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2000-1 Addison Circle
1995-1996 Barton - Aschman Correspondence

Meeting @ Barton Ashman

8-19-97

ULI Urban Land Institute

Peak -
Addison Circle Phase II

Use ULI - Retail & Rest

DT Data for Residential
Shared Parking Planning Guidelines '95

Jeff - Thorough Plan

Post-it [®] Fax Note	7671	Date	# of pages ▶ 3
To	John Baumgardner		
From	JDM		
Co./Dept.	Co.		
Phone #	Phone # 991-1900		
Fax # 960-7684	Fax #		

AFT

ADDISON URBAN CENTER

TRANSPORTATION RELATED ISSUES

- A more comprehensive traffic study should be conducted prior to the determination of the adequacy of the transportation system serving the Urban Center. This study should include, as a minimum the following elements:
 - Analysis conducted for the P.M. peak hour rather than on a daily basis.
 - Consideration of on-street parking and higher than normal pedestrian movements on traffic conditions during the design hour.
 - Impact should be identified and recommendations developed based on maintaining LOS D peak hour conditions.
 - The analysis of total traffic on the roadway system should include traffic generated by new development on the remaining undeveloped land in the north Quorum area and along the Dallas North Tollway (DNT) Corridor.
 - Critical intersections should be analyzed in addition to the roadway segment analysis conducted. The critical intersection should include all intersections within the north Quorum area and DNT intersections at Belt Line, Arapaho, Keller Springs, Airport, and Westgrove.
- The final geometric of the proposed traffic round-a-bout should be developed as quickly as possible to allow proper analysis of operating conditions on Quorum Drive.
- Access Control Policies should be developed for the area to maintain the efficiency of the roadway system.
- Future locations for traffic control devices should be identified.
- The impact of not extending Spectrum Drive across the Railroad tracks should be identified.
- Planned roadway improvements should coincide with appropriate development thresholds.
- The ability for Quorum Drive to accommodate through traffic at an acceptable level of service must be preserved.

Scenario 1:

Development	Size	24-Hour Volumes (Trips)	AM Peak Hour (Trips)	PM Peak Hour (Trips)
Multi-Family	4000 Units	26,987	1,967	1,956
Office*	2,500,000 Sq.Ft.	21,150	3,000	2,700
Retail	300,000 Sq.Ft.	14,063	310	1,321
Total		62,200	5,277	5,977

* It was assumed the 2,500,000 sq. ft. of office is interrelated.

Scenario 2:

Development	Size	24-Hour Volumes (Trips)	AM Peak Hour (Trips)	PM Peak Hour (Trips)
Multi-Family	1500 Units	8,293	740	787
Office*	2,221,376 Sq.Ft.	18,793	2,666	2,399
Retail	0 Sq.Ft.	0	0	0
Total		27,086	3,406	3,186

* It was assumed the 2,221,376 sq. ft. of office is interrelated.

Scenario 3:

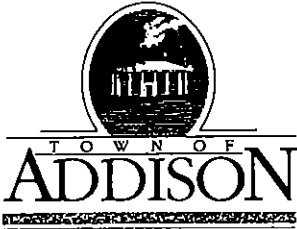
Development	Size	24-Hour Volumes (Trips)	AM Peak Hour (Trips)	PM Peak Hour (Trips)
Multi-Family	4000 Units	26,987	1,967	1,956
Office*	221,376 Sq.Ft.	1,872	265	238
Retail	0 Sq.Ft.	0	0	0
Total		28,859	2,232	2,194

* It was assumed the 221,376 sq. ft. of office is interrelated.

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3.2




Post Office Box 144 Addison, Texas 75001-0144

5300 Belt Line Road

(214) 450-7000
FAX (214) 960-7684

April 27, 1995

TO: Kathy at Barton-Aschman

FROM: Carmen Moran, Director of Development Services, Town of Addison 

SUBJECT: Addison Urban Center traffic generation and Grade Separation Issues and Spectrum/DART crossing

Kathy,

As Gary is aware, we have been working on a new zoning district to be known as the Addison Urban Center. Columbus Realty Trust has had DeShazo do the attached traffic analysis. We just received the analysis today.

Dan Kenney from Sasaki Associates has reviewed the study and made some notes. We would also like for Barton-Aschman to review the study and be prepared, if needed, to attend the Council meeting on:

WEDNESDAY, MAY 3, 1995
6:00 P.M.
ADDISON CONFERENCE AND THEATRE CENTRE
15650 ADDISON ROAD

John Baumgartner is not in today, but I will talk to him tomorrow and see if he thinks we need a representative from Barton-Aschman at the meeting.

*John,
I will
call in the
morning*

Susaki Associates, Inc.

Facsimile Transmittal

- Planning
- Architecture
- Landscape Architecture
- Urban Design
- Transportation Planning
- Civil Engineering
- Environmental Services
- Interior Design
- Graphic Design

4/27/95
 Date: _____ File: _____

A1532 ADDISON SPECIAL DISTRICT
 Project Name/Number: _____

CARMEN MORAN
 To: _____ Company: _____

214 960 7684
 Facsimile Number: _____

DAN KENNEY
 From: _____ cc: _____

5
 Number of pages transmitted (including cover sheet): _____ Hard Copy in Mail Yes / No

DAN
 Transmitted by: _____

Comments:

TRAFFIC MEMO WE TALKED ABOUT.

1925 San Jacinto
 Dallas, Texas
 75201

Telephone 214 922 9380
 Facsimile 214 954 0687

- Los Angeles, California
- San Francisco, California
- Washington, D.C.
- Watertown, Massachusetts
- Zurich, Switzerland

Affiliated Office:
 Suter + Suter
 Basel, Switzerland

REALTY TRUST

Facsimile Transmission

TO: Dan Kenney
FAX #: 954-0687
LOCATION: Sasaki, Inc.

FROM: Bryant Nail
Fax # 770-5129
Voice # 770-5151

Date: 4/25 Time: _____

RECEIVED
APR 25 1995

4 # Pages (Including Cover Sheet)

SASAKI ASSOCIATES, INC.

COMMENTS: _____

JOB #	<u>41532</u>
FILE	<u>DK</u>
	<u>JML</u>

NOTICE OF CONFIDENTIALITY

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DeShazo, Tang & Associates, Inc.
Engineers • Planners
330 Union Station, Dallas, Texas 75202-4802
214/748-6740 • Metro 214/263-5428
FAX 214/748-7037

To: Brian Nail
Columbus Realty Trust

DeShazo, Tang & Associates
Tony T. Tramel, P.E. *TT*

Subject: Addison Urban Center
Traffic Generation & Grade Separation Issues at Spectrum/DART Crossing

The purpose of this technical memorandum is to address the following two transportation issues associated with the proposed Addison Urban Center development:

- Project the number of trip ends for the Addison Urban Center and evaluate the generalized 24 hour north/south capacity of the roadways within and adjacent to the development for the following scenario:
 - 4,000 multifamily units; with
 - 300,000 square feet of ground floor retail within the multifamily buildings; and
 - 2,500,000 square feet of general office space.
- Comment on DART's request/requirement that the extension of Spectrum will necessitate grade separating the rail line from the roadway.

Trip Generation Analysis

Site generated traffic from the three land uses produce different trip characteristics. The residential component is expected to generate significant portion of their trip ends during the traditional peak hours of traffic due to the work related uses. However, because of their location it is anticipated the trips will be shorter and destined to employment opportunities within or adjacent to the Addison Urban Center. These same characteristics would be expected for the retail uses as well. This relationship creates an overall reduction in trip making within the Urban Center. This represents one of the benefits of multi-use developments.

The number of trips generated by each type of land use in 24 hours was projected using values contained in Institute of Transportation Engineer's Trip Generation. The following table reflects the total number of vehicle driver trip ends for each type of land use proposed.

Land Use	Units/Square Feet	24 Hour Trip Ends
Multi-Family	4,000 Sq. Ft.	16,800
Ground Floor Retail	3,000 Units	14,000
General Office	2,500,000	21,000
Subtotal		51,800
Less (10%) Internal Trips		-5200
Total		46,600

*NO PEAK ANALYSIS
DOES NOT INCLUDE
ADJ. DEPEND*

Addison Urban Center

Projected traffic volume to roadway capacity with 2.5 M square feet of office development

North/South Addison Rd	No Lanes	LOSE Capacity	1995 Volume	Phase I Traffic	N/S Volume With Phase I	Projected 24 Hr Traffic Volumes	
						Additional Volume For 2.5 M sf Office	Projected Total
	4	28,000	19,500	2,500	22,000	3,000	25,000
Quorum Dr	4	20,000	6,600	8,500	15,100	4,000	19,100
Spectrum	4	20,000	0	10,000	10,000	5,000	15,000
Dallas North Frontage Rds	6	43,500	25,000	7,000	32,000	6,600	38,600
North/South Totals		109,500	51,100	28,000	79,100	18,600	97,700

The Projected North/South 24 Hour Volume to Capacity Ratio = $(97,700/109,500) = 0.89$

With the Addition of 2.5 M Square Feet of Office Beyond Phase I

Phase I consist of 4,000 Multifamily Units, with 300,000 SF of ground floor retail, with 10% internal trip satisfaction.

Phase 2 includes 2.5 million SF of general office with 10% internal trip satisfaction.

NO distribution will be done

The projected 24 hour volumes were distributed on the existing and planned north/south roadways which will serve the Addison Urban Center. These values were added to the estimated 1995 24-hour traffic volumes for Addison Road, Quorum Drive, Spectrum Way and the Dallas North Tollway frontage roads for Phase I and an additional 2,500,000 square feet of general office uses. The generalized 24-hour roadway capacity for each of the four north/south roadways has also been identified. The total gross north/south roadway capacity for the four roadways is 109,500 vehicles per day. This compares to a projected demand of 100,100 vehicles for the development scenario of 4,000 multi-family units, 300,000 square feet of ground floor commercial space, and 2.5 million square feet of general office use.

The attached table reflects a comparison of the available 24 hour north/south roadway capacity to the 24 hour traffic demand for the multifamily, commercial, and general office development scenario noted within this memorandum. This comparison indicates the existing and planned roadway network can be expected to accommodate the development as proposed ignoring background growth other than the Addison Urban Center.

This analysis should be considered a macro type of analysis. The findings indicate that the gross number of lanes in the north south direction correspond to the same general order of magnitude needs to accommodate the 1995 conditions plus the projected project demand with 11% reserve for other background traffic growth during project build out.

Grade Separating Spectrum at DART Rail Facility

Significant and substantial efforts by traffic engineers have been expended in examining the potential for DART light rail facilities to operate in the urban environment without grade separations. Several traffic engineering firms including DeShazo, Tang & Associates and Barton Aschman have examined the expected traffic operations impact of DART rail and its impact on traffic operations on public roadways and intersections. This analysis has led DART and Cities where DART is scheduled to operate to generally used at grade operations. DART plans call for light rail facilities to cross roadways and even to run within median areas of existing roadways.

The basis for this conclusion is primarily related to the large costs for grade separations and the relatively small impact the at-grade facility has on traffic operations (i.e., delay, safety, and efficiency). DART rail operations would reasonably occur with 10 minute or greater headway's. Assuming such a headway for each direction on the rail line, an average of two trains would cross Spectrum every 5 minutes. The trains would be short with 3-5 cars in length operating at 30-40 mph. Such an operation would provide a total roadway blockage time or "gate down time" of only 35 to 60 seconds for each train crossing every five minutes during the peak hours of operations.

The DART rail facility between Irving and Dallas is proposed to have 20 minute headway's rather than the assumed 10 minute headway's identified above during the peak hours. The closing of the gates for an at-grade rail location for DART would be similar to a two phase traffic signal. One phase or green period of 35-60 seconds for the DART train, and then a period of 4 minutes of green time for Spectrum vehicular traffic. The crossing would operate as a traffic signal with almost all the green time being provided to Spectrum.

The need to grade separate Spectrum with the DART rail line should be examined from a cost efficiency perspective and traffic related impact of an at-grade rail line crossing analysis.

BARTON-ASCHMAN

A PARSONS TRANSPORTATION GROUP COMPANY

5485 Bell Line Road, Suite 199 • Dallas, Texas 75240 USA • (214) 991-1900 Fax (214) 490-9261

Memorandum

TO: John Baumgartner
Town of Addison

FROM: Gary Jost

DATE: November 27, 1995

SUBJECT: Review of Design Study for Addison Circle Modern Roundabout

This memorandum presents the findings of a review conducted by Barton-Aschman Associates Inc. of the above referenced study. The study, dated November 14, 1995, was prepared by Huitt-Zollars, Inc. in association with Ourston and Doctors. The study presents the geometric design parameters and estimated operating conditions of a modern roundabout planned for the intersection of Quorum Drive and Mildred Street in the Town of Addison. Barton-Aschman's review focuses on the operational and safety considerations of the planned roundabout assuming projected traffic volumes at build-out of the proposed development and currently undeveloped sites along the Quorum Drive Corridor. Our findings are contained in the paragraphs below.

PROPOSED LAND USE

The proposed development consists of approximately 5,050 multi-family dwelling units and 207,887 square feet of commercial floor area. The commercial land uses will be located adjacent to Quorum Drive and Mildred Street.

The proposed land use plan represents land use densities much greater than typically found in the Dallas area. Because of these higher densities, one can expect that the development will generate significantly higher traffic volumes (on a per acre basis) than other multi-family developments in the area. These increased traffic volumes could impact the ability of the area roadway system to accommodate future development along the Quorum Drive Corridor.

TRIP GENERATION

The report estimates that the proposed development will generate approximately 40,000 vehicle trips per day, with 2,900 and 3,950 trips generated during the A.M. and P.M. peak hours, respectively.



While Barton-Aschman estimates of trip generation for the proposed development generally fall within this order of magnitude of daily and peak hour trips, we would request that further documentation be supplied on specific rates, equations, and other assumptions used in this projection of site generated traffic.

Given that Quorum Drive will be the main thoroughfare serving the development, a significant number of the site generated trips will utilize Quorum Drive. Assuming that 50 percent of the site generated traffic will utilize Quorum Drive on any given day, approximately 75 percent (assuming 30,000 vpd as capacity) of the capacity of the of this roadway will be consumed by the proposed development. With other land available for development along the corridor, it can be concluded that demand on Quorum Drive could exceed the 30,000 vpd for assumed in the report.

TRAFFIC ASSIGNMENTS

The peak hour traffic volume assignments for the proposed roundabout indicate 3,064 and 3,150 vehicles entering the roundabout during the A.M. and P.M. peak hours, respectively. Of the total approaching volumes approximately 55.4% of the A.M. peak hour site generated traffic and 64.7% of the P.M. peak hour site generated traffic is assigned through the roundabout. We request that additional documentation of the traffic assignment assumptions be provided. Non-site traffic makes up the remainder of the total volumes entering the roundabout during the peak hours (1,696 vehicles in the A.M. and 1,111 vehicles in the P.M.). These non-site generated traffic volumes seem conservative given the development potential in the corridor. We request that further documentation be provided on the generation of non-site traffic volumes.

The total traffic volumes entering the roundabout appear conservative given the assumed capacities for Quorum Drive(30,000 vpd) and Mildred Street (10,000 vpd). Assuming that 10 percent of the daily traffic occurs during each of the peak hours, it can be assumed that the roundabout should expect approach volumes of approximately 4,000 vehicle during each of the peak hours. Given the findings regarding the percentage of Quorum Drive capacity utilized by the proposed development, higher projected peak hour volumes should be evaluated.

GEOMETRIC DESIGN PARAMETERS

The report states that design parameters were developed to reflect "space limitations imposed by the proposed right of way, proposed development and existing streets." Given that the planned roundabout is currently proposed on undeveloped land with no immediately adjacent buildings, it is not felt that space limitations should constrain the development of design parameters that will provide optimum flow conditions through the roundabout. Given the relationship between the diameter of a roundabout and its capacity, further analysis should be conducted without such a limitation.

SAFETY CONSIDERATIONS

The design report properly identifies lighting requirements, signing and striping requirements, and adequate sight distance as critical elements of the design of the roundabout. The design of these elements should be carefully reviewed given the unfamiliar nature of modern roundabouts to drivers in the United States.

CONCLUSIONS

The design report provides design parameters to accommodate the projected traffic volumes identified in the report. Given the trip generation characteristics of the proposed development, the development potential of the Quorum Drive corridor, actual volumes could be considerably higher than those projected in the report. In lieu of a detailed analysis of projected corridor volume, it is requested that a sensitivity analysis be conducted on the proposed design to increases in traffic volumes. These iterative increases in traffic volumes should be consistent with the development potential in the corridor and identify at what level of traffic volume the roundabout would cease to operate at an acceptable level of service during the peak hours. For purposes of the study, we would recommend that average vehicle delays greater than 40 seconds per vehicle (level of service D) be considered as unacceptable.

p:\wp\gary\addison\adddcir.mem

BARTON-ASCHMAN

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PROPOSED LAND USE

The proposed development consists of approximately 5,050 multi-family dwelling units and 207,887 square feet of commercial floor area. The commercial land uses will be located adjacent to Quorum Drive and Mildred Street.

The proposed land use plan represents land use densities much greater than typically found in the Dallas area. Because of these higher densities, one can expect that the development will generate significantly higher traffic volumes (on a per acre basis) than other multi-family developments in the area. These increased traffic volumes could impact the ability of the area roadway system to accommodate future development along the Quorum Drive Corridor.

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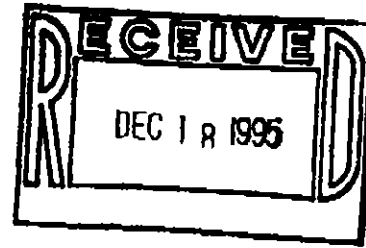
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BARTON-ASCHMAN

A PARSONS TRANSPORTATION GROUP COMPANY
 5485 Bell Line Road, Suite 199 • Dallas, Texas 75240 USA • (214) 991-1900 Fax (214) 490-9281

MEMORANDUM



TO: Ms. Carmen Moran
 Director of Development Services
 Town of Addison

FROM: Kathleen Mullins
 Tom Simerly *TS*

DATE: December 13, 1995

RE: Shared Parking Analysis for Addison Urban Center

We have reviewed the parking analysis provided by RTKL for part of the Addison Urban Center. The site plan appears to meet the required total parking needs per the ordinance. We would like to offer the following comments and observations about the site plan.

- Although the total parking demand appears to be met, the distribution of the parking leaves something to be desired. The need for occupants of building "A" to use parking deck "B" and for occupants of building "B" to use parking deck "C" can only lead to confusion and disgruntled occupants. In order for this domino distribution of parking demand and supply to work, spaces will need to be assigned to insure the availability of parking for the office and restaurant areas of building "A" during the normal work day hours.
- The concept of mixed use parking is being stretched by this layout. Typically, mixed use applies to uses adjacent to the parking that is being shared, on the same tract, not separated by streets.
- The on-street parking that is counted across Mildred Street, south of building "A" and "B", should be reserved for the tract south of Mildred Street. This same theory applies to the north side of street "B". Counting on-street parking across the streets from the actual development will penalize the adjacent site in the future or create an accounting problem for the staff in determining which on-street parking counts for which site.
- On-street parking on the departure side of the roundabout should be eliminated for 150' past the nose of the median. Motorists trying to negotiate the roundabout should not have the potential for a parallel parking vehicle to cause them to have to stop in the middle of the roundabout. This affects tan parking spaces 29, 30, 44, and 45.
- Generally speaking, on-street parking on Quorum is a bad idea.

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Post-It® Fax Note 7671		Date 12-26	# of pages 1
To J PALINGRINA	From C MORAN		
Co./Dept.	Co.		
Phone # 06	Phone #		
Fax #	Fax #		

Memorandum

TO: John Baumgartner
Town of Addison

FROM: Gary Jost

DATE: January 5, 1996

SUBJECT: Addison Roundabout - Additional comments

We have completed our review of the sensitivity analysis completed by Ourston and Doctors and design plans prepared by Huitt-Zollars for the proposed Addison Roundabout. This memorandum presents our findings.

Sensitivity Analysis

Ourston and Doctors present in their sensitivity analysis findings based on 50 percent and 85 percent confidence levels. If queues and delays are calculated at a 85 percent confidence level, this means that one can be 85 percent certain that actual queues will not be greater than the calculated values. Based on the uncertainty of operations of the first modern roundabout in North Texas, we would recommend that the 85 percent confidence level be used for calculating operating conditions of the planned roundabout.

It should also be noted that there is currently no consensus in the transportation profession regarding the most appropriate traffic engineering tool for analyzing modern roundabouts. The Transportation Research Board has established a committee to review current capacity analysis techniques and develop a new Highway Capacity Manual by the year 2000. This committee, chaired by Mr. John Zegeer of Barton-Aschman Associates, Inc., is working to include a recommended procedure for analyzing modern roundabouts in the new manual.

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Mildred, would be less than 30,000 vpd.

Of particular note is the comparison of average and maximum queue lengths between the original projections and the maximum volumes that can be accommodated at Level of Service D. Tables 1.0 and 2.0 present this comparison for the A.M. and P.M. hours, respectively.

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	ORIG.	LOS D	ORIG.	LOS D
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SB Quorum	17	30	35	69
EB Mildred	4	5	6	9

Table 2.0
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APPROACH LEG	AVERAGE QUEUES (VEH)		MAXIMUM QUEUES (VEH)	
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Based on the sensitivity to small increases in peak-hour volumes identified in the analysis conducted by Ourston and Doctors, it is our recommendation that the design of the planned Addison Roundabout be analyzed further to provide more stable conditions at these anticipated volumes.

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Miscellaneous

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Memorandum

TO: John Baumgartner
Town of Addison

FROM: Gary Jost

DATE: January 5, 1996

SUBJECT: Addison Roundabout - Additional comments

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Bryant Nail
Andy Oakley

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5435 Belt Line Road, Suite 199 • Dallas, Texas 75240 • (214) 991-1900 • Fax: (214) 490-9261

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BARTON-ASCHMAN TRANSPORTATION CONSULTANTS

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MEMORANDUM

TO: John Baumgartner
Town of Addison

FROM: Gary Jost 

DATE: December 1, 1994

SUBJECT: Quorum Drive Roundabout

A modern roundabout has been proposed, as part of the Addison Town Center development, for the intersection of Quorum Drive and Mildred Drive in the Town of Addison. The development includes mid-rise apartments and retail and would be located on both side of Quorum Drive between the railroad and Airport Boulevard. The proposed roundabout would serve as the focal point of the development.

This memorandum presents the findings and conclusions an evaluation of the impact of the proposed roundabout on the transportation system serving the area.

BACKGROUND

Transportation has long been a high priority in the Town of Addison. The town has initiated several efforts over the recent years to create an effective transportation system. These efforts include the following:

- The development of a comprehensive program of intersection improvements to increase capacity and efficiency of the existing roadway system.
- Implementation of transportation management actions to preserve roadway capacity
- Ongoing traffic signal timing optimization to improve operational efficiency.
- The development of the Addison Thoroughfare Plan.
- The funding and design of the Arapaho Road extension.

- The development of alternative access routes for the South Quorum area.
- Traffic management actions to protect neighborhoods from "cut-through" traffic.

These actions have been initiated in the ongoing effort to create and maintain an effective transportation system to serve the citizens of the Town.

Quorum Drive

Quorum Drive is currently a north/south four lane divided arterial located approximately one-quarter mile west of the Dallas North Tollway. The Town of Addison Thoroughfare plan designates Quorum Drive as a minor arterial. The roadway provides access to Belt Line Road, a six lane, east/west regional arterial, and the Dallas North Tollway, a six lane, controlled access toll facility serving north/south travel needs for the area.

Quorum Drive will provide access for adjacent properties along its route. Currently, the majority of this property is undeveloped, but medium and high density land uses are proposed for the area. These type uses are projected to generate traffic that will utilize all of the available capacity of Quorum Drive.

PROPOSED DEVELOPMENT

The proposed development includes approximately 40 acres of residential development containing approximately 3,500 multi-family dwelling units and 300,000 square feet of retail/office development. As part of the master planning efforts of the development, the construction of a modern roundabout at the intersection of Quorum Drive and Mildred Drive has been proposed.

Trip Generation

Based on trip generation rates for these type land uses, the development would generate approximately 33,000 vehicle trips per day. Of the daily trips, approximately ten percent would occur during the P.M. peak hour. Based on the preliminary site plan furnished by the developer, it is assumed that the majority of the trips generated by the development would use Quorum Drive to access the area.

The capacity of Quorum Drive is approximately 30,000 vehicles per day. The proposed development and additional development potential in the area will generate demand to completely utilize this capacity. Therefore, all analysis concerning the roundabout should utilize the capacity of Quorum as the projected traffic volume.

Mildred Drive will remain a minor collector with relatively low volumes, especially west of Quorum Drive.

MODERN ROUNDABOUTS

There has been much written lately about modern roundabouts. Most of these articles have focused on "modern roundabouts" rather than traffic circles. Modern roundabouts differ from traffic circles in their design and operational characteristics. The primary advantage presented for modern roundabouts is their ability to replace signalized intersections while achieving a reduction in delay and accidents.

The disadvantages of modern roundabouts and are also presented in many of the articles. Several are specifically related to the proposed roundabout at Quorum Drive and Mildred Drive. These include operational characteristics when the Minor Street (Mildred Drive) has significantly less volume than the Major Street (Quorum Drive). In this case, the roundabout essentially operates as a "T" intersection. Modern roundabouts also present a less friendly pedestrian environment, require more land, and are less familiar to U.S. drivers.

CONCLUSIONS AND RECOMMENDATIONS

Based on our analysis, the following conclusions have been drawn:

- It appears from the literature presented that modern roundabouts can function effectively both for low volume and high volume locations provided that they are designed to accommodate the projected volumes and traffic characteristics are conducive to this type of control.
- The proposed roundabout, if approved should be considered a high volume roundabout, designed accordingly, and its design analytically developed and documented. Roundabout diameters in the range of 300 feet would be expected.
- The success of the modern roundabout hinges on slower speeds and yield at entry. These will be an unexpected roadway characteristic to many drivers and may initially result in driver confusion and increased conflicts between vehicles. Other segments of Quorum Drive do not have similar characteristics.
- The roundabout is proposed to replace signalization of this intersection. The need to signalize the Quorum Drive/ Mildred Drive intersection is yet undetermined.
- The roundabout will negatively impact the ability to provide progression for vehicles along Quorum Drive.

- The projected volumes on Quorum Drive and Mildred Drive will effectively cause the roundabout to function as a "T" intersection, requiring Mildred Drive traffic to yield to the much higher volumes on Quorum Drive.
- The operation of the modern roundabout will force traffic on Quorum Drive to yield to vehicles turning left onto Mildred Drive.
- The predominant movements within the proposed roundabout would be "straight through" movements northbound and southbound on Quorum Drive. These movements can be most effectively accommodated without a roundabout.
- There are currently very few operating modern roundabouts in the United States. Most of the documentation of operating conditions comes from overseas (England, Europe < Australia) where driving characteristics are significantly different than those found in the United States.
- Roundabouts present an unfriendly environment to pedestrians and are counterproductive to creating a pedestrian friendly environment.

Recommendations

Based on these conclusions, we offer the following recommendations:

- The construction of a modern roundabout on Quorum Drive in Addison will ultimately be the Decision of Town officials after the consideration of many factors. These recommendations address only the transportation related issues of the proposal.
- It appears from available data that a modern roundabout could be constructed on Quorum Drive to accommodate the projected volumes, However, due to the limited experience with modern roundabouts in North America, and little or no experience with roundabouts with similar traffic characteristics as projected on Quorum Drive, we do not recommend a roundabout at this location. The introduction of significantly different roadway characteristics in this segment of the roadway is not consistent with the goal of providing consistent design standards along a particular roadway or roadway type. It would seem that a more appropriate place for roundabouts would be at the intersection of residential streets within the development (similar design characteristics) rather than on the arterial. The limited experience of roundabouts in the US would make the construction of a roundabout on Quorum Drive an experiment, rather than a design decision based on creating desirable operational characteristics.

- In lieu of eliminating the opportunity for a modern roundabout at this location, ROW could be reserved to provide the necessary land for future construction. It is recommended that future approval of a roundabout be provided only after additional documentation on operating characteristics is available from other locations. ROW should be reserved based on existing analysis of design requirements. Actual design would be based on design criteria available at the time of approval.

BARTON-ASCHMAN

A PARSONS TRANSPORTATION GROUP COMPANY

5485 Belt Line Road, Suite 199 • Dallas, Texas 75240 USA • (214) 991-1900 Fax (214) 490-9261

Memorandum

TO: John Baumgartner
Town of Addison

FROM: Gary Jost

DATE: November 27, 1995

SUBJECT: Review of Design Study for Addison Circle Modern Roundabout

This memorandum presents the findings of a review conducted by Barton-Aschman Associates Inc. of the above referenced study. The study, dated November 14, 1995, was prepared by Huitt-Zollars, Inc. in association with Ourston and Doctors. The study presents the geometric design parameters and estimated operating conditions of a modern roundabout planned for the intersection of Quorum Drive and Mildred Street in the Town of Addison. Barton-Aschman's review focuses on the operational and safety considerations of the planned roundabout assuming projected traffic volumes at build-out of the proposed development and currently undeveloped sites along the Quorum Drive Corridor. Our findings are contained in the paragraphs below.

PROPOSED LAND USE

The proposed development consists of approximately 5,050 multi-family dwelling units and 207,887 square feet of commercial floor area. The commercial land uses will be located adjacent to Quorum Drive and Mildred Street.

The proposed land use plan represents land use densities much greater than typically found in the Dallas area. Because of these higher densities, one can expect that the development will generate significantly higher traffic volumes (on a per acre basis) than other multi-family developments in the area. These increased traffic volumes could impact the ability of the area roadway system to accommodate future development along the Quorum Drive Corridor.

TRIP GENERATION

The report estimates that the proposed development will generate approximately 40,000 vehicle trips per day, with 2,900 and 3,950 trips generated during the A.M. and P.M. peak hours, respectively.

While Barton-Aschman estimates of trip generation for the proposed development generally fall within this order of magnitude of daily and peak hour trips, we would request that further documentation be supplied on specific rates, equations, and other assumptions used in this projection of site generated traffic.

Given that Quorum Drive will be the main thoroughfare serving the development, a significant number of the site generated trips will utilize Quorum Drive. Assuming that 50 percent of the site generated traffic will utilize Quorum Drive on any given day, approximately 75 percent (assuming 30,000 vpd as capacity) of the capacity of the of this roadway will be consumed by the proposed development. With other land available for development along the corridor, it can be concluded that demand on Quorum Drive could exceed the 30,000 vpd for assumed in the report.

TRAFFIC ASSIGNMENTS

The peak hour traffic volume assignments for the proposed roundabout indicate 3,064 and 3,150 vehicles entering the roundabout during the A.M. and P.M. peak hours, respectively. Of the total approaching volumes approximately 55.4% of the A.M. peak hour site generated traffic and 64.7% of the P.M. peak hour site generated traffic is assigned through the roundabout. We request that additional documentation of the traffic assignment assumptions be provided. Non-site traffic makes up the remainder of the total volumes entering the roundabout during the peak hours (1,696 vehicles in the A.M. and 1,111 vehicles in the P.M.). These non-site generated traffic volumes seem conservative given the development potential in the corridor. We request that further documentation be provided on the generation of non-site traffic volumes.

The total traffic volumes entering the roundabout appear conservative given the assumed capacities for Quorum Drive(30,000 vpd) and Mildred Street (10,000 vpd). Assuming that 10 percent of the daily traffic occurs during each of the peak hours, it can be assumed that the roundabout should expect approach volumes of approximately 4,000 vehicle during each of the peak hours. Given the findings regarding the percentage of Quorum Drive capacity utilized by the proposed development, higher projected peak hour volumes should be evaluated.

GEOMETRIC DESIGN PARAMETERS

The report states that design parameters were developed to reflect "space limitations imposed by the proposed right of way, proposed development and existing streets." Given that the planned roundabout is currently proposed on undeveloped land with no immediately adjacent buildings, it is not felt that space limitations should constrain the development of design parameters that will provide optimum flow conditions through the roundabout. Given the relationship between the diameter of a roundabout and its capacity, further analysis should be conducted without such a limitation.

SAFETY CONSIDERATIONS

The design report properly identifies lighting requirements, signing and striping requirements, and adequate sight distance as critical elements of the design of the roundabout. The design of these elements should be carefully reviewed given the unfamiliar nature of modern roundabouts to drivers in the United States.

CONCLUSIONS

The design report provides design parameters to accommodate the projected traffic volumes identified in the report. Given the trip generation characteristics of the proposed development, the development potential of the Quorum Drive corridor, actual volumes could be considerably higher than those projected in the report. In lieu of a detailed analysis of projected corridor volume, it is requested that a sensitivity analysis be conducted on the proposed design to increases in traffic volumes. These iterative increases in traffic volumes should be consistent with the development potential in the corridor and identify at what level of traffic volume the roundabout would cease to operate at an acceptable level of service during the peak hours. For purposes of the study, we would recommend that average vehicle delays greater than 40 seconds per vehicle (level of service D) be considered as unacceptable.

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Engineers • Planners
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COPY

MEMORANDUM

TO: Mr. Bryant Nail, Vice President of Development
Columbus Realty Trust

FROM: DeShazo, Tang & Associates, Inc.

DATE: March 17, 1997

RE: Shared Parking Study for Phase II of Addison Circle in Addison, Texas;
DT&A No. 96068.1

The purpose of this memorandum is to provide responses to comments from Barton-Aschman Associates, Inc. representing the Town of Addison regarding *the Shared Parking Analysis for Addison Circle Phase II* prepared for Columbus Realty Trust.

The methodology utilized in the DT&A analysis is derived from the concepts outlined in the *Shared Parking Study* as prepared for the Urban Land Institute (ULI). The ULI study provides hourly parking demand rates and adjustment factors for various land uses. This information is then used to project the peak parking demand for a mixed-use development as a function of the size and composition of the respective land uses. Intuitively, the off-setting parking needs of office and commercial users with the parking needs of residential users ranks the Addison Circle a prime candidate to benefit from shared parking opportunities.

The ULI study was finalized in 1983. The general concept of shared parking as presented by ULI is widely accepted as the primary reference for considering shared parking application. Since 1983, several case studies have been performed at mixed-use developments comparing the projected parking demand based upon actual characteristics measured at the various site locations versus direct application of ULI values. Results consistently reflected that direct application of ULI values consistently generated conservatively high projections for peak parking demand as stated in *Shared Parking Planning Guidelines* by the Institute of Transportation Engineers (August 1995). A copy of this publication is attached.

Objectives of the DT&A shared parking model methodology include maintaining the integrity of the ULI concept while adapting the model rates to reflect parking activity observed at actual locations similar to those anticipated at Addison Circle. Consequently, the model sites of Uptown Village and the Worthington apartment communities were selected to represent the residential component of Addison Circle; Highland Park Village was selected to represent the commercial land use component (a combination of retail and restaurant); and The Crescent Office Towers were selected to represent the office land use component in the DT&A shared parking model. At each model site location, DT&A collected hourly parking usage data during periods of peak parking activity as well as relevant information regarding occupancy and composition at each site at the time of data collection. Based upon this information and supplementary support from ULI, DT&A parking counts were calculated to yield "raw" model data. Based upon accumulated technical knowledge and experience, a series of adjustment or "safety" factors were derived for each land use category to yield peak parking rates which were considered proven and appropriate. Each component of the model is explained below.

Residential

ULI states numerous variables exist in residential parking which are related to environment and characteristics of residents. The urban character within the metroplex and demographics of residents within existing Columbus Realty Trust properties were determined to better represent the anticipated Addison Circle residential parking needs than would use of default data from ULI. The model data obtained from sites in Uptown Dallas used in the DT&A model were formulated in a manner consistent with the concept represented in ULI. The peak hour of 6:00 AM (weekday) was calibrated to equal one occupied parking space per bedroom by applying a 14 percent safety factor to raw counts; subsequent hourly rates were proportionally based on parking demand observed for the corresponding weekday and weekend hours.

Commercial

The thought process behind the "commercial land use" component of the DT&A model is intended to incorporate the synergy of the various establishments which typically compose a commercial environment. To ensure appropriate compatibility, specific resident-/tenant-oriented retail uses permitted within the district are identified on pages 15 and 16 of the Urban Center ordinance. In addition, restaurant uses are planned to be incorporated into these retail areas as represented in the DT&A shared parking model. ULI contains data for large suburban shopping centers and restaurants acknowledging variations as a function of local market factors. Due to the existence of these variations, use of the default ULI data was not considered to generate an accurate representation of more specialized commercial uses planned within Addison Circle.

Independently, as per the Urban Center ordinance, retail uses require one parking space per 250 square feet (SF) while restaurants require one space per 70 SF. Since restaurant use is a more "intensive" parking generator than basic retail use, as illustrated by these rates, and, since the restaurant market is more likely to generate off-site traffic than on-site-oriented retail market, the assumption was made to hold constant the restaurant parking rate and focus the synergy characteristics of shared parking on the retail uses. At the same time, the commercial component of the DT&A shared parking model acknowledges the multi-purpose trip which commonly occurs within a "mixed, commercial land use".

To illustrate these shared parking opportunities, Highland Park Village was selected as a model site which was considered to closely resemble the commercial environment envisioned in Addison

Circle. Highland Park Village, however, does exhibit some unique characteristics which generate the need for minor adjustments in the model. These considerations are described as follows:

- ◆ Highland Park Village included 13,977 SF of retail storage space at the time of the parking study which does not generate any additional parking. This square footage was subtracted from the total site area *before* calculating the parking rates.
- ◆ Highland Park Village included 38,457 SF of office space at the time of the parking study. This square footage was also subtracted from the total site area *before* calculating the parking rates. In addition, a five percent reduction factor was applied to the overall parking accumulation counts to discount office parkers who were "mixed in" with the commercial parkers counted in the study.
- ◆ Highland Park Village included an 11,714 SF movie theater at the time of the parking study. Although this use would not be permitted within Addison Circle, DT&A research indicates the parking activity associated with a movie theater is more "intensive" than that of traditional retail, yielding a more conservative parking demand. Hence, no adjustments were made for the movie theater.
- ◆ Highland Park Village included 13,491 SF of restaurant space at the time of the parking study which represents 6.38 percent of the net total square footage (not including the office or storage) on site. The proportion of restaurant planned in Addison Circle Phase II is approximately 18 percent of the total square footage of commercial uses on site. As discussed previously, accounting for restaurant parking needs is considered critical, so a proportional consideration was accordingly given in the shared parking model spreadsheet.
- ◆ In order to represent peak commercial parking demand conditions, adjustment factors were applied to the parking accumulation data to account for seasonal variations (6.6 percent increase based upon the ULI study), leasable area vacancies (4.7 percent increase to simulate full occupancy of the site), and general parking inefficiencies (ten percent increase). These adjustments resulted in a net safety factor of approximately 17 percent applied to raw parking counts.

NOTE: Although it is common for retail parking demand to peak on the weekends versus weekdays, the data collected at Highland Park Village yielded contradictory observations. This condition may be attributed to the presence of office parkers during the weekday. However, more nearly pure commercial parking activity was observed on the weekends when office parking was not a factor. Consequently, it is felt that the weekend parking demand is in fact correct and that weekday parking demand may be over-compensated (i.e., no adjustments were made to reduce the weekday data in order to maintain a more conservative approach).

The resulting net parking ratio for the commercial component during the peak hour of parking demand was one space per 191 SF (see Exhibit 1). This ratio lies between the standard rates for retail and restaurant of one space per 250 SF and 70 SF respectively.

Office

Parking demand characteristics at urban and suburban office developments are very universal in terms of peaking characteristics and hourly profiles. DT&A's familiarity with the Crescent office complex justified its selection as the model on which to base typical demand profiles. In addition, DT&A's knowledge of typical suburban office parking needs in the Dallas area was used as a

basis for establishing a peak parking demand rate of one space per 367 SF – resulting in a net safety factor of 62 percent applied to raw parking counts.

Once the shared parking model rates were defined, application of the Addison Circle Phase II development program was incorporated for each parking area.

The current building program for Phase II is summarized in Exhibit 2. The DT&A shared parking model directly computes the minimum number of parking spaces needed to sustain a fully-shared parking environment. The results under this scenario indicate as few as 671 total off-street spaces would feasibly serve the projected parking needs for Phase II of Addison Circle. However, in order to accommodate a moderate supply of access-controlled spaces for residents and tenants who prefer such, compensation is necessary. The two-gate, shared parking management concept introduced in the previous DT&A study provides an environment for both shared and exclusive spaces to coexist. After making appropriate accommodations for the two-gate system, the provision of 811 off-street spaces (plus 12 spaces within private townhouse garages) was determined to be adequate. This represents a supply decrease of approximately 23 percent from the 1,065 spaces calculated directly from local codes. With the addition of 113 planned on-street spaces, the resulting cumulative supply of 936 spaces represents a net 12 percent credit. A summary of the planned parking supply for Phase II of Addison Circle and the direct parking code application for the planned building program is provided in Exhibit 3.

Other responses to specific comments are provided below:

- ◆ Revised development plans for Phase II consider the delayed construction of Block *Q* which eliminates the opportunity for Block *P* residents to share-park in Block *Q*, hence addressing the pedestrian crossings of Spectrum Drive.
- ◆ Revised development plans for Phase II of Addison Circle excludes plans for Block *Q*. This eliminates the issue of pedestrian crossing of Spectrum Drive to utilize shared parking. DT&A does concur that if the arrangement of shared parking between Blocks *P* and *Q* were to occur, enhancements to the pedestrian connection between the two buildings is desirable.
- ◆ As part of the garage design, adequate “turn-around” space would be designated in advance of gates for unauthorized parkers to maneuver as needed.
- ◆ Shared parking among Blocks *M* and *N* and among Blocks *O* and *P* is considered feasible in that only the mews separate the respective buildings. Given the pedestrian-oriented design features of the mews, location of the parking supply within the block pair is not an unreasonable scenario. In several existing Columbus Realty developments, mew-like streets serve as the pedestrian links between the major parking supply and portions of the complex without difficulty.

Based upon the compound application of safety allowances throughout the shared parking evaluation process and the ability to empirically trace DT&A model rates to actual parking characteristics, DT&A maintains that the philosophy and procedure outlined in the *Shared Parking Analysis for Addison Circle, Phase II* document is valid and appropriate as a basis for application in Addison Circle. DT&A is available to provide further “step-by-step” guidance as needed.

EXHIBIT 1

Derivation of the Peak Commercial Rate for Addison Circle Phase II

$$(R_{Com}) = (R_{Res} * \%_{Res}) + (R_{Ret} * \%_{Ret})$$

$$1. R_{Tot} = \frac{S_{Tot}}{A_{Tot}} = \frac{822 \text{ spaces}}{211,596 \text{ SF}} = \frac{1 \text{ space}}{257 \text{ SF}} \quad (\text{From Highland Park Village peak hour data})$$

$$2. R_{Res} = \frac{1 \text{ space}}{70 \text{ SF}} \quad (\text{From Urban Center Ordinance})$$

$$3. R_{Ret} = \frac{1 \text{ space}}{X \text{ SF}}$$

$$\frac{1}{X} = \frac{S_{Ret}}{A_{Ret}}$$

$$X = \frac{A_{Ret}}{S_{Ret}} = \frac{A_{Tot} - A_{Res}}{S_{Tot} - S_{Res}} = \frac{A_{Tot} - A_{Res}}{(A_{Tot} * R_{Tot}) - (A_{Res} * R_{Res})}$$

$$X = \frac{211,596 \text{ SF} - 13,491 \text{ SF}}{\left(211,596 \text{ SF} * \frac{1 \text{ space}}{257 \text{ SF}}\right) - \left(13,491 \text{ SF} * \frac{1 \text{ space}}{70 \text{ SF}}\right)} = 315 \frac{\text{SF}}{\text{space}}$$

$$R_{Ret} = \frac{1 \text{ space}}{315 \text{ SF}}$$

$$4. R_{Com} = (R_{Res} * \%_{Res}) + (R_{Ret} * \%_{Ret})$$

$$R_{Com} = \left(\frac{1 \text{ space}}{70 \text{ SF}} * 0.1843\right) + \left(\frac{1 \text{ space}}{315 \text{ SF}} * 0.8157\right)$$

$$R_{Com} = \frac{1 \text{ space}}{191 \text{ SF}}$$

R_{Com} = Commercial Parking Rate	A_{Com} = Commercial Area (SF)	S_{Com} = Commercial Parking Spaces
R_{Res} = Restaurant Parking Rate	A_{Res} = Restaurant Area (SF)	S_{Res} = Restaurant Parking Spaces
R_{Ret} = Retail Parking Rate	A_{Ret} = Retail Area (SF)	S_{Ret} = Retail Parking Spaces
R_{Tot} = Total Parking Rate	A_{Tot} = Total Area (SF)	S_{Tot} = Total Parking Spaces

$\%_{Res}$ = Restaurant % of Commercial Area

$\%_{Ret}$ = Retail % of Commercial Area

EXHIBIT 2

LAND USE	PHASE II DEVELOPMENT PROGRAM				
	BLOCK M	BLOCK N	BLOCK O	BLOCK P	TOTAL
Residential	108 Bdrms	108 Bdrms	210 Bdrms	165 Bdrms	591 Bdrms
Office	0 SF	0 SF	0 SF	41,522 SF	41,522 SF
Retail & Flex	8,166 SF	13,146 SF	13,921 SF	8,698 SF	43,931 SF
Restaurant	0 SF	6,021 SF	3,903 SF	0 SF	9,924 SF
Storage	0 SF	0 SF	26,000 SF	2,568 SF	28,568 SF

EXHIBIT 3

REQUIRED OFF-STREET PARKING	PROVIDED PARKING (BASED ON SHARED PARKING ANALYSIS)
Building "M"	Building "M"
Units 105	Private Garage 46
Retail (1/250)= 31	Building "N"
Home/Office (1/250)= 2	Townhouses 12
Subtotal 138	Deck 265
Building "N"	(w/ 5 standard accessible & 1 van-accessible spaces)
Units 120	Building "O"
Retail (1/250)= 27	Deck 500
Restaurant (1/70)= 86	(w/ 6 standard accessible & 1 van-accessible spaces)
Home/Office (1/250)= 26	Total (Off-Street) 823
Subtotal 259	On-Street 113
Building "O"	(w/ 4 standard accessible & 1 van-accessible spaces)
Units 210	* Criteria not specified in
Retail (1/250)= 25	Addison Circle ordinances—
Restaurant (1/70)= 56	based on City of Dallas codes.
Home/Office (1/250)= 31	Analysis Conducted By:
Storage (1/3000)*= 9	DeShazo, Tang & Assoc., Inc.
Subtotal 331	400 S. Houston St., Suite 330
Building "P"	Dallas, TX 75202
Units 162	phone: (214) 748-6740
Retail (1/250)= 35	
Office (1/300)= 139	
Storage (1/3000)*= 1	
Subtotal 337	
Total 1065	

The Epitome of Public/Private Cooperation

by Kay Tiller

Addison Circle is not just a group of buildings, it is a dream, a vision that has brought together a city, a major landowner, and a developer renowned for producing unique, unusual, and highly successful projects. The result is a new "city center" for Addison, where there will be housing, retail, offices, theaters, and even a park: Addison Circle.

The players are the Town of Addison, Gaylord Properties, and Columbus Realty Trust. This most interesting project is the result of city leaders establishing an "urban district" that allows for the zoning necessary to accommodate residential, office, and retail and allow them not only to co-exist but, in Addison Circle, to also become part of a most unique concept.

Addison is different from most cities. The zoning in the city is 80 percent business and 20 percent residential, and approximately 70,000 people call Addison their daytime home. Nine million square feet of office space within the Town accounts for this weekday population, and restaurants of every kind (more than 150 of them) bring a great number of people from all over the Dallas area to Addison in the evening. At present, there are about 6,000 apartments and 1,300 single-family homes in Addison.

The city is seeking additional residential population for its 4.5 square miles of landlocked area. The planned development, Addison Circle, addresses that need and, as Addison City Manager Ron Whitehead said, "shows the best side of the way a planned development can take place and how, when all the parties have the same vision, it can all come together in a very orderly manner."

The landowners, Gaylord Properties* of Oklahoma City, in the early 1980s purchased the land on which Addison Circle is being built. Clay Bennett, Vice President of Gaylord, explained that the firm envisioned the land

becoming part of the Far North Dallas "growth corridor."

Bennet added that, due to the downturn in Dallas-area real estate in the mid-1980s, "it took a little longer to realize the dream, but today it is becoming a reality." And what a reality it is.

In early June, the first residents moved into Phase I of the apartment home buildings, and the retailers who will serve these residents began to open their stores. A cleaning establishment, a "corner store," a beauty salon, a concierge ser-

**(Gaylord Properties is a subsidiary of Gaylord Broadcasting Co. of Oklahoma City. Among their holdings are KTVT-TV in Fort Worth, the Farmer-Stockman magazine, oil and gas producing companies, The Daily Oklahoman, and the Broadmoor Hotel in Colorado Springs, Colorado.)*

vice, a sandwich shop, and a boutique are now open or will be open soon. As City Manager Ron Whitehead remarked, "the retail for the project will be limited to spaces of 10,000 square feet, large enough to serve those living at Addison Circle."

The entire Addison Circle concept is one patterned after European enclaves where people can live and shop and work in one area. Columbus Realty Trust, Gaylord Properties, and the Town of Addison are developing the 70-acre site, which will cost approximately \$400 million.

"Addison, unlike other cities, does not offer all kinds of tax incentives to gain business," Whitehead said. "What the city is bringing to Addison Circle is a total package of more than \$9 million in infrastructure — sidewalks, streets, landscaping, and utilities — as our part in what we are calling our 'new urban center.' We feel that kind of investment will remain when and if everything else is gone." This practice by the Town of Addison was praised by Bennett when he said that his company was very impressed with the leadership of the city and the results of that leadership. "It is a premier location, and the city leaders are exemplifying the fact that they are tremendous stewards and are actively involved with the growth of their city."

Using the architectural design of RTKL and retaining Newman-Jackson-Bieberstein, Inc. (NJB) as the landscape architectural firm on the project, Columbus put into place something entirely different from any of their other projects. The urban design and streetscape done by NJB for Phase I of the project included the design for Bosque Park, a park within the project that has been called the Addison Circle "Central Park," according to Rowland Jackson, Senior Vice President of NJB.

"What we see at Addison Circle is a 2 X 2 = 6 deal where everyone benefits from a public/private partnership among three entities who all see the same vision and are committed to putting it in place." Robert Shaw, CEO of Columbus Realty Trust, said.

He continued. "we see here an opportunity to offer both apartment homes and townhouses for residential use, as well as small-scale retail, larger retail, and major office space along the Dallas North Tollway, which borders the property on the east. It's a 'win-win' situation and, although it may take ten years to complete, it will certainly be something unique and a monument to what the public/private sector can accomplish."

The vision that is Addison Circle has just begun. Phase II is now underway, people are moving in, the shops are opening, the dream is coming true, and it will continue as one of the unique real estate projects in the Southwest well into the 21st century. *

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