of the trips to the development will use driveway "B" during Phase I. In order to streamline vehicular flow at the driveway and provide a more efficient operation, it is recommended that the driveway be channelized as shown on the attached Phase I horizontal control sheet. The drive-thru kiosk planned for that area of the development should be located on the island east of the driveway with vehicle access provided in the parking area east of driveway "B". The increased island area also provides additional room for landscaping along F.M. 740. Approximately twenty additional parking spaces are provided through the elimination of one driving aisle east of driveway "B".

As shown in Figure 2, an estimated sixty percent of the trips approaching the site will arrive from the north on F.M. 740. This results in a left turn volume of 145 during the p.m. peak for Phase I. In order to accommodate this left turn volume, it is recommended that widening occur on F.M. 740 to provide for a left turn lane at one of the driveways. In reviewing the site plans for the phased retail development it appears that driveway "C" will be the primary access point for the proposed development. We therefore recommend that driveway "C" be constructed during Phase I in conjunction with the widening of F.M. 740 (See Figure 4). All pavement marking modifications on F.M. 740 shall be performed using raised pavement markers. Prior to implementation of any improvements to F.M. 740, construction plans will be submitted to the City of Rockwall and the SDHPT for approval. The north/south circulation roadway connecting driveway "C" should be constructed from F.M. 740 to the circulation road at the rear of the Phase I development in order to facilitate the movement of service and delivery vehicles.



A.M. PEAK			P.M. PEAK			AVG. WEEKDAY		
IN		OUT	IN		OUT	IN		OUT
10	"A"	6	41	"A"	25	385	"A"	227
25	"B"	27	97	"B"	121	905	"B"	1152
26	"C"	22	104	"C"	98	971	"C"	905
61 TOTAL 55			242 TOTAL 244			2261 TOTAL 2261		



## PHASE I & II

Upon implementation of Phase II, the distribution of trips to the retail development is estimated to be as shown in Figure 5. Driveway "C" will again function as the primary access to the development with fifty-five percent of the inbound trips and forty five percent of the outbound trips. Due to its heavy usage, driveway "C" is recommended to be channelized as shown on the attached horizontal control sheet for Phase II. Channelization of this driveway will improve its operational characteristics by providing 180 feet of interior stacking space and additional area for landscaping.

Driveway "D" has also been modified as shown on the attached sheets. By removing approximately 10 parking spaces and relocating the drive to the south, vehicular flow at the driveway and along the circulation roadway in front of the Phase II development will be improved. The forty-six foot internal roadway at the north end of the development is considered to be excessive. A roadway width of thirty five feet is recommended with the remaining eleven feet used as a greenbelt for landscaping.

With the opening of Phase II, the left turn movement from southbound F.M. 740 into the development are expected to increase to 345 during the p.m. peak. The majority of the left turns will occur at driveways "C" and "D" with 200 and 115 respectively. This increase will require additional widening of F.M. 740 to provide a southbound left-turn lane at driveway "D" (See Figure 6). All pavement marking modifications shall be performed using raised pavement markings. When F.M. 740 is improved to a four lane divided minor arterial, it is recommended that median openings be located at driveways "A", "C", and "D" to provide access to the development. Left turn lanes in the median should also be provided at each of these driveways.

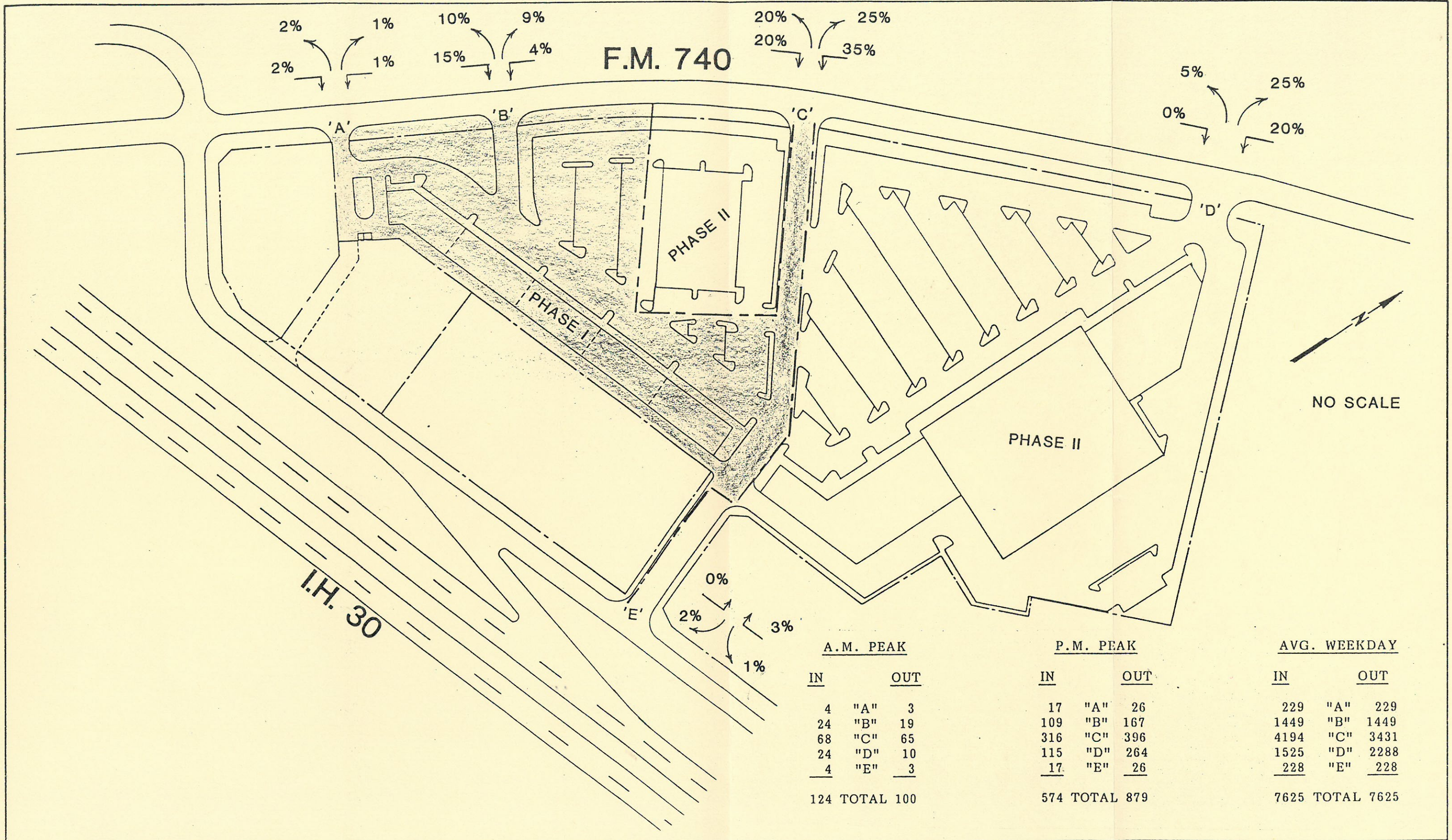
F.M. 740 at driveway "C" has the potential of requiring future traffic signalization due to possible cut-thru traffic from the I.H. 30 westbound frontage road. If a traffic signal is warranted at this location, the developer should be responsible for all associated costs related to its justification, engineering, and installation.

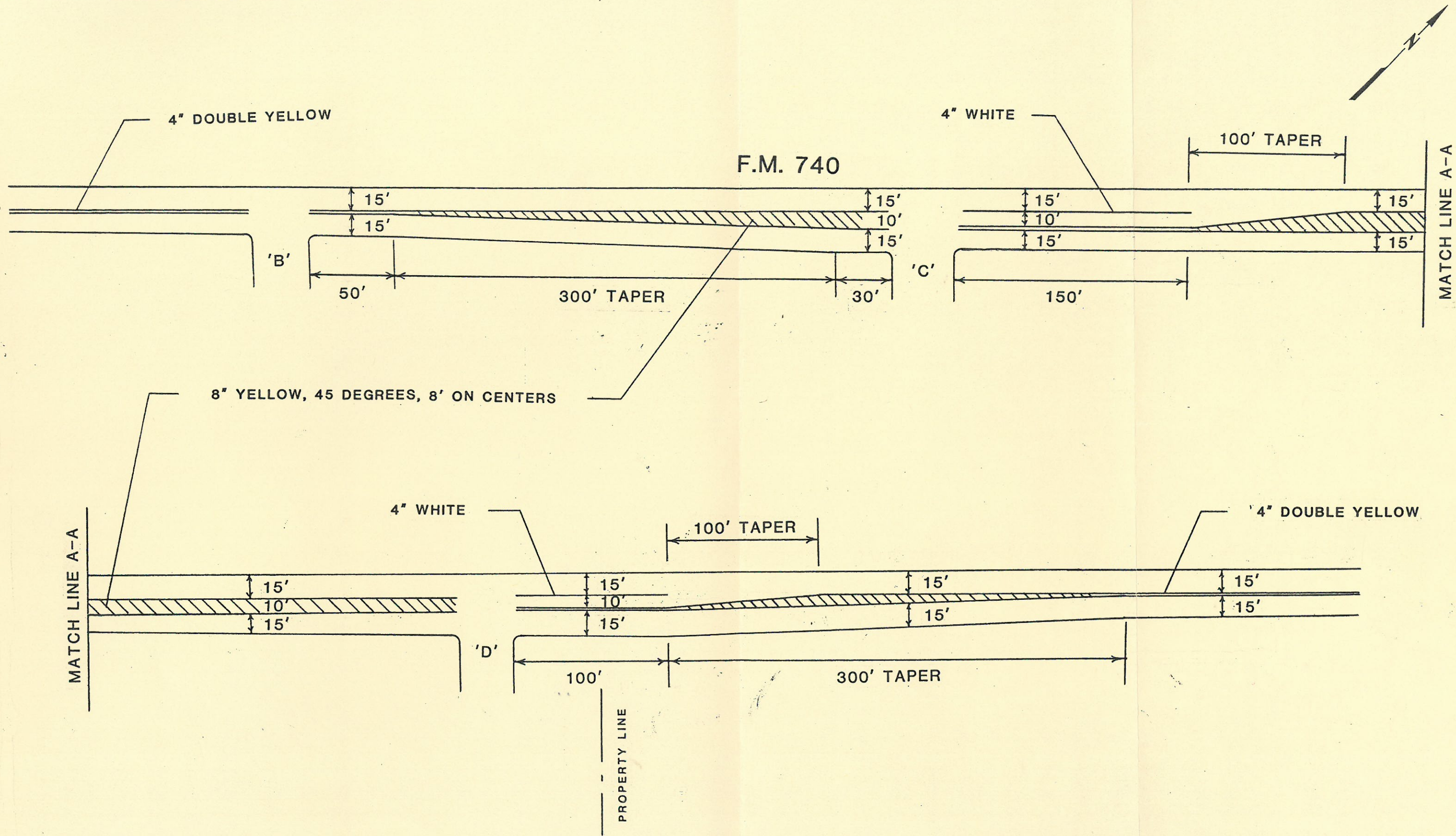
As noted earlier, F.M. 740 is designated as a four lane divided minor arterial in the Rockwall thoroughfare plan. F.M. 740 is also identified in the SDHPT strategic mobility plan as a four lane divided facility from I.H. 30 to SH 205. The roadway is planned to be constructed as a rigid pavement with curb and gutter. This section of F.M. 740 is not contained in the SDHPT 10 year improvement program and therefore is not planned for improvement until after 1995. However, District 18 has advised PAWA-Winkelmann & Associates, Inc. that the project could be accelerated if the City was willing to fund a portion of the construction costs. The City could obtain its portion of the funding through its roadway assessment program. As new development occurs along F.M. 740, it is recommended that a portion of the developer's roadway assessment be used to fund any needed improvements to the existing alignment of the roadway to support his development (i.e. left-turn/right-turn lanes). The remainder of the roadway assessment should be placed in escrow. When adequate funds are accumulated, the City should approach the SDHPT regarding acceleration of the planned improvements to F.M. 740.

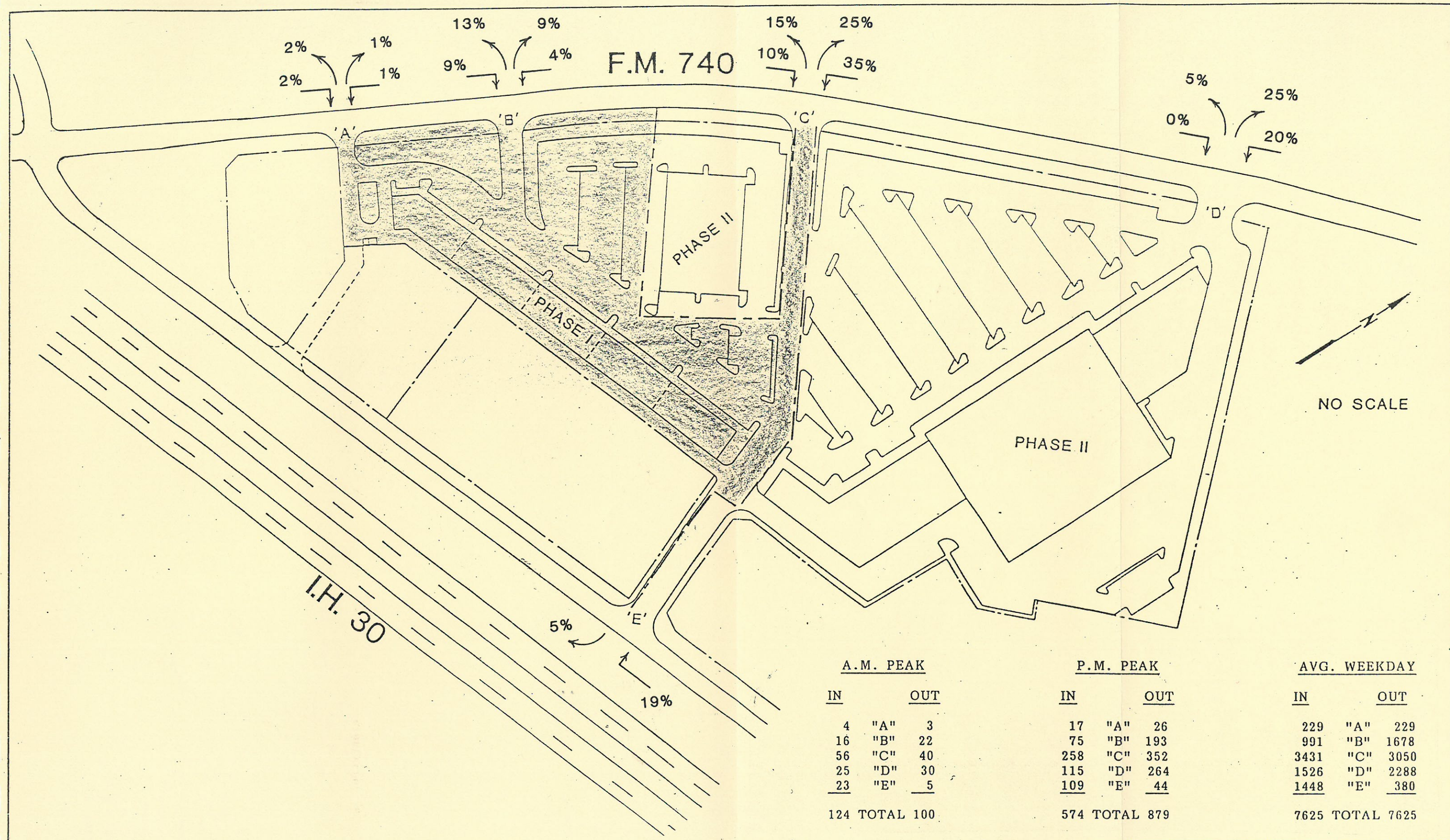
## I.H. 30 IMPROVEMENTS

Shown in Figure 7 is the redistribution of trips to Rockwall Towne Centre upon completion of the proposed improvements to I.H. 30. The reassignment is primarily due to the relocation of the westbound off ramp to a point approximately 600 feet east of driveway









A.M. PEAK			P.M. PEAK			AVG. WEEKDAY		
IN		OUT	IN		OUT	IN		OUT
4	"A"	3	17	"A"	26	229	"A"	229
16	"B"	22	75	"B"	193	991	"B"	1678
56	"C"	40	258	"C"	352	3431	"C"	3050
25	"D"	30	115	"D"	264	1526	"D"	2288
23	"E"	5	109	"E"	44	1448	"E"	380
124 TOTAL 100			574 TOTAL 879			7625 TOTAL 7625		

"E". The ramp relocation will allow trips approaching from the east on I.H. 30 to gain access to the development from the frontage road. One drawback to the ramp relocation is the possibility of "cut-thru" traffic within the development. Motorist exiting westbound I.H. 30 with destinations on F.M. 740 north of the interstate are likely to use the circulation roadway connecting driveways "E" and "C" as a short cut. In order to deter this movement, a combination of stop signs and speed bumps may be used. Another possible deterrent would be a discontinuous or circuitous alignment for the circulation roadway.

# FREESE AND NICHOLS, INC.

CONSULTING ENGINEERS AND PLANNERS

Mr. William R. Eisen  
City Manager  
City of Rockwall  
205 West Rusk  
Rockwall, Tx. 75087

SIMON W. FREESE, P.E.  
JAMES R. NICHOLS, P.E.  
ROBERT L. NICHOLS, P.E.  
LEE B. FREESE, P.E.  
ROBERT S. GOOCH, P.E.  
JOE PAUL JONES, P.E.  
ROBERT A. THOMPSON III, P.E.  
JOHN H. COOK, P.E.  
T. ANTHONY REID P.E.

JOE B. MAPES, P.E.  
OCIE C. ALLEN, P.E.  
W. ERNEST CLEMENT, P.E.  
ELVIN C. COPELAND, P.E.  
GARY N. REEVES, P.E.

Re: Second Review  
Rockwall Towne Center  
ROK 84877

Dear Mr. Eisen:

We have received the plans for the referenced project and have completed the second review. We offer the following comments regarding compliance with the City of Rockwall's Standards for Design and good engineering practice.

## GENERAL COMMENTS

We only received one copy of the plans which are being returned to you for review. This set should be returned if another review is deemed necessary.

## STORM DRAINAGE SYSTEM

1. The drainage area map which reflects the finished grade elevations after completion of all phases on the site appears to require several phases of extensive site grading which will cause the site to be bare of vegetative cover (and thus subject to erosion) for a much longer period of time than if all the grading and drainage work is done during the first phase, particularly for the area along the IH-30 Frontage Road.
2. The boundaries for Phase I and Phase II do not include the areas along the IH-30 frontage road which are planned to be extensively regraded. The regrading of Drainage Area 5 and a portion of Drainage Area 4 appears to be integral to the drainage plan for Phase II.
3. The City should ascertain that the Developer owns all of the land to be affected by the extensive regrading.
4. The proposed grading plan appears to call for 6 to 9 feet of elevation difference between the entrance on the IH-30 frontage road and the surrounding property. The City should review this concept with regard to fire fighting and maintenance access.

## WATER SYSTEM

1. As per the water distribution system analyses made in the first review, the proposed system will not meet the State's fire protection standards.
2. In order to be able to meet the fire demand of 1,500 gpm with a residual pressure of 20 psi, a looped 8-inch pipeline within the development which is tied to the 16-inch pipeline to the east and to parallel 6-inch pipelines along F.M. 740 will be required as recommended in the first review.

*Enlarge  
and pro rata?*

With this configuration as illustrated in Figure 1, the resulting pressures will be 25 psi assuming the 24-inch pipeline extension from the Heath Street Pump Station is in place.

3. In order to serve additional developments in the vicinity, particularly near Mr. Catfish, the City may want to increase the size of the proposed 6-inch parallel pipeline along F.M. 740.
4. Where water and sanitary sewer pipelines cross within nine feet of each other, special construction methods are required by the Texas Department of Health and should be noted on the plans.

## SANITARY SEWER SYSTEM

1. Where the proposed sanitary sewer Line A crosses under the 16-inch water pipeline along the IH-30 frontage road, special construction methods will be required to meet TDH regulations and insure no contamination of the water pipeline will occur.

## PAVING PLAN

1. Apparently no dedicated streets are planned for this plat; however, the City may want to ask the developer to provide typical cross-sections for the paving in the parking areas.

## DRIVEWAYS

1. The City may want to consider requiring a larger turning radii on the interior of the driveways accessed from FM 740 since fire fighting equipment may be required to use the parking lot for access to buildings.

GENERAL COMMENTS

Various other comments have been made on the attached plans for review and consideration. Upon the City of Rockwall's review and acceptance of these comments offer herein, we would recommend that the Developer provide corrections and additions to the plans as noted. Our recommendations do not in anyway relieve the Developer or his agent from responsibility and compliance with Rockwall's design standards and good engineering practice.

Please contact us if you have any questions or if we can be of further assistance.

Sincerely,

FREESE AND NICHOLS, INC.

A handwritten signature in cursive script that reads "C. Diane Palmer".

C. Diane Palmer, P.E.

CDP:sp

xc: Ed Heath  
R.L. Nichols  
T.A. Reid  
W.L. Douphrate II  
G.N. Williams





**FREESE AND NICHOLS, INC.**  
CONSULTING ENGINEERS AND PLANNERS

SIMON W. FREESE, P.E.  
JAMES R. NICHOLS, P.E.  
ROBERT L. NICHOLS, P.E.  
LEE B. FREESE, P.E.  
ROBERT S. GOOCH, P.E.  
JOE PAUL JONES, P.E.  
ROBERT A. THOMPSON III, P.E.  
JOHN H. COOK, P.E.  
T. ANTHONY REID P.E.

JOE B. MAPES, P.E.  
OCIE C. ALLEN, P.E.  
W. ERNEST CLEMENT, P.E.  
ELVIN C. COPELAND, P.E.  
GARY N. REEVES, P.E.

December 3, 1984

Mr. William R. Eisen  
City Manager  
City of Rockwall  
205 West Rusk  
Rockwall, TX 75087

RE: First Review  
Rockwall Towne Centre  
ROK 84877

Dear Mr. Eisen:

We have received the plans for the referenced project and have completed the first review. We offer the following comments regarding compliance with the City of Rockwall's Standards for Design and good engineering practice.

GENERAL COMMENTS

1. The plans submitted for review are substantially complete; however, a few comments are offered.
2. The plans seem to indicate that this site may be planned for phased development. If so, the plans should clearly indicate which structures (specially drainage structures) will be constructed in this phase and provide the appropriate plans and profiles.
3. The plans as submitted appear to cover only the portion proposed in the plat.

STORM DRAINAGE SYSTEM

1. Topographic contours should be shown for the drainage area No. 4 in order to justify the location of the drainage boundary.
2. Estimated discharge rates should be shown on the plan view at the inlet locations.
3. The storm sewer profiles should be included along with their corresponding hydraulic calculations if the system will be built in this phase.

Mr. William Eisen  
December 3, 1984  
Page 3

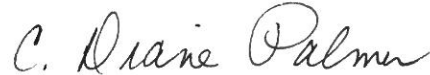
GENERAL COMMENTS

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Please contact us if you have any questions or if we can be of further assistance.

Sincerely,

FREESE AND NICHOLS, INC.



C. Diane Palmer, P.E.

CDP:dd

xc: Ed Heath  
R. L. Nichols  
T. A. Reid  
W. L. Douphrate II  
G. N. Williams

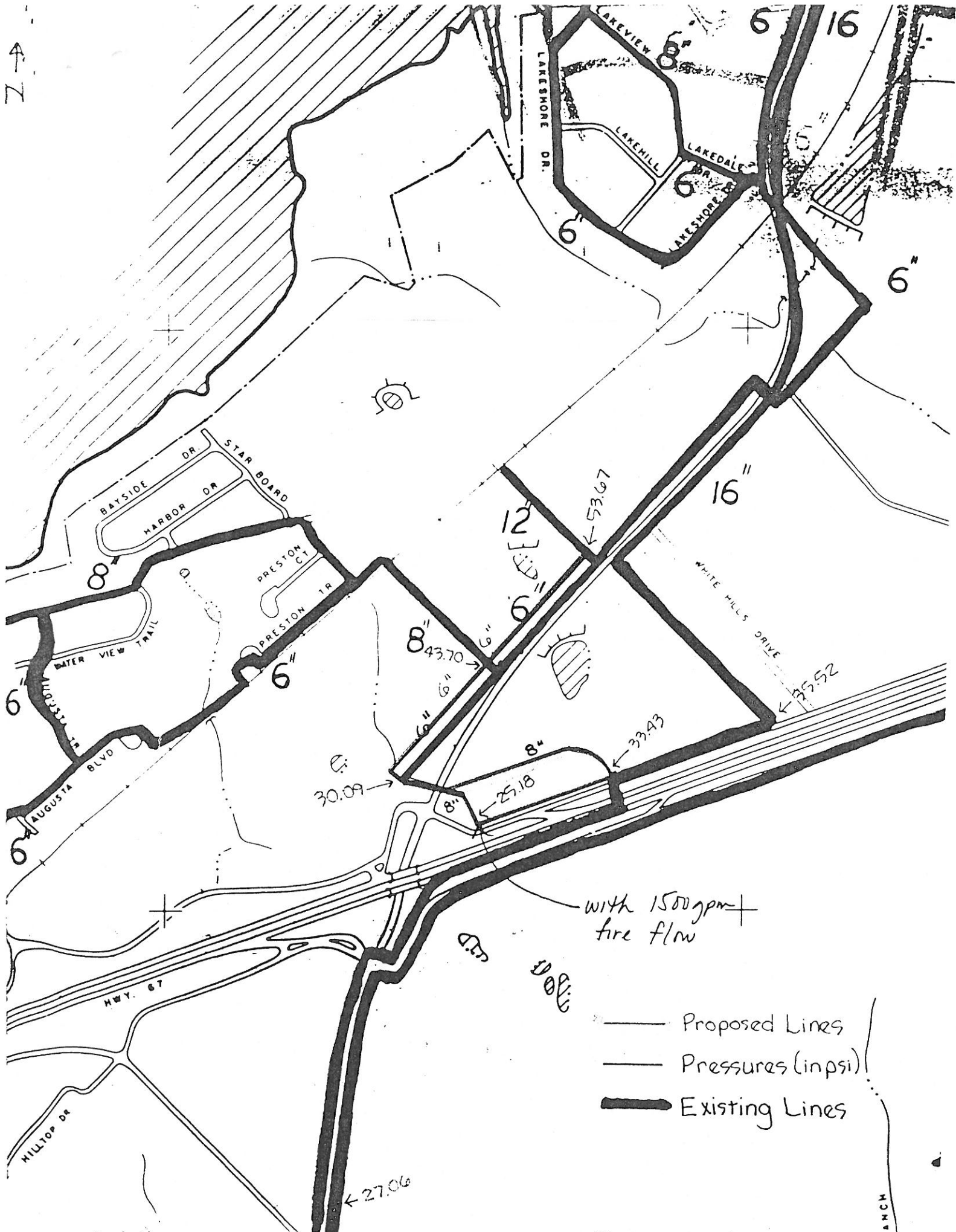


FIGURE 1

**Dunning  
Development Corporation**

8235 Douglas Avenue  
Suite 816  
Dallas, Texas 75225  
(214) 528-1905

February 6, 1986

Mr. Ed Heath  
City of Rockwall  
205 West Rusk  
Rockwall, Texas 75087-3628

RE: Rockwall Towne Centre  
FM 740 Improvements

Dear Mr. Heath:

When the Rockwall City Council approved the final plat for Rockwall Towne Centre, they required that we escrow the cost of a 12 foot wide lane along 740 in proportion to the amount of building area completed in Phase I. My understanding is that we are to be given credit for any portion on the 12 foot lane which is actually installed.

I have enclosed a breakdown which shows that at this time we have installed a 12 foot lane along 42% the Phase I frontage. We have completed 35% of the Phase I building area.

From this comparison, it appears that no street improvement escrow is required at this time. I understand that at such time as we complete more buildings in Phase I, we will be required to escrow a proportionate share of the cost of installing the 12 foot lane.

Please review this information at your convenience and contact me if your understanding differs from mine. I appreciate the effort the City of Rockwall has made to work with us on this project. I think our building is an asset to the City of Rockwall and judging from our leasing success, many people agree.

Thanks once again for the help from you and your fine staff.

Sincerely,



Patrick E. Donovan

PED:jms



ROCKWALL TOWNE CENTRE

PHASE I

12 Foot Lane Installed

Gulf	165'
McDonald's	25'
Rockwall Towne Centre	441'
	<hr/>

Total Frontage 631'

Turn Lane Installed (average 12' width)

Gulf	165'
McDonald's	25'
Rockwall Towne Centre	150' divided by 2 (taper)
	<hr/>
	265'

Installed to Date:  $\frac{265'}{631'}$  = 42% of Phase I

Phase I Building Area

Allowable Building area on site plan	30,100 Square Feet
Phase IA Construction	10,600 Square Feet

Phase I buildings completed to date = 35%

Eisen stated that the items other than the rate increase were administrative in nature, and Mr. Duane Gracy was present and indicated that he was in agreement with the changes proposed.

Ken Dickson made a motion that the ordinance amending the Garbage Collection Franchise Agreement raising the rates to be charged for garbage collection be approved. Bill Fox seconded the motion was voted on and passed unanimously.

The Council considered an ordinance governing landfill rates and types of refuse accepted at the Rockwall Sanitary Landfill.

Eisen explained that this ordinance establishes rates to be charged at the Sanitary Landfill. He stated that the ordinance under consideration did not change the formula for calculation of charges (based on \$1.20 per cubic yard); however, it had been modified to account for compaction containers and larger trucks and trailers. He stated that the intent of the changes proposed in this ordinance was to make the City's charges more equitable for customers.

Ed Eubanks made a motion to approve the ordinance governing landfill rates and types of refuse accepted at the landfill on first reading. Dickson seconded the motion. The motion was voted on and passed unanimously.

The Council then considered approval of a final plat on Rockwall Central Shopping Center submitted by Folsom Investments.

Phelps made a motion to approve the final plat on Rockwall Central Shopping Center. Dickson seconded the motion. The motion was voted on and passed unanimously.

The Council then considered approval of a final plat on Rockwall Towne Centre, Phase 2 submitted by Dunning Development. Eisen explained the Staff's recommendations.

Dickson made a motion to approve the final plat of Rockwall Towne Centre, Phase 2 with the following stipulations:

1. One turn lane shall be completed prior to the issuance of a Certificate of Occupancy being granted on any portion of Phase 1.
2. A turn lane into the main entrance and northernmost entrance shall be completed prior to issuance of a Certificate of Occupancy being granted on any portion of Phase 2.
3. All improvements must be approved by and meet all conditions of the State Highway Department.
4. The developer shall place in escrow 115% of the cost to complete the paving, storm drainage, curb and gutter, sidewalks and engineering for a 12 ft. lane, as estimated by the City's engineers,



# Rockwall Town Centre

FM-740 Improvements

Phase 1<sup>o</sup> 24ft - 54,400

15% Engineering - 11,787.45

24" RCP  
1 INLET 5' drainage - 24,183.00

15% Contingency - ~~13,555.57~~

---

115% Total \$119,514.92

Phase 2<sup>o</sup> 24ft. - <sup>\$</sup>79,400

15% engineering - 14,480.14

24" RCP  
1 INLET 10'

drainage - 17,134.40

15% Contingency - 16,652.18

---

115% Total - \$146,814.75

\$266,331.67



TO

Pat Donovan  
Dunning Development  
8235 Douglas Ave., Suite 816  
Dallas, Tx. 75225

FROM

**CITY OF ROCKWALL**  
205 West Rusk Street  
ROCKWALL, TEXAS 75087-3793  
(214) 722-1111 • Dallas 226-7885

SUBJECT

Rockwall Towne Centre Final Plat

DATE

11/30/84

MESSAGE:

Staff comments are as follows:

1. List acreage in each lot on plat.
2. Indicate 20 ft. building line along frontages.
3. Indicate point of beginning on plat.
4. Engineering review will be available on Monday.
5. Submit 8 copies of the plat drawing only by Dec. 5th.
6. Inform Staff as to what type of screening you will provide behind the buildings by Dec. 5th since the City Council gave you the option of a wall or any other opaque screen.

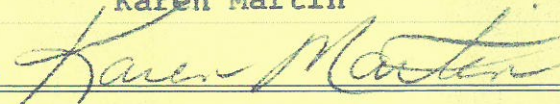
CC: Gino Bernardez  
Wier & Assoc.

ORIGINATOR-DO NOT WRITE BELOW THIS LINE

REPLY TO →

SIGNED

Karen Martin



REPLY

DATE

SIGNED

SEND PARTS 1 AND 3 INTACT-PART 1 WILL BE RETURNED WITH REPLY

Ennis RM-858-3

ORIGINATOR'S COPY

ORIGINATOR DETACH AND FILE FOR FOLLOW UP

MEMORANDUM

December 17, 1984

TO: Pat Donovan  
FROM: Karen Martin *KM*  
SUBJECT: Rockwall Towne Centre Final Plat

On December 13, 1984, the Planning and Zoning Commission recommended approval of your final plat with a brick screening wall above your retaining wall. This plat will be considered by the City Council on January 7, 1985. Your engineering must be re-submitted by December 26th.

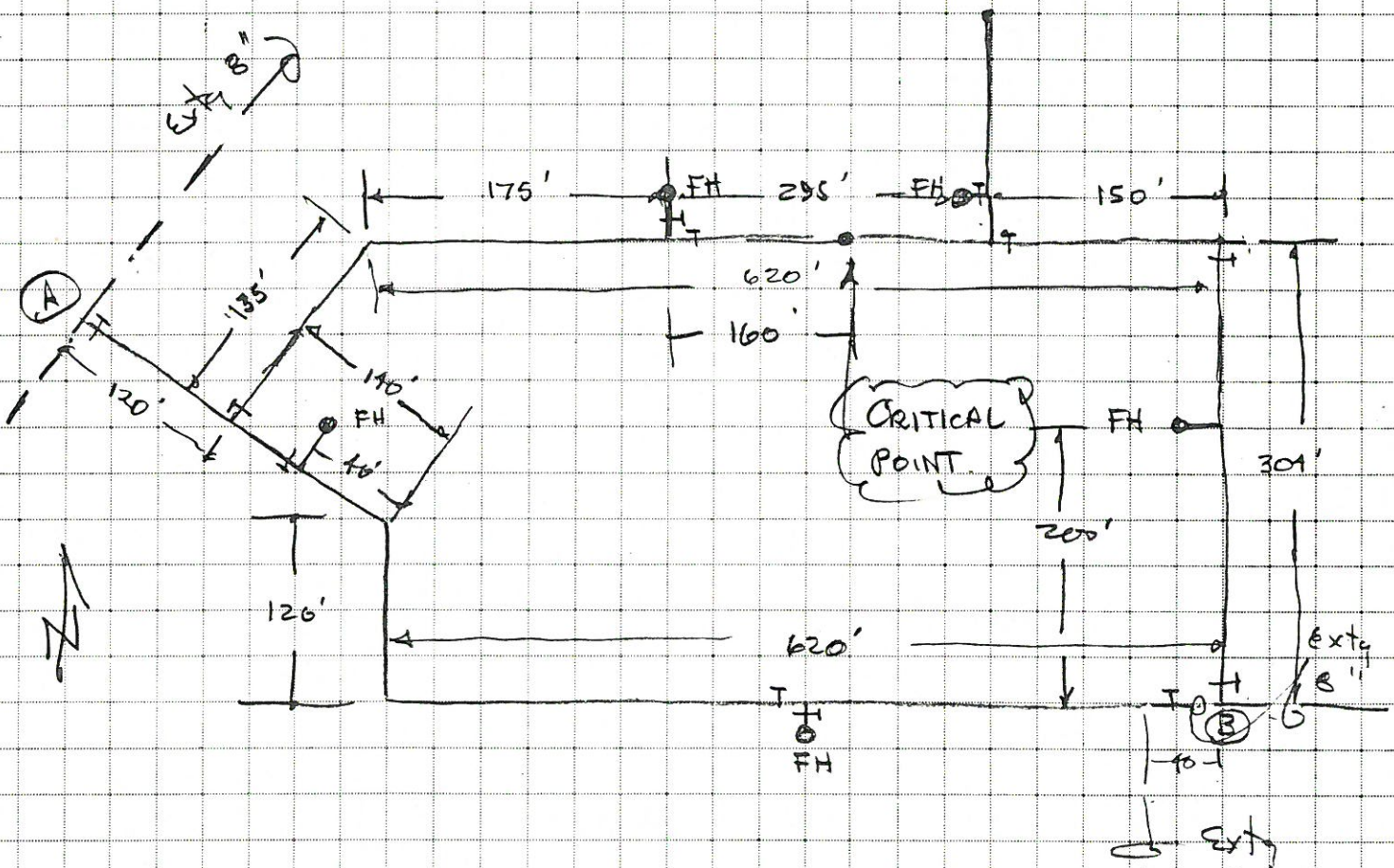
CC: Rudy Garcia

**Sheard**  
No. 1031/C  
HASTINGS, MN - LOS ANGELES  
LOGAN, OH - McREGOR, TX U. S. A.



Ref. Phone Conn. Tony Reed City Eng. 12/11/84  
Pressure at Sto 50-60 psi

WATER SYSTEM ANALYSIS  
(PHASE #1)



• Max distance between supply sources A & B

Distances A - B

North Route =  $120 + 135 + 620 + 304 = 1179$

South Route =  $120 + 140 + 120 + 580 = 960$  LF

• CRITICAL POINT  $\frac{1179 \text{ LF}}{2} = 590 \text{ FT}$  in on Northern Route



DESIGN FLOW DETERMINATION

Source: Water Supply & Pollution Control 2nd Edition  
Clark, Viessman and Hammer,  
Intext Educational Publishers, New York, 1971 p. 101 ff.

- Population Density for Commercial Areas 15.30 pers/acre
- Water use per capita Commercial Areas 28 gpcd
- Demand / Acre =  $30 \frac{\text{person}}{\text{acre}} \times 28 \frac{\text{gal}}{\text{person/day}} = 840 \frac{\text{gal}}{\text{acre/day}}$

1. Northern Service reqmt.

$$Q_N = 840 \frac{\text{gal}}{\text{acre day}} \times \text{Area in Acres}$$

$$N \text{ Area} = 38.5 + 10.02 + 13.4 \text{ in}^2 = 61.92 \text{ in}^2$$

$$1 \text{ in}^2 = 2500 \text{ SF} \quad \frac{61.92 \text{ in}^2 \times 2500 \text{ SF}}{43,560 \text{ SF/Acre}} = 3.55 \text{ Ac}$$

$$Q_N = 840 \frac{\text{gal}}{\text{acre/day}} \times 3.55 \text{ Acres} = 2,982 \text{ gpd.}$$

2 Southern Service Reqmt 5.197 Acres - 3.55 = 1.65 Ac

$$Q_S = 840 \times 1.65 \text{ Acres} = 1,383 \text{ gpd}$$



$$\bullet \text{ Design Flow} = Q_N \times 2 + Q_{\text{Fire}}$$

$$Q_{\text{Fire}} = Q_{\text{Commercial}} = 1500 \text{ gpm}$$

$$\bullet \text{ Design Flow} = (2 \text{ gpm} \times 2) + 1500 \text{ gpm}$$

$$Q_D = \underline{1504 \text{ gpm}} = Q_N$$

CHECK 8 INCH LINE IN NORTH ROUTE

Length of Line from 8" main = 590 LF  
at Intersect point

Pressure Calc. Using Hazen Williams Nomograph

Assuming  $P_{8''} = 50 \text{ psi}$   $\Delta \text{Elev} \approx \text{Zero}$

$$Q_N = 1502 \text{ gpm} ; C = 110 ; D = 8''$$

$$\frac{H_L}{1000'} = 45 \text{ per } 1000 \text{ FT. } 19.5 \text{ psi} / 1000 \text{ FT.}$$

$$\Delta H = .0195 \frac{\text{psi}}{\text{ft}} \times 590 \text{ FT} = 11.5 \text{ psi}$$

$$\text{Pressure Residual} = 50 \text{ psi} - 11.5 = 38.5 \text{ psi}$$

38.5 > 20 psi  $\therefore$  8" is OK!