

# KNOXVILLE/KNOX COUNTY METROPOLITAN PLANNING COMMISSION USE ON REVIEW REPORT

▶ FILE #: 2-B-08-UR AGENDA ITEM #: 64

POSTPONEMENT(S): 2/14/2008 **AGENDA DATE: 3/13/2008** 

► APPLICANT: ROBERT BEDWELL

OWNER(S): KNOXVILLE LAND PARTNERS LIMITED PARTNERSHIP

C/O MR. DURANT BELL, STEVEN D. BELL & CO WALKER'S CROSSING

PROPERTIES, GP

TAX ID NUMBER: 120 H B 02701 AND 02703

JURISDICTION: City Council District 2

► LOCATION: East side of N. Gallaher View Rd., south of Broome Rd.

► APPX. SIZE OF TRACT: 30.6 acres

SECTOR PLAN: Northwest City

GROWTH POLICY PLAN: Urban Growth Area (Inside City Limits)

ACCESSIBILITY: Current access is through the established Walker's Crossing Apartment

Complex via E. Walker Springs Ln., a local street with 25' of pavement width within 50' of right of way. Access is also proposed to N. Gallaher View Rd., a five lane minor arterial street with varying right-of-way widths.

UTILITIES: Water Source: Knoxville Utilities Board

Sewer Source: Knoxville Utilities Board

WATERSHED: Ten Mile Creek

► ZONING: RP-1 (Planned Residential) & RP-1 (Planned Residential) pending

EXISTING LAND USE: Apartments and vacant land

PROPOSED USE: Apartment development (52 new units, 404 total units)

13.2 du/ac

HISTORY OF ZONING: Existing apartment development property was rezoned to RP-1 in the

1980's. See comment section below for most recent request.

SURROUNDING LAND

USE AND ZONING:

North: Sinking Creek, greenway, Broome Rd., apartments, residences /

R-1A (Low Density Residential), R-1E (Low Density Exclusive

Residential), and F-1 (Floodway)

South: E. Walker Springs Ln., office buildings / O-1 (Office, Medical &

Related Services)

East: Church / R-1 (Low Density Residential)

West: N. Gallaher View Rd., mixed businesses / C-3 (General

Commercial) and CA (General Business)

NEIGHBORHOOD CONTEXT: The site is in an area that serves as a transition between office and

commercial uses to the south and west and low density residential

development to the north and east.

#### STAFF RECOMMENDATION:

▶ APPROVE the development plan for up to 52 additional apartment units subject to the following 8

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#### conditions:

- 1. Connection to sanitary sewer and meeting any other relevant requirement of the Knox County Health Department.
- 2. Provision of a street name which is consistent with the Uniform Street Naming and Addressing System within Knoxville, Ord. O-280-90.
- 3. Prior to submitting an application for a building permit, submitting detailed design plans for the turn lane configurations for the entrance driveway and changes to N. Gallaher View Rd. to City Engineering and Planning Commission Staff for review and approval. The design plans shall also address the need for a turnaround area for the entrance drive due to the proposed gate.
- 4. Obtaining approval from the Knoxville Fire Marshal on the design of the proposed access gate for the development.
- 5. Meeting all applicable requirements of the Knoxville Department of Engineering.
- 6. Meeting all applicable requirements of the Knoxville City Arborist.
- 7. Installation of landscaping as shown on the development plan within six months of the issuance of the first occupancy permit for each phase of the project.
- 8. Meeting all applicable requirements of the Knoxville Zoning Ordinance.

With the conditions noted, this plan meets the requirements for approval in the RP-1 District and the other criteria for approval of a use-on-review.

#### **COMMENTS:**

The applicant is proposing to add 52 apartment units to the existing Walker's Crossing apartment complex. With the existing 352 units, there will be a total of 404 apartment units on this 30.6 acre tract (area excluding floodway) for a proposed density of approximately 13.2 du/ac. The proposed apartments will be located in two three story buildings. There are 26 one bedroom units and 26 two bedroom units. There will be 85 new parking spaces provided which is the minimum number of required parking spaces.

The Planning Commission considered a plan amendment and rezoning request (1-A-08-PA/1-A-08-RZ) for this property on January 10, 2008. The Planning Commission recommended approval of the requests that included a plan amendment that supports the rezoning change of Tax Parcel 120HB02701 to RP-1 (Planned Residential) and increases the maximum density of the entire RP-1 property from 12 du/ac to 13.5 du/ac. The Knoxville City Council approved the requests on Second Reading at their February 26, 2008 meeting.

The proposed apartment expansion will tie into the existing driveway network for the complex with access out to East Walker Springs Ln. A new entrance is also proposed out to N. Gallaher View Rd. The new access drive will be approximately 450' southeast of the intersection of Broome Rd. and N. Gallaher View Rd.

A Traffic Impact Study was prepared by Cannon & Cannon, Inc. to address this new access drive. A copy of the study is attached. The study evaluated the new driveway intersection with N. Gallaher View Rd. and the intersection of Walker Springs Ln./Sam's Club Driveway and N. Gallaher View Rd. The study concluded that the addition of the new driveway connection will improve the operating conditions and reduce the side street delays at the intersection of Walker Springs Ln./Sam's Club Driveway and N. Gallaher View Rd.

### EFFECT OF THE PROPOSAL ON THE SUBJECT PROPERTY, SURROUNDING PROPERTY AND THE COMMUNITY AS A WHOLE

- 1. The proposed development will have minimal impact on local services since all utilities are available to serve this site.
- 2. The proposed apartment complex at a density of 13.2 du/ac for the entire development, is consistent in use and density with the zoning density that was approved by Knoxville City Council on February 26, 2008.
- 3. As identified in the Traffic Impact Study, the proposed development with the new access to N. Gallaher View Rd. will actually improve the operating conditions and reduce the side street delays at the intersection of Walker Springs Ln./Sam's Club Driveway and N. Gallaher View Rd. under future conditions.

## CONFORMITY OF THE PROPOSAL TO CRITERIA ESTABLISHED BY THE KNOXVILLE ZONING ORDINANCE

- 1. The proposed apartment complex meets the standards for development within a RP-1 (Planned Residential) Zone and all other requirements of the Zoning Ordinance.
- 2. The proposed development is consistent with the general standards for uses permitted on review: The

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proposed development is consistent with the adopted plans and policies of the General Plan and Sector Plan. The use is in harmony with the general purpose and intent of the Zoning Ordinance. The use is compatible with the character of the neighborhood where it is proposed. The use will not significantly injure the value of adjacent property. The use will not draw additional traffic through residential areas since it will have direct access to a minor arterial street.

#### CONFORMITY OF THE PROPOSAL TO ADOPTED PLANS

- 1. The Northwest City Sector Plan designates this property for office use. The One Year Plan as amended identifies the property for mixed use development including medium density residential use. The approved RP-1 zoning allows a density of up to 13.5 du/ac. The proposed development with an overall density of 13.2 du/ac is consistent with the One Year Plan.
- 2. The site is located within the Urban Growth Area on the Knoxville-Knox County-Farragut Growth Policy Plan map.

#### ESTIMATED TRAFFIC IMPACT 3348 (average daily vehicle trips)

Average Daily Vehicle Trips are computed using national average trip rates reported in the latest edition of "Trip Generation," published by the Institute of Transportation Engineers. Average Daily Vehicle Trips represent the total number of trips that a particular land use can be expected to generate during a 24-hour day (Monday through Friday), with a "trip" counted each time a vehicle enters or exits a proposed development.

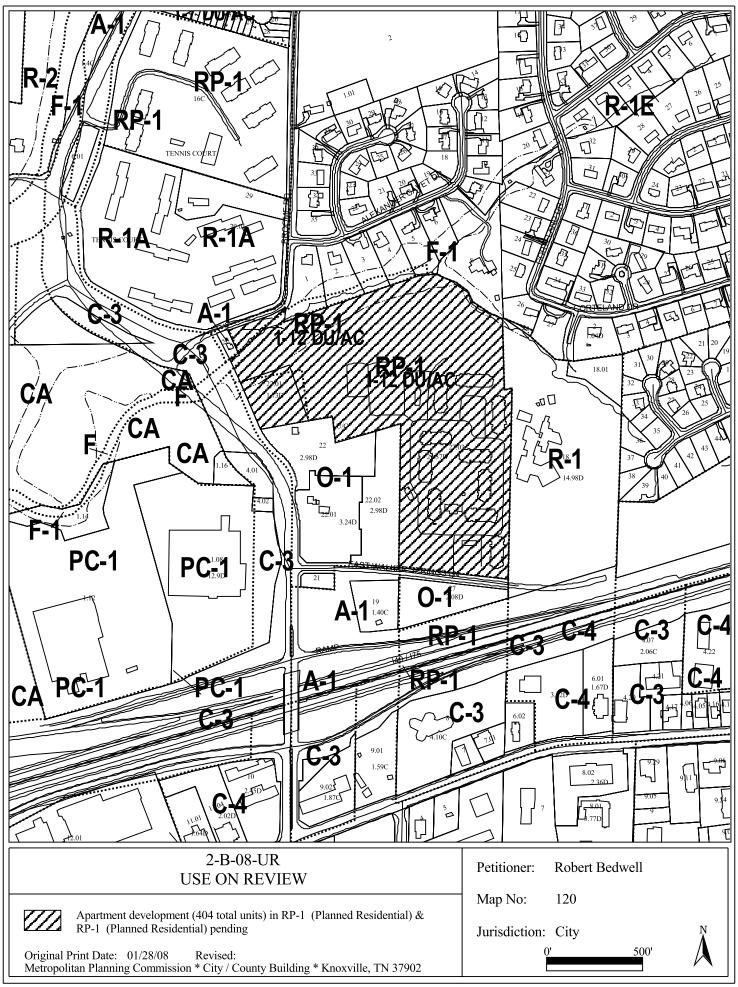
#### ESTIMATED STUDENT YIELD: 9 (public and private school children, ages 5-18 years)

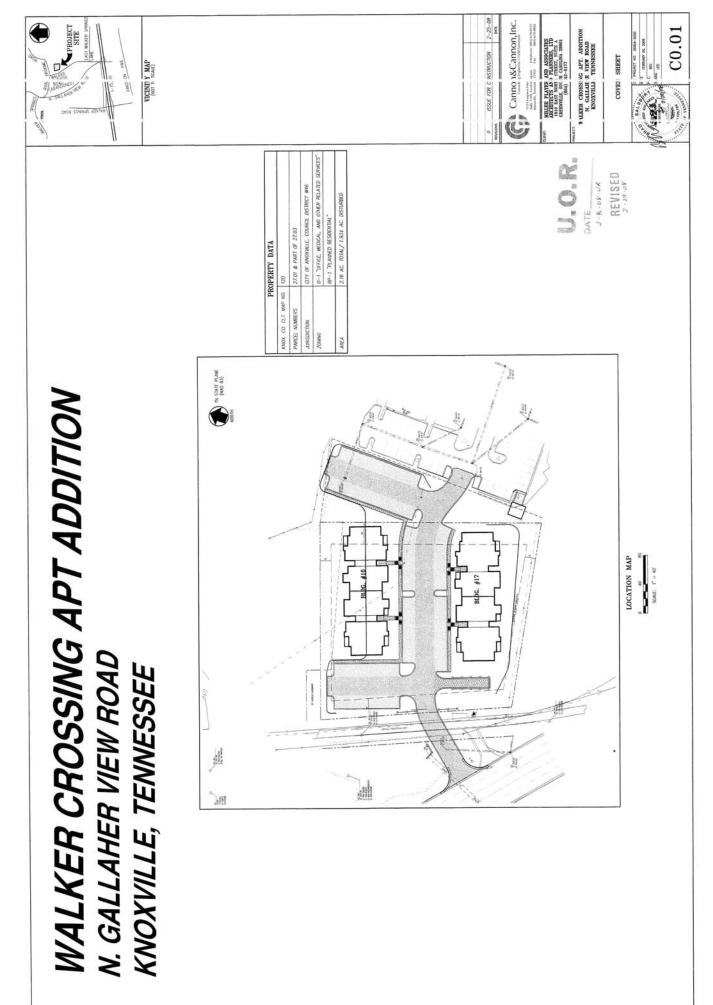
Schools affected by this proposal: West Hills Elementary, Bearden Middle, and Bearden High.

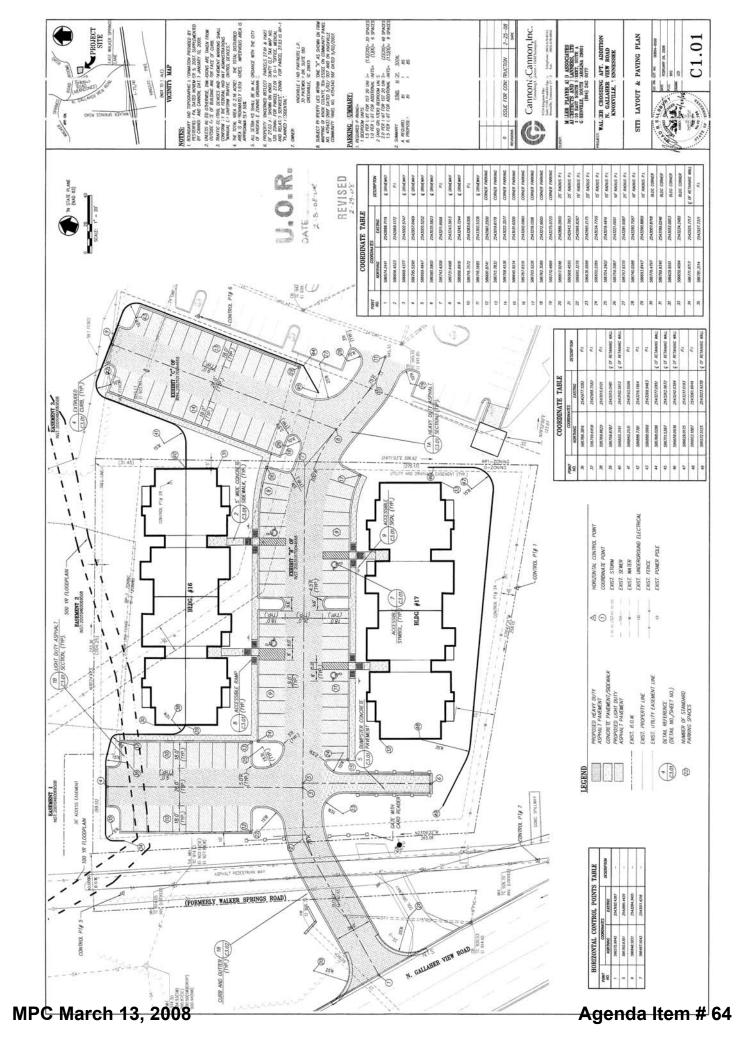
- School-age population (ages 5–18) is estimated by MPC using data from a variety of sources.
- While most children will attend public schools, the estimate includes population that may be homeschooled, attend private schools at various stages of enrollment, or drop out of the public system.
- Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Zone boundaries are subject to change.
- Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.
- Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.
- School capacities are subject to change by Knox County Schools through building additions, curriculum or scheduling changes, or amendments to attendance zone boundaries.

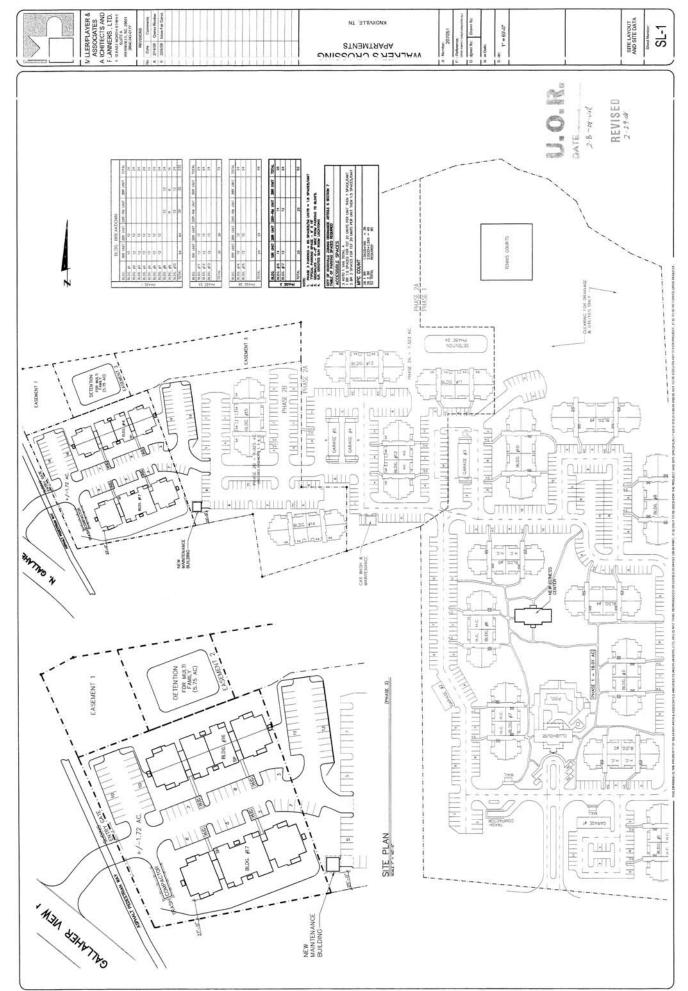
MPC's approval or denial of this request is final, unless the action is appealed to the Knoxville City Council. The date of the Knoxville City Council hearing will depend on when the appeal application is filed. Appellants have 15 days to appeal an MPC decision in the City.

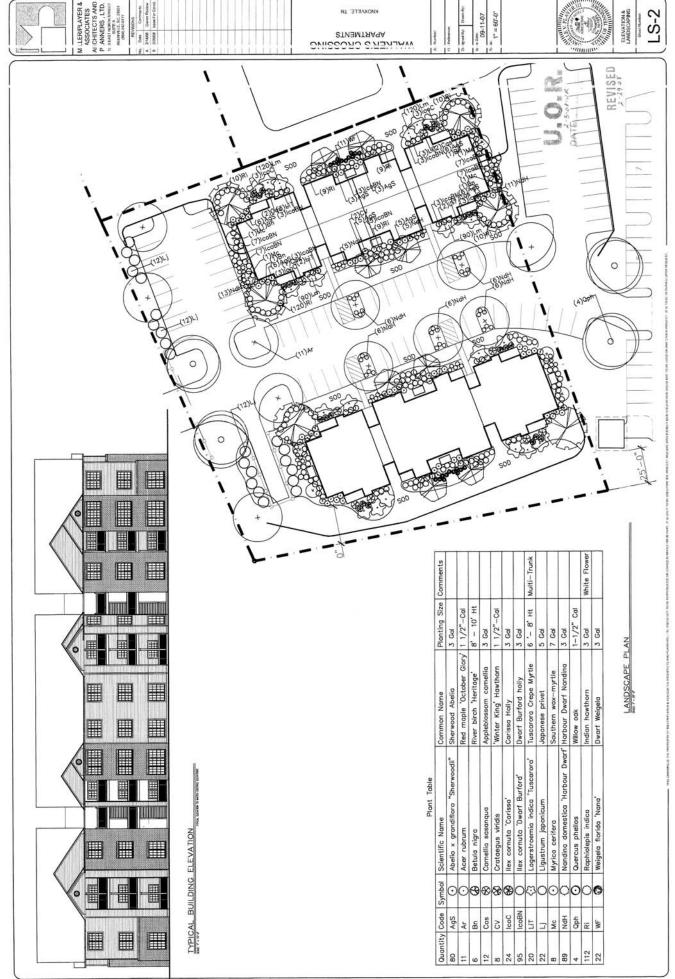
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February 19, 2008

Mr. Nathan Benditz Knoxville-Knox County Metropolitan Planning Commission City/County Building, Suite 403 400 Main Street Knoxville, Tennessee 37902



RE: Traffic Evaluation for Proposed Walker Crossing Apartment Expansion Walker Springs Lane at Gallaher View Road, City of Knoxville

Dear Mr. Benditz:

This correspondence provides a summary of a traffic evaluation that was conducted for the proposed Walker Crossing Apartment expansion on Walker Springs Lane and adjacent to Gallaher View Road. Of particular interest in the study is whether or not to provide direct driveway access from the proposed development onto Gallaher View Road. The existing portion of the apartment development has only one access located on Walker Springs Lane

The proposed expansion consists of an additional 52 units bringing the total number of multi-family units within the Walker Crossing Apartment development to 404 units. Access to the public street system from the development is currently provided by an existing intersection on Walker Springs Lane approximately 1,000 feet east of Gallaher View Road. The purpose of this study was the evaluation of the traffic operational and safety impact of the existing intersection of Gallaher View Road and Walker Springs Lane/Sam's Wholesale driveway. As previously mentioned, the study will evaluate the intersection under two scenarios, with and without a direct driveway access onto Gallaher View Road.

#### **Existing and Background Conditions**

Walker Springs Lane is a two-lane roadway that is classified by the MPC as a local street. The roadway pavement is approximately 24 feet wide with two 12 foot travel lanes and minimal shoulder widths Gallaher View Road is a five-lane roadway that is classified by the MPC as a Minor Arterial. The posted speed limit on Gallaher View Road is 40 mph. A traffic count was taken by TDOT in year 2007, with a resulting average daily traffic (ADT) of 9,385

Intersection turning movement counts were conducted during the AM, PM, and Saturday peak hours at the intersection of Gallaher View Road and Walker Springs Lane. The resulting peak hour volumes are shown on FIGURE 1. Background traffic volumes were developed for the Year 2010 by using the 2008 Existing Traffic Volumes and applying a 30% annual growth rate. The resulting background peak hour volumes are also shown on FIGURE 1. Unsignalized capacity analyses for the intersection of Gallaher View Road and Walker Springs Lane were conducted for each of the peak hours using the existing and background traffic volumes. The resulting levels-of-service (LOS) indicate the intersection is currently operating, and will continue to operate under background conditions, at LOS "F" and "E" for the westbound (Walker Springs Lane) and eastbound (Sam's) side street left turns, respectively.

#### **Future Conditions**

AM, PM, and Saturday peak hour traffic volume estimates for the proposed intersection were also developed for the anticipated full build-out of the apartment expansion. For the newly generated AM and PM peak traffic, local Knoxville-specific apartment trip generation data was used to estimate the newly generated trips anticipated from the 52 apartments for the weekday and AM and PM peak hours. The procedures of *Trip Generation, Seventh Edition*, published by the Institute of Transportation Engineers were used to estimate Saturday peak generated traffic. The trip generation for an average weekday resulted in 530 new trips from the proposed expansion with 265 entering and 265 exiting during the day. The AM peak hour of adjacent street traffic between 7 and 9 AM resulted in 29 new trips with 6 trips entering and 23 trips exiting the development. The PM peak hour of adjacent street traffic between 4 and 6 PM resulted in 45 new trips with 25 trips entering and 20 trips exiting the development. The Saturday peak hour of the generator resulted in 27 new trips with 12 trips entering and 15 trips exiting. Peak hour trip generation for the proposed 52 unit expansion is summarized in TABLE 1.

TABLE 1									
Trip Generation Summary									
	AM	PM	Saturday						
	Peak	Peak	Peak						
	(trips/hour)	(trips/hour)	(trips/hour)						
Entering Trips	6	25	12						
Exiting Trips	23	20	15						
TOTAL TRIPS	29	45	27						
			·						

The generated trips were distributed upon the existing roadway network based on existing distribution patterns obtained from the intersection turning movement counts. FIGURE 2 illustrates the resulting trip generation and trip distribution for both proposed access scenarios (with and without the Gallaher View driveway). For the scenario with the proposed access onto Gallaher View Road an assumption was made that 25% of the traffic from the existing 352 apartment units would utilize the new driveway onto Gallaher View Road. The redistribution of the existing traffic is reflected in the assignments illustrated on the bottom sketch on FIGURE 2. FIGURE 3 shows the combined year 2010 traffic volumes reflecting the existing traffic, background traffic, and the newly generated traffic from the proposed expansion.

#### Evaluation

Unsignalized intersection capacity analyses were again conducted for the intersection of Gallaher View Road and Walker Springs Lane / Sam's Wholesale driveway utilizing the volumes shown in FIGURE 3. Analyses were conducted for both driveway scenarios. A summary of the capacity analyses are shown in TABLE 2.

#### Without Secondary Access

This first scenario assumes all existing traffic, as well as all newly generated traffic from the 52-unit expansion will utilize the existing development access onto Walker Springs Lane. The analyses show that the intersection will operate at levels-of-service of no worse than "C" during the weekday AM peak hour

TABLE 2 Capacity Analysis Summary										
	AM Peak			ysis Summary PM Peak			Saturday Peak			
	LOS	Delay (sec)	v/c	LOS	Delay (sec)	v/c	LOS	Delay (sec)	v/c	
	Gallaher View Rd at Walker Springs Ln									
2008 Existing Conditions					·					
Northbound Left Southbound Left Eastbound Left Westbound	B A C C	10.5 8.4 22.6 18.7	0.05 0.04 0.01 0.34	B B D F	10 3 11.1 34.0 135.7	0.23 0.06 0.13 0.98	B A E F	11.4 8.6 37.4 80.9	0.38 0.02 0.17 0.69	
2010 Background Conditions										
Northbound Left Southbound Left Eastbound Left Westbound	B A C C	10.9 8.4 24.6 20.7	0.05 0.04 0.02 0.38	B B E F	10.7 11.5 40.2 228.0	0.25 0.07 0.16 1.22	B A E F	12.1 8.7 46.1 250.8	0.41 0 02 0.22 1.18	
Conditions without Secondary Driveway					,					
Northbound Left Southbound Left Eastbound Left Westbound	B A C C	10.9 8.5 24.8 22.7	0.05 0.05 0.02 0.45	B B E F	10.7 11 7 44.0 324.7	0.25 0.08 0.18 1.47	B A E F	12.1 8.8 49.7 420.2	0.41 0.03 0.25 1.58	
Conditions with Secondary Driveway			·							
Northbound Left Southbound Left Eastbound Left Westbound	B A D C	11 1 8.4 25.3 19 1	0.06 0.04 0.02 0.29	B B E F	10.9 11.4 37.1 145.8	0 26 0.05 0.15 0.95	B A E F	12.3 8.7 46.1 167.6	0 42 0 02 0 25 0 88	
	Ga	llaher Vie	ew Rd at	Proposed	d Drivew	ay				
2010 Combined Conditions										
Southbound Left Westbound	A B	8.2 12.9	0.00 0.12	B C	11.3 19.9	0.03 0.17	A B	8.8 12.8	0 01 0.09	

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and will operate at a level of service "F" for certain turning movements during the weekday PM and Saturday peak hours. Specifically, the westbound left turn (Walker Springs Lane) is anticipated to operate at LOS "F" during both the weekday PM peak hour and the Saturday peak hour. Estimated delays for the westbound left turn are in excess of 5 minutes for both peak hours.

#### With Secondary Access

The second scenario assumes the installation of a site driveway from the new expansion to Gallaher View Road. It is assumed that all newly generated traffic from the 52-unit expansion will utilize this new driveway. In addition, an assumption was made that 25% of the existing apartment traffic will divert to this new driveway. The analyses show that the westbound left turn (Walker Springs Lane) is anticipated to continue to operate at LOS "F" during both the weekday PM peak hour and the Saturday peak hour. However, with the addition of the second site access the estimated delays for the westbound left turn are reduced by approximately 40%

#### Signal Warrant Analysis

The intersection of Gallaher View Road and Walker Springs Lane was evaluated for potential signalization under the 2010 Combined conditions without the secondary access. Under these conditions the intersection is very close to meeting the Peak Hour warrant and with additional traffic data may very well meet the Four Hour warrant. However, due to the close proximity (less than 500 feet) of the existing signal at the intersection of Gallaher View Road and I-40 Westbound Off-Ramp additional study should be conducted

### Conclusions

The intersection of Gallaher View Road and Walker Springs Lane / Sam's Wholesale driveway is currently experiencing considerable side-street delay and poor levels-of-service. With the 52-unit expansion of the Walker Crossing Apartment development located on Walker Springs Lane, and assuming no additional driveway access points, the intersection will continue to operate at poor levels-of-service and will experience more extreme peak hour delays in excess of five minutes. The addition of a second Walker Crossing driveway, to be located on Gallaher View Road north of Walker Springs Lane, will improve the operating conditions and reduce the side street delays at the study intersection to near pre-expansion conditions.

In summary, based on the analyses of this study, the inclusion of a site access driveway onto Gallaher View Road from the Walker Crossing Apartment proposed expansion will mitigate the impact of the additional apartments. If you should have any questions, comments, or require additional information, please do not hesitate to give us a call

Sincerely,

Alan L. Childers, P.E. Vice President

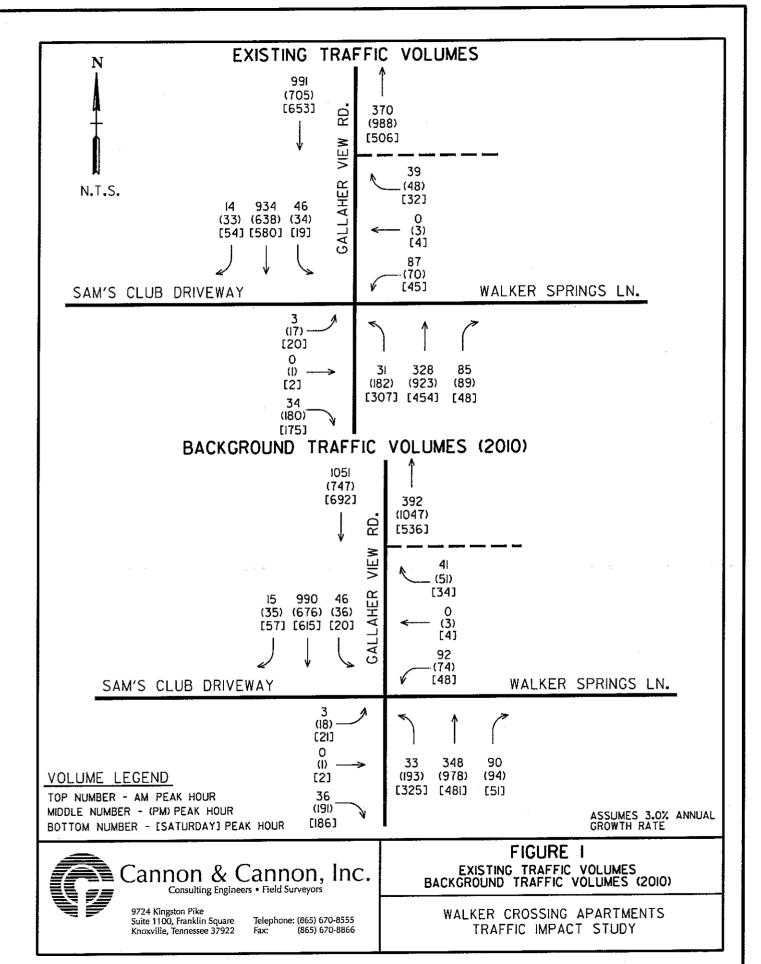
Attachments: Figures

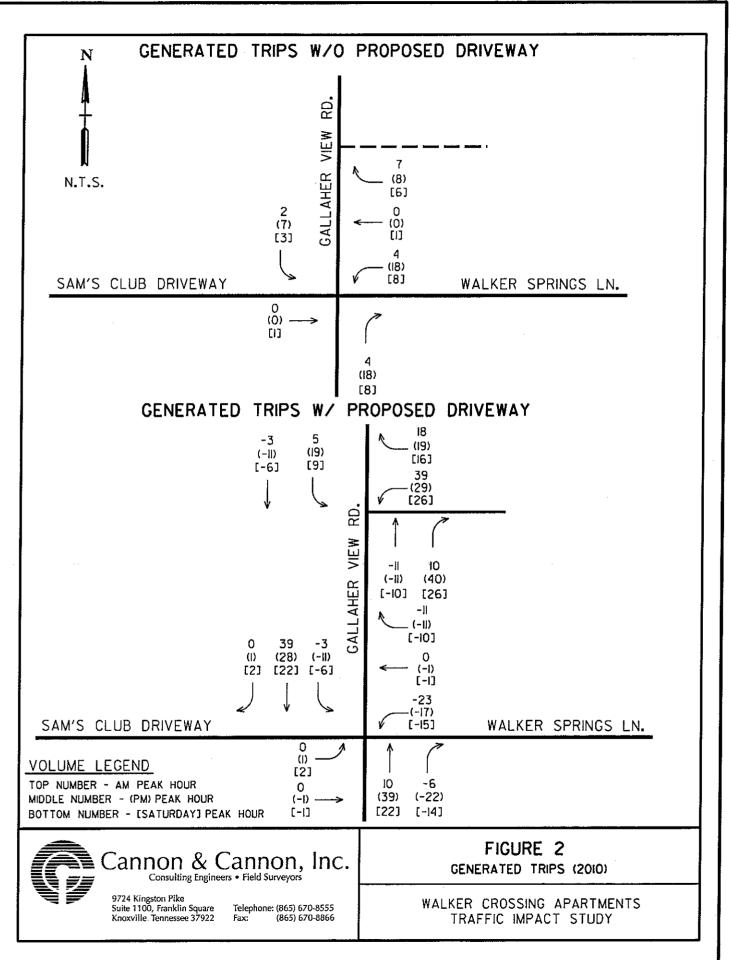
Appendix

cc:

Mr. Durant Bell Mr. Brad Salsbury

alar L. Childen





MPC March 13, 2008

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