

**SPRING HILL PLANNING COMMISSION  
REGULAR MEETING AGENDA**

Thursday, February 06, 2013  
7:00 p.m.  
Spring Hill Civic Center  
401 N. Madison St.

**CALL TO ORDER**

**ROLL CALL**

Tobi Bitner  
Janet Harms  
Brian Haupt  
Valerie Houpt  
Michael Weber

Janell Pollom  
Cindy Squire  
Troy Mitchell  
Stephen Sly

**APPROVAL OF AGENDA**

**FORMAL COMMISSION ACTION**

1. Approval of Minutes  
December 06, 2013
2. Conditional Use Policy
3. Public Hearing - Conditional Use Permit  
Case No.: CU-01-14  
Request: Off-Premise Billboard Sign  
Address: 169hwy & 191st  
Applicant: Ad Trend
4. Public Hearing - Conditional Use Permit  
Case No.: CU-02-14  
Request: Volumetric Concrete Facility  
Address: 20790 Woodland  
Applicant: Randall J. Miller
5. Public Hearing - Rezoning  
Case No.: Z-02-13  
Request: Zoning Change C-2 to RP-4  
Address: SW Corner 226th & Harrison St.  
Applicant: BlackHawk Development, L.L.C.
  - 5A. Preliminary Development Plan  
Case No.: Z-02-13  
Request: Preliminary Development Plan for Rezoning Request (Item #5)  
Location: SW Corner 226th & Harrison St.  
Applicant: BlackHawk Development, L.L.C.

**ANNOUNCEMENTS**

Planning Commission

Staff

**ADJOURN**

## PUBLIC HEARING PROCEDURE

1. Chairperson opens the public hearing.
2. Commission members describe what, if any, ex-party contacts they might have had regarding this case; indicating the nature of the communication and *whom* it was with.
3. Commission members describe what, if any, conflicts of interest they may have and dismiss themselves from the hearing.
4. Staff presents a report and comments regarding the case.
5. Applicant or agent of the applicant makes brief presentation of the case or request.
6. Commission members ask for any needed clarification of the applicant or agent.
7. Public comments are solicited from the audience. Each member of the audience must fill out a Citizen Participation/Comment Form.
8. Commission members ask for any further clarifications from applicant or staff.
9. Public Hearing is closed.
10. Members deliberate the request.
11. 14-day Protest Period begins after the Planning Commission Public Hearing is closed.  
\*

\* **Protest Petitions:** Any protest petition must be filed in the Office of the Spring Hill City Clerk within 14 days from the conclusion of the public hearing held by the Planning Commission. Sample copies of protest petitions may be obtained from the City Clerk Office at 401 N. Madison, Spring Hill, KS 66083 (913-592-3664).



# Memo

To: Spring Hill Planning Commission  
From: Jim Hendershot, Community Development Director  
CC: File  
Date: January 30, 2014  
Re: February 6, 2014 regular meeting

---

The following offers a brief explanation of items on the February 6, 2014, Planning Commission agenda. If you are unable to attend the meeting **PLEASE** contact my office at 913-592-3664, or email at hendershotj@springhillks.com or lazenbyn@springhillks.com.

## **FORMAL COMMISSION ACTION**

1. **APPROVAL OF MINUTES:** December 5, 2013 meeting
2. **POLICY ON CONDITIONAL USE PERMITS:** Included with this packet you will find a memorandum detailing a proposed policy on conditional use permits with respect to renewal or review conditions imposed on future applications. You will also find a spreadsheet proposed to be used as a guide in determining a condition of renewal or review. In addition, for your review staff has included a spreadsheet of current conditional use permits that identifies the status of each with respect to future actions, if any. Staff recommends adoption of the CUP Policy Memorandum. In the event the policy memorandum is not adopted by the PC, staff will ask for guidance on a policy draft for future consideration. If minor changes to the document are suggested and agreed upon by the PC, the policy memorandum can be adopted "in substantial form" with approved changes to be incorporated into the document prior to distribution.
3. **PUBLIC HEARING; OFF-SITE BILLBOARD CUP RENEWAL, CU-01-14:** Included with this packet is a staff report detailing this renewal request. The initial approval ordinance (2008) for this CUP contained conditions requiring the sign to be maintained in good repair, lighting must be shielded to prevent glare onto adjoining properties and was subject to renewal in five years. All conditions have been and continue to be met and the applicant submitted a request for renewal. Staff's recommendation is to approve the renewal request including the previous conditions regarding maintenance and lighting. Staff is also recommending three additional conditions, 1) The CUP is subject to annual review, 2) the applicant is to contact city staff if the billboard structure is sold, and 3) the

CUP is null and void if vacated or removed for a period of six months or more. These additional conditions are the result of the proposed policy from item #2 of this packet.

**4. PUBLIC HEARING; CONDITIONAL USE PERMIT CU-02-14, VOLUMETRIC CONCRETE FACILITY, 20790 WOODLAND ROAD:** Included with this packet is a staff report detailing this CUP request. The facility previously approved for operation under a CUP in the Country Meadows Industrial Park. The applicant now desires to relocate the facility to Woodland Road. Staff recommends approval of the application subject to the facts and conditions noted in the staff report.

**5. & 5A PUBLIC HEARING, REZONING REQUEST FROM C-2 (GENERAL BUSINESS) TO RP-4 (PLANNED MULTI-FAMILY):** This item consists of two parts, 1) Rezoning Staff Report, and 2) Preliminary Development Plan Staff Report. A request for rezoning to a Planned Development zoning category must be accompanied by a preliminary development plan. The Planning Commission is charged with conducting a public hearing on the rezoning application that includes the preliminary development plan. As a result, the items are listed on the agenda as Items #5 and #5A. Staff will present both staff reports prior to the public hearing to provide all the information on the application prior to any comments or questions. Possible action(s) for the PC include recommendations of approval, denial and defer to a future meeting. Each item will require a separate motion. As noted in each staff report, staff is recommending approval of both the rezoning application and preliminary development plan.

NOTE: Included with this packet you will find statistics from 2013 for building permit and inspection activity as well as a yearly review of Planning Commission meetings. Please feel free to contact my office if you have any questions or comments on this information. If you prefer, questions or comments can be discussed during the announcement portion of the meeting.

The following minutes are subject to modification  
and are not official minutes  
until approved by the Planning Commission

**SPRING HILL PLANNING COMMISSION  
REGULAR MEETING  
December 05, 2013**

**CALL TO ORDER**

Chairman Mitchell called the meeting to order at 7:02 PM

**ROLL CALL**

Roll call by Natalie Lazenby

Members Present:

Troy Mitchell     Michael Weber  
Valerie Houpt     Tobi Bitner  
Cindy Squire     Janell Pollom  
Brian Haupt

Members Absent:

Stephen Sly     Janet Harms

Staff Present:     Jim Hendershot, Community Development Director  
                           Natalie Lazenby, Administrative Assistant

Others:

Mark Squire

**APPROVAL OF AGENDA**

**Motion by** Ms. Squire to approve the agenda as presented.  
**Second by** Mr. Weber. Motion passed 7-0-0.

**FORMAL COMMISSION ACTION**

**1. Approval of Minutes**

**Motion by** Mr. Haupt to approve the minutes from November 7, 2013 as presented.  
**Second by** Ms. Houpt. Motion passed 7-0-0.

**DISCUSSION**

**2. Conditional Use Permits**

After discussion the Community Development Director was directed to write a policy that lists requirements and guidelines for the Conditional Use Process. The City Attorney will review the proposed policy prior to presentation to the Planning Commission.

The following minutes are subject to modification  
and are not official minutes  
until approved by the Planning Commission

### **3. Planning Commission Bylaws**

After discussion the Community Development Director suggested bylaws be included annually with the March agenda packet with a note directing Planning Commissioners to contact the Community Development Director or Planning Commission Chairman with questions, concerns or comments.

The commissioners agreed that this was an appropriate course of action and that the topic on attendance is satisfied.

### **4. January 2, 2014 Meeting**

The Community Development Director informed the Planning Commission that no new business was scheduled for January 2, 2013 Planning Commission meeting.

**Motion by** Ms. Pollom to cancel the January 2nd regular meeting, with no special meetings scheduled in the month of January.

**Second by** Mr. Weber. Motion passed 7-0-0.

## **ANNOUNCEMENTS**

## **ADJOURN**

**Motion by** Mr. Weber to adjourn.

**Second by** Ms. Squire Motion passed unanimously

The meeting was adjourned at 8:45 PM

---

Natalie Lazenby, Planning Commission Secretary



# Memo

To: Spring Hill Planning Commission  
From: Jim Hendershot, Community Development Director  
CC: file  
Date: January 27, 2014  
Re: Agenda Item #2, Policy, Conditional Use Permits subject to review and/or renewal

---

## **BACKGROUND:**

Over the course of several meetings in 2013 the Spring Hill Planning Commission (PC) discussed the topic of conditional use permits (CUP) subject to renewal or review. These discussions resulted in a directive to write a policy to serve as a guide in determining whether a CUP is subject to renewal or review.

What is a Conditional Use Permit? A conditional use permit allows a city or county to consider special uses which may be essential or desirable to a particular community, but which are not allowed as a matter of right within a zoning district, through a public hearing process. A conditional use permit can provide flexibility within a zoning ordinance. Another traditional purpose of the conditional use permit is to enable a municipality to control certain uses which could have detrimental effects on the community.

As per KSA 12-755, cities are authorized to issue conditional use permits in connection with the adopted zoning regulations. Section 17.354 of the Spring Hill Zoning Regulations details the process associated with a CUP application.

The attached spreadsheet identifies all uses listed in the Spring Hill Zoning Regulations that are permitted with an approved CUP. These uses have been grouped into two categories, review and renewal. Placement of a use into these two categories is based on the possible negative impact a use may have on a neighborhood or the community that may be best resolved through the formal hearing process associated with a renewal. Those listed in the review category are

subject to an annual, no cost, review by city staff to verify compliance with any conditions placed upon the use in the approved CUP ordinance. Following the staff review a report will be presented to the PC along with any suggested recommendations, if any.

It is important to note that in many instances a use allowed in one zoning district with a CUP may be a permitted use in a different zoning district. For example, banks and financial institutions are a permitted use in a C-2 (Commercial Business District) but are allowed only with CUP in a C-O (Office Building District). The attached spreadsheet should only be used when the listed use is identified with a CUP in the zoning district in which the property is located.

It is also important to note that the spreadsheet is a guide for staff and PC reference and is not intended to be the sole factor in determining if a CUP is subject to renewal or review. Depending on the individual application, it is possible that a use listed in the review category could be subject to renewal if so determined by the PC in the public hearing process.

The subject of a change property ownership requiring a renewal is one that jurisdictions across the State of Kansas interpret in various manners. City Attorney, Frank Jenkins, has issued his opinion that a CUP cannot have formal ownership restrictions or conditions attached to the approved CUP. For example, a CUP subject to renewal upon change of property ownership is not allowed. Mr. Jenkins did suggest the Planning Commission could consider language for the current owner of a property with an approved CUP contact the City in the event of the sale of the property. This would provide an opportunity for city staff to communicate with the new owner and explain the existing CUP.

A change in tenants does not require action on a CUP provided the use is operated in the same manner as the previous tenant and within the conditions established in the approved CUP.

If a property with an approved CUP remains vacant for six months or more the land use would then be classified as a nonconforming use. The CUP is then null and void and subject to a new CUP application as applicable dependent on the new use.

All CUP's subject to renewal shall require the applicant to complete the application form and provide all documentation and fees as required for a new CUP application.

#### **RECOMMENDATION:**

It is staff's recommendation this policy memo be formally adopted including the following provisions for future consideration of Conditional Use Permits:

1. The attached spreadsheet entitled "Conditional Use Permit Review/Renewal Guide, February 2014" is utilized as a guide to determine review or renewal conditions placed on CUP's.

2. All CUP's recommend city staff is contacted in the event of the sale of the property.
3. An approved CUP will become null and void if the subject property remains vacant for a period of six months or more and shall be classified as a nonconforming use.

**CONDITIONAL USE PERMIT REVIEW/RENEWAL GUIDE - February , 2014**

**Review**

Airport or Airstrip	Hospitals, Nursing or Convalescent Homes, Congregate Care Facilities, and Retirement Housing
Banks or Financial Institutions	Hotel/Motel
Basic Industry	Library
Bed & Breakfast Inn	Manufacturing, General
Boarding or Lodging Homes	Neighborhood Swimming Pool
Broadcast/Recording Studio	Off-Premise Billboard Signs
Cemetery	Personal Care Service
Church or Place of Worship	Personal Improvement Service
Communication Tower	Printing and Copying, Limited
Contractor Storage	School, Elementary, Middle & High
Cultural Group	Service Station
Day Care	Tavern & Drinking Establishment
Earth Sheltered Residence	Utility, Major
Golf Course	Vehicle Repair General
Government Service	Vehicle Repair Limited
Group Boarding Homes for Adults	Warehouse, Self-Service Storage
Group Boarding Homes for Minors	Wind Energy Conversion System

**Renewal**

Adult Business
Animal Care, General
Animal Care, Limited
Auto Wrecking or Salvage Yard
Extraction of Minerals
Kennel, Boarding, Breeding, Training
Recreation & Entertainment, Outdoor

**SPRING HILL PLANNING COMMISSION  
CONDITIONAL USE STAFF REPORT**

**Case #:** CU-01-14

**Meeting Date:** February 6, 2014

**Description:** Conditional Use Permit Renewal for an Off-Premise Billboard Sign

**Location:** Approximately 1,100 feet north of 191<sup>st</sup> St. on the east side of US169 Highway

**Applicant:** Ad Trend, Kansas City, MO (contact) Jim Boeh

**Engineer:** Not Applicable

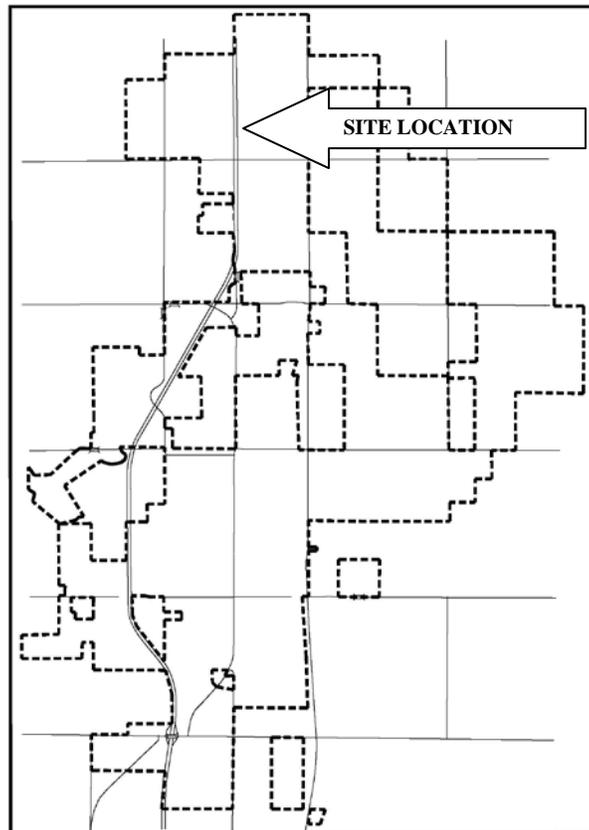
**Current Zoning:** M-1 Industrial

**Site Area:** 57.3 acres

**Number of Lots:** 1

	<b>Current Zoning</b>	<b>Existing Land Use</b>	<b>Future Land Use Map</b>
<b>Site:</b>	“M-1”	Vacant	Industrial
<b>North:</b>	“M-1”	Industrial	Industrial
<b>South:</b>	“M-1”	Industrial	Industrial
<b>East:</b>	“Unzoned”	Railroad R-O-W	Industrial
<b>West:</b>	“Unzoned”	Highway US169	Highway

**Related Applications:** SP-03-08



**BACKGROUND:**

The applicant, Ad Trend, has submitted an application for the renewal of CUP-03-08 for an off-premise billboard sign located approximately 1,100 feet north of 191<sup>st</sup> Street on the east side of US169 Highway. The sign is an illuminated, “V” shaped sign with a total height of 30 feet. Initially approved in 2008, the approval ordinance required renewal of the CUP in five years.

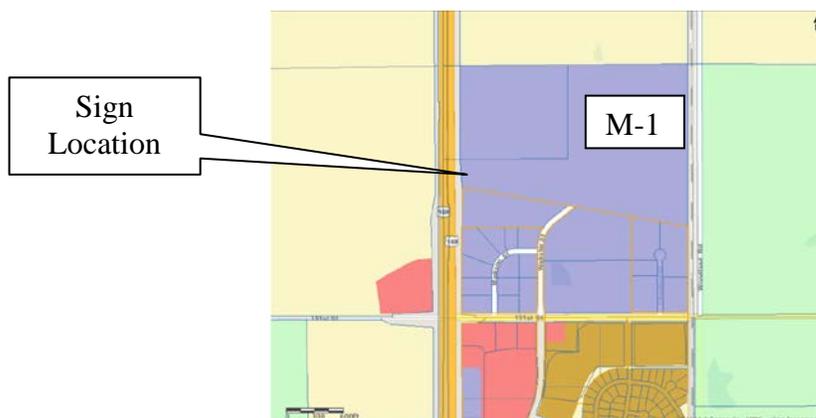
**GOLDEN FACTORS:**

The review of the proposed conditional use permit is consistent with Golden v. City of Overland Park, 224 Kan. 591, 584 P. 2d 130 (1978).

1. **Neighborhood Character.** The surrounding neighborhood is industrial in zoning and vacant along US169 Highway. .



2. **Adjacent Zoning.** Adjacent parcels to the north, south and east are zoned for industrial uses, with the west being US169 Highway. Proposed conditional use permit for the site will be compatible with existing zoning.



3. **Suitability for Current Zoning.** Section 17.730.A.6.a requires zoning of M-1 or MP for an off-premise billboard sign. The current zoning of M-1 is suitable for this sign installation
4. **Detrimental Effect of Zoning Change.** The proposed conditional use permit will not have a detrimental effect on the nearby properties.
5. **Length of Time at Current Zoning.** The site has been zoned “M-1” General Industrial since the development of the area.
6. **Public Gain Balanced by Landowner Hardship.** Public gain includes regulating the property with a Conditional Use Permit.
7. **Conformance with Comprehensive Plan.** The proposed conditional use permit is in conformance with the Spring Hill Comprehensive Plan.



**RECOMMENDATION:**

It is the recommendation of staff that the Planning Commission recommend approval of the conditional use permit renewal CU-01-14 with the following conditions:

1. The sign being kept in good repair, and
2. Lighting to be shielded to prevent glare to adjoining properties and US169 Highway; and
3. The applicant, Ad Trend, contact city staff in the event of sale of the sign structure, and
4. The CUP shall become null and void if the sign is vacated or removed for a period of six months or more, and

### **Agenda Item No. 3**

5. Permit approval subject to annual review by staff with a report forwarded to the Planning Commission.

**ORDINANCE NO.**

**AN ORDINANCE OF THE CITY OF SPRING HILL, KANSAS, AUTHORIZING  
CONDITIONAL USE PERMIT CU-01-14 (OFF-PREMISES BILLBOARD).**

**WHEREAS**, the Spring Hill Planning Commission did hold a public hearing on February 6, 2014 in accordance with the requirements as set forth in Section 17.354 of the Spring Hill Zoning Ordinance to consider a Conditional Use Permit for an off-premises billboard, on the real property described in Section One below; and

**WHEREAS**, fourteen (14) days have passed since the hearing before the Planning Commission and no sufficient protest has been filed with the office of the City Clerk; and

**WHEREAS**, after reviewing all written and oral testimony presented at said hearing, the Planning Commission did recommend that the City Council approve Conditional Use Permit No. CU-01-14 (off-premises billboard); and

**WHEREAS**, the City Council has reviewed the Conditional Use Permit along with the recommendations of the Planning Commission and professional planning staff.

**NOW, THEREFORE, BE IT ORDAINED THAT THE GOVERNING BODY OF  
THE CITY OF SPRING HILL, KANSAS:**

**SECTION ONE:** Conditional Use Permit No. CU-01-14 is hereby approved for an off-premises billboard to commence upon the publication of this ordinance, located on the following tract of land located within Johnson County, Kansas:

**[SEE EXHIBIT "A" ATTACHED HERETO]**

Additionally, the conditional use permit is subject to the following conditions;

1. The sign being kept in good repair, and
2. Lighting to be shielded to prevent glare to adjoining properties and US169 Highway; and

3. The applicant, Ad Trend, contact city staff in the event of sale of the sign structure, and
4. The CUP shall become null and void if the sign is vacated or removed for a period of six months or more, and
5. Permit approval subject to annual review by staff with a report forwarded to the Planning Commission.

**SECTION TWO:** The real property described in Section One shall be deemed to be authorized for an off-premises billboard, pursuant to Section 17.354 of the Spring Hill Zoning Ordinance.

**SECTION THREE:** This Ordinance shall take effect upon publication in the official city newspaper. All zoning regulations of Spring Hill, Kansas, affecting the use of the real property heretofore described, which are inconsistent with this ordinance are hereby made inapplicable to said property until the Conditional Use Permit is vacated or is declared null and void.

**PASSED BY THE CITY COUNCIL** this 27th day of February, 2014.

**APPROVED BY THE MAYOR** this 27th day of February, 2014.

---

**Steven M. Ellis, Mayor**

**ATTEST:**

---

**Glenda Gerrity, City Clerk**

**APPROVED AS TO FORM:**

---

**Frank H. Jenkins, Jr.,  
City Attorney**

**EXHIBIT "A"**

ALL THAT PART OF THE SOUTHEAST QUARTER OF SECTION 35, TOWNSHIP 14 SOUTH, RANGE 23 EAST, IN THE CITY OF SPRING HILL, JOHNSON COUNTY, KANSAS.

EXCEPT:

THE NORTH THREE QUARTERS OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 35, TOWNSHIP 14, RANGE 23, IN JOHNSON COUNTY, KANSAS, EXCEPT THAT PART IN ROADS AND HIGHWAYS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF SAID SECTION 35; THENCE NORTH 89 DEGREES 36 MINUTES 05 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 35, A DISTANCE OF 177.90 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF US 169 HIGHWAY; SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE CONTINUING NORTH 89 DEGREES 36 MINUTES 05 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 35 A DISTANCE OF 1142.42 FEET TO THE NORTHEAST CORNER OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 35; THENCE SOUTH 0 DEGREES 02 MINUTES 47 SECONDS EAST ALONG THE EAST LINE OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 35 A DISTANCE OF 1003.90 FEET TO THE SOUTHEAST CORNER OF THE NORTH THREE QUARTERS OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 35; THENCE SOUTH 89 DEGREES 45 MINUTES 04 SECONDS WEST ALONG THE SOUTH LINE OF THE NORTH THREE QUARTERS OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 35 A DISTANCE OF 1140.82 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF SAID US 169 HIGHWAY; THENCE NORTH 0 DEGREES 01 MINUTES 34 SECONDS WEST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 806.12 FEET; THENCE NORTH 0 DEGREES 35 MINUTES 44 SECONDS WEST ALONG SAID RIGHT OF WAY LINE A DISTANCE OF (194.79 FEET MEASURED) (190.50 FEET DEED) TO THE POINT OF BEGINNING, EXCEPT THAT PART IN ROADS AND HIGHWAYS.

AND EXCEPT:

A TRACT OF LAND LYING IN THE SOUTHEAST QUARTER OF SECTION 35, TOWNSHIP 14 SOUTH, RANGE 23 EAST, BEGINNING AT THE NORTHWEST CORNER OF SAID QUARTER SECTION; THENCE EAST 47.8 FEET; THENCE IN A SOUTHERLY DIRECTION 1,454 FEET; THENCE EAST AT RIGHT ANGLES 15 FEET; THENCE SOUTH AT RIGHT ANGLES 600 FEET; THENCE WEST AT RIGHT ANGLES 15 FEET, THENCE SOUTH AT RIGHT ANGLES TO A POINT ON THE SOUTH LINE 50 FEET EAST OF THE SOUTHWEST CORNER OF SAID QUARTER SECTION; THENCE WEST 50 FEET TO THE WEST LINE OF THE SAID QUARTER SECTION; THENCE NORTH ALONG SAID LINE TO THE PLACE OF BEGINNING, EXCEPT THAT PART IN STREETS OR ROADS.

AND EXCEPT:

LOT 3, COUNTRY MEADOWS INDUSTRIAL PARK, 2ND PLAT, A SUBDIVISION IN THE CITY OF SPRING HILL JOHNSON COUNTY, KANSAS.

AND EXCEPT:

LOTS 4, 5, AND 6, COUNTRY MEADOWS INDUSTRIAL PARK, 3RD PLAT, A SUBDIVISION IN THE CITY OF SPRING HILL, JOHNSON COUNTY, KANSAS.

AND EXCEPT:

LOTS 7-17 INCL., COUNTRY MEADOWS INDUSTRIAL PARK, 4TH PLAT, A SUBDIVISION IN THE CITY OF SPRING HILL, JOHNSON COUNTY, KANSAS.

AND EXCEPT:

THAT PART USED OR DEDICATED FOR STREETS, ROADS, OR HIGHWAYS.

**SPRING HILL PLANNING COMMISSION  
CONDITIONAL USE STAFF REPORT**

**Case #:** CU-02-14

**Meeting Date:** February 6, 2014

**Description:** Conditional Use Permit - Volumetric Concrete Facility

**Location:** 20790 Woodland

**Applicant:** Randall J. Miller

**Engineer:** n/a

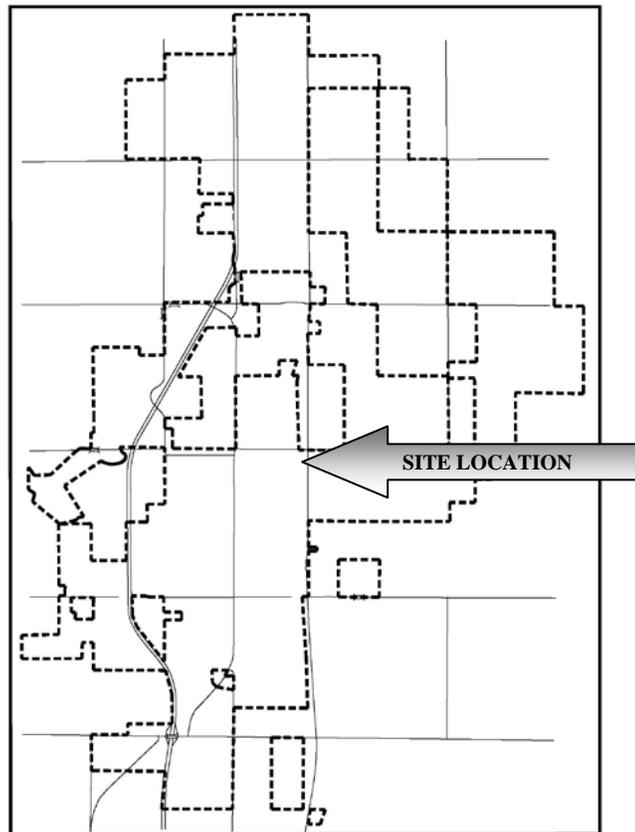
**Current Zoning:** "M-1" General Industrial

**Site Area:** 2.24 acres

**Number of Lots:** 1

	<b>Current Zoning</b>	<b>Existing Land Use</b>	<b>Future Land Use Map</b>
<b>Site:</b>	M-1	General Industrial	Industrial
<b>North:</b>	M-1	General Industrial	Industrial
<b>South:</b>	M-1	General Industrial	Industrial
<b>East:</b>	R-2	Vacant	Residential
<b>West:</b>	M-1	General Industrial	Industrial

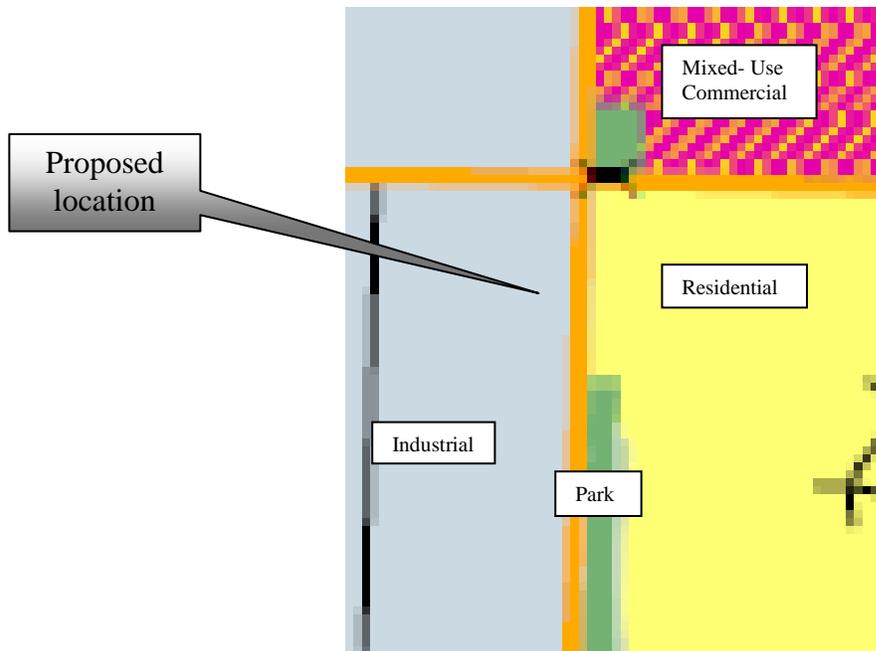
**Related Applications:** CU-06-12







3. **Suitability for Current Zoning.** The site is suitable for the proposed use as cement plants are allowed in an M-1 District with a conditional use permit.
4. **Detrimental Effect of Zoning Change.** The proposed conditional use permit should have no detrimental effect on the nearby properties. With the exception of the vacant property to the east, all other area parcels are industrial in zoning and use.
5. **Length of Time at Current Zoning.** The site has been zoned “M-1” General Industrial for many years.
6. **Public Gain Balanced by Landowner Hardship.** Public gain includes regulating the property with a Conditional Use Permit.
7. **Conformance with Comprehensive Plan.** The proposed conditional use permit would be in conformance with the Spring Hill Comprehensive Plan Future Land Use Map, that identifies the parcel as industrial.



**8. Review Criteria** Sections 17.354.H and 17.334.D detail the review criteria for a conditional use permit. Not all of the criteria must be given equal consideration by the Planning Commission or by the Governing Body in reaching a decision.

- A. *The proposed project is consistent with purposes of the regulations and intent of the district.*

The proposed development is consistent with regulations and intent of the district in that a concrete batch plant is basic industry and is allowed in an M-1 zone with a conditional use permit. In addition, the Comprehensive Plan identifies the area as industrial for future land use.

- B. *The proposed project is compatible with the character of the neighborhood.*

The proposed project is compatible with the character of the neighborhood as surrounding property is either zoned industrial or is vacant.

- C. *The proposed project is compatible with zoning and uses of nearby parcels.*

The proposed project is in compliance with zoning districts as identified on the zoning map and with uses of nearby parcels as noted in item “B”.

- D. *The proposed project is requested because of changing conditions.*

The proposed project is requested because of a need to relocate the facility from its current location

- E. *Review of suitability of parcel for uses permitted by the district.*

The proposed project is suitable for this particular parcel when considering zoning, current use and future land use.

*F. Review detrimental effects on nearby parcels.*

The nearby parcels should not be affected negatively as they are either industrial in zoning and use or vacant.

*G. The proposed project corrects an error.*

The project does not correct an error of any kind.

*H. Adequacy of current facilities.*

Facilities such as road access, water, electric and gas are adequately available to the site with minimal extensions by the developer. Sewer is not available at the site but the facility has no need for sewer services until the future building is constructed. At that time, if applicable, onsite sewage is an option. Woodland Road is constructed to withstand the truck traffic generated by this facility. Current regulations require the driveway entrance to the facility be paved with either concrete or asphalt. The applicant has indicated his intention to pave the driveway in the immediate future.

*I. Conformity with Comprehensive Plan.*

The proposed development is in compliance with the Comprehensive Plan with regards to zoning and future land use.

*K. Hardship if application is denied.*

The applicant could better speak to any perceived hardship if the application is denied.

*View of portable batch plant as erected on Chestnut Street in Country Meadows Industrial Park*



**RECOMMENDATION:**

Staff recommends the Planning Commission approves CU-02-14 as presented with final action by the Governing Body on February 27, 2014 with the following conditions:

1. Approved concrete approach and driveway must be installed from Woodland Road within six months, (August 2014), and
2. The applicant contact city staff in the event of sale of the property, and
3. The CUP shall become null and void if the use is vacated or removed for a period of six months or more, and
4. Permit approval subject to annual review by staff with a report forwarded to the Planning Commission.

**ORDINANCE NO. 2014-**

**AN ORDINANCE OF THE CITY OF SPRING HILL, KANSAS, AUTHORIZING CONDITIONAL USE PERMIT (CU-02-14) (VOLUMETRIC CONCRETE FACILITY, 20790 Woodland Road).**

**WHEREAS**, the Spring Hill Planning Commission did hold a public hearing on February 6, 2014, in accordance with the requirements as set forth in Section 17.354 of the Spring Hill Zoning Ordinance to consider a Conditional Use Permit for the operation of a volumetric concrete facility on the real property described in Section One below; and

**WHEREAS**, fourteen (14) days have passed since the hearing before the Planning Commission and no sufficient protest has been filed with the office of the City Clerk; and

**WHEREAS**, after reviewing all written and oral testimony presented at said hearing, the Planning Commission did recommend that the City Council approve Conditional Use Permit No. CU-02-14 (volumetric concrete facility); and

**WHEREAS**, the City Council has reviewed the Conditional Use Permit along with the recommendations of the Planning Commission and professional planning staff.

**NOW, THEREFORE, BE IT ORDAINED THAT THE GOVERNING BODY OF THE CITY OF SPRING HILL, KANSAS:**

**SECTION ONE:** Conditional Use Permit No. CU-02-14 is hereby approved for a volumetric concrete facility to commence upon the publication of this ordinance, located on the following tract of land within Johnson County, Kansas:

Lot 2, Spring Hill Industrial Park, a subdivision  
in Spring Hill, Johnson County, Kansas

**SECTION TWO:** The real property described in Section One shall be deemed to be authorized for a volumetric concrete facility, pursuant to Section 17.354 of the Spring Hill Zoning Ordinance, subject to the following conditions:

1. Approved concrete approach and driveway must be installed from Woodland Road within six months, (August 2014), and
2. The applicant contact city staff in the event of sale of the property, and
3. The CUP shall become null and void if the use is vacated or removed for a period of six months or more, and
4. Permit approval subject to annual review by staff with a report forwarded to the Planning Commission.

**SECTION THREE:** This Ordinance shall take effect upon publication in the official City Newspaper. All zoning regulations of Spring Hill, Kansas, affecting the use of the real property heretofore described, which are inconsistent with this ordinance are hereby made inapplicable to said property until the Conditional Use Permit is vacated or is declared null and void.

**PASSED BY THE CITY COUNCIL** this \_\_\_\_ day of \_\_\_\_\_ 2014.

**APPROVED BY THE MAYOR** this \_\_\_\_ day of \_\_\_\_\_ 2014.

\_\_\_\_\_  
**Steven M. Ellis, Mayor**

**ATTEST:**

\_\_\_\_\_  
**Glenda Gerrity, City Clerk**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
**Frank H. Jenkins, Jr.,  
City Attorney**

**SPRING HILL PLANNING COMMISSION  
ZONING STAFF REPORT**

**Case #:** Z-02-13 **Meeting Date:** February 6, 2014

**Description:** Proposed Rezoning from C-2 to RP-4

**Location:** Southwest corner of Franklin & 226th St.

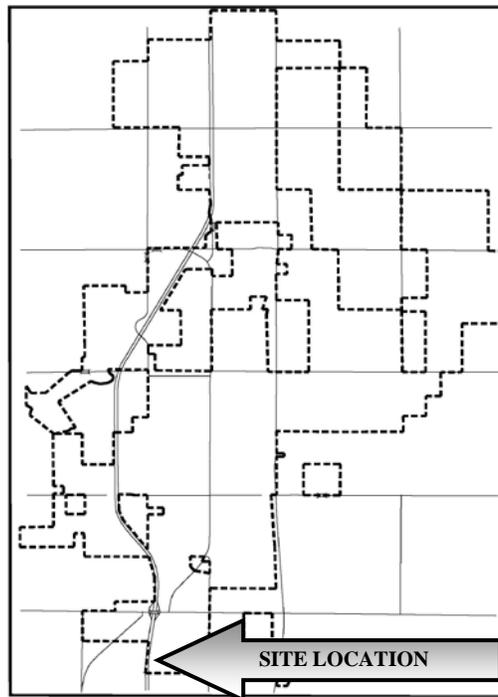
**Applicant:** Blackhawk Development, LLC

**Engineer:** Allenbrand-Drews & Assoc., Inc.

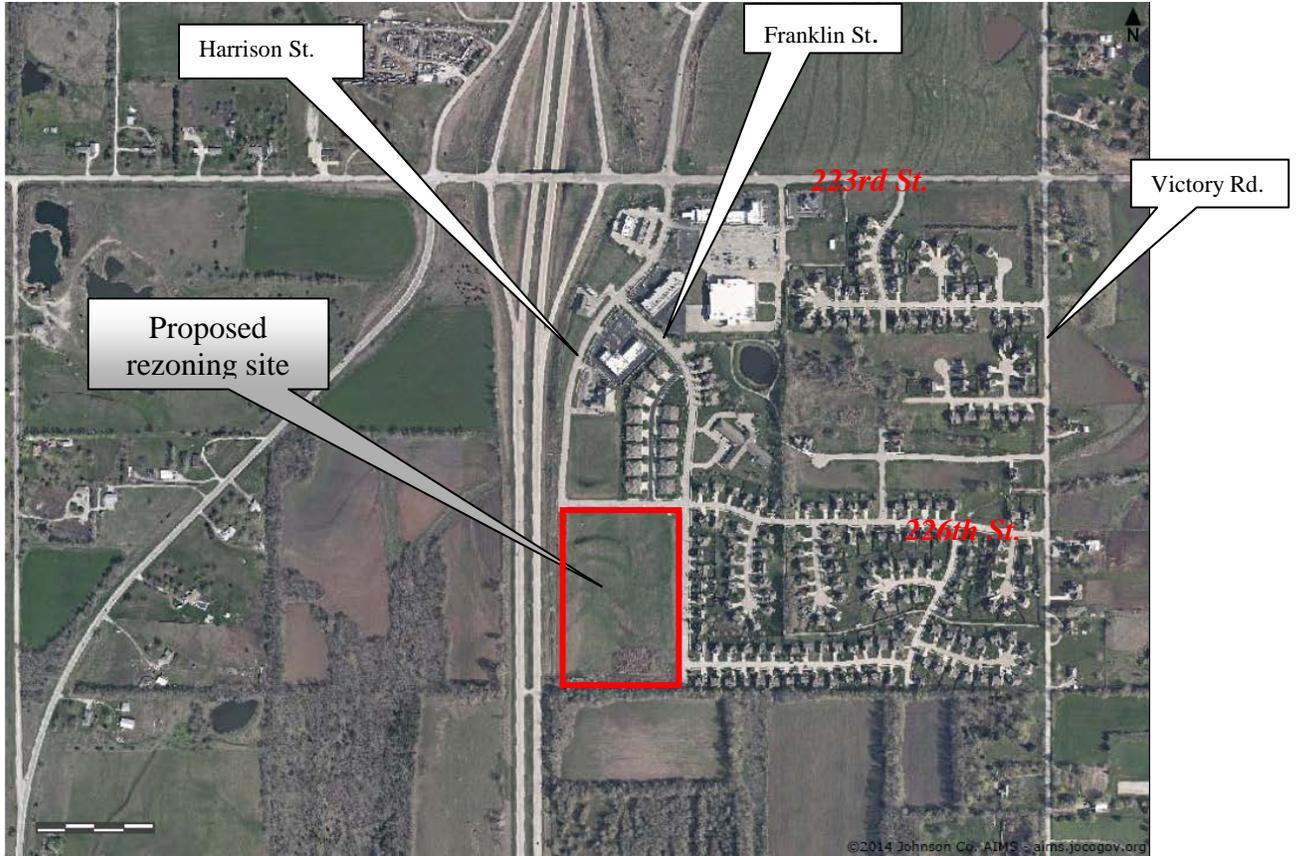
**Current Zoning:** "C-2" **Proposed Zoning:** "RP-4"

**Site Area:** 13.68 Ac. **Number of Lots:** 1

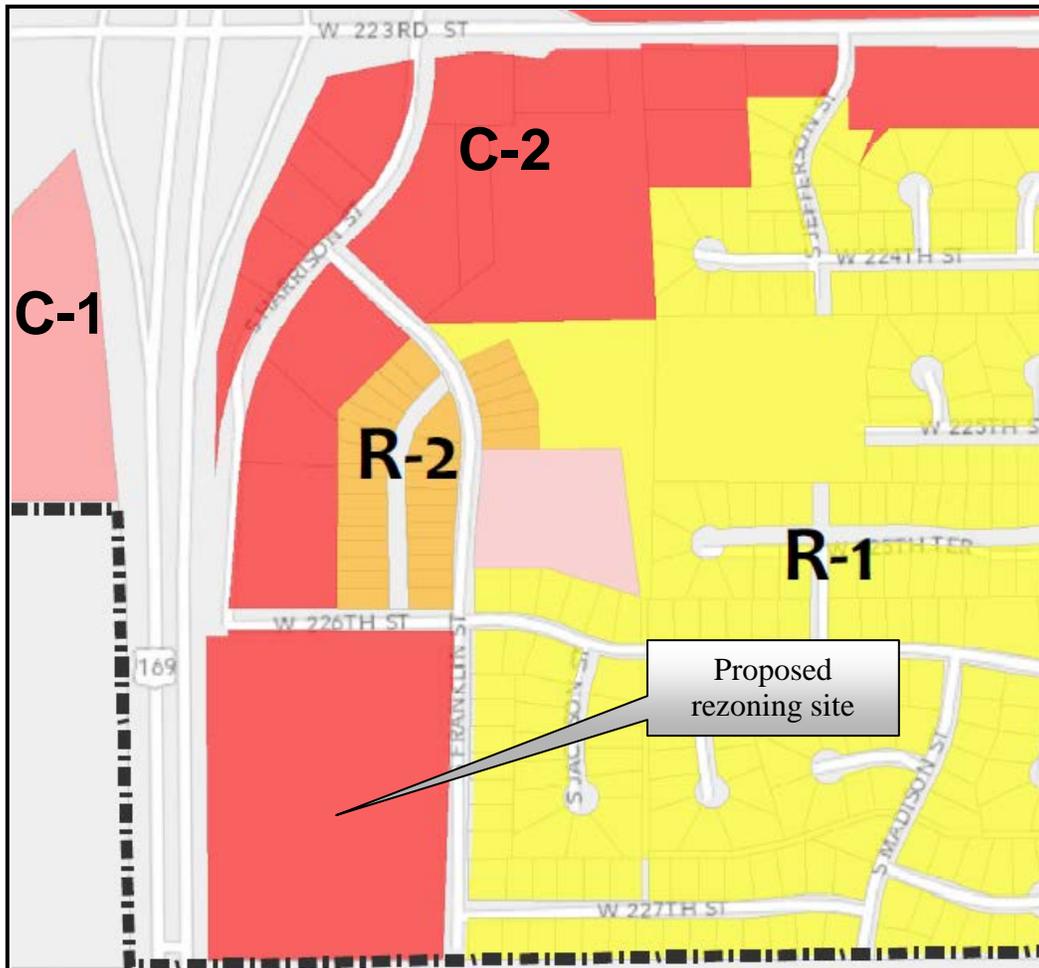
	<b>Current Zoning</b>	<b>Existing Land Use</b>	<b>Future Land Use Map</b>
<b>Site:</b>	"C-2"	Vacant	Mixed Use Commercial
<b>North:</b>	"C-2"	Vacant	Mixed Use Commercial
	"R-2"	2-Family Resid.	Mixed Use Residential
<b>South:</b>	County	Vacant	N/A
<b>East:</b>	"R-1"	Single Family Resid.	Residential
<b>West:</b>	N/A	Highway R-O-W	N/A
<b>Proposed Use:</b>	Planned Multi-Family		



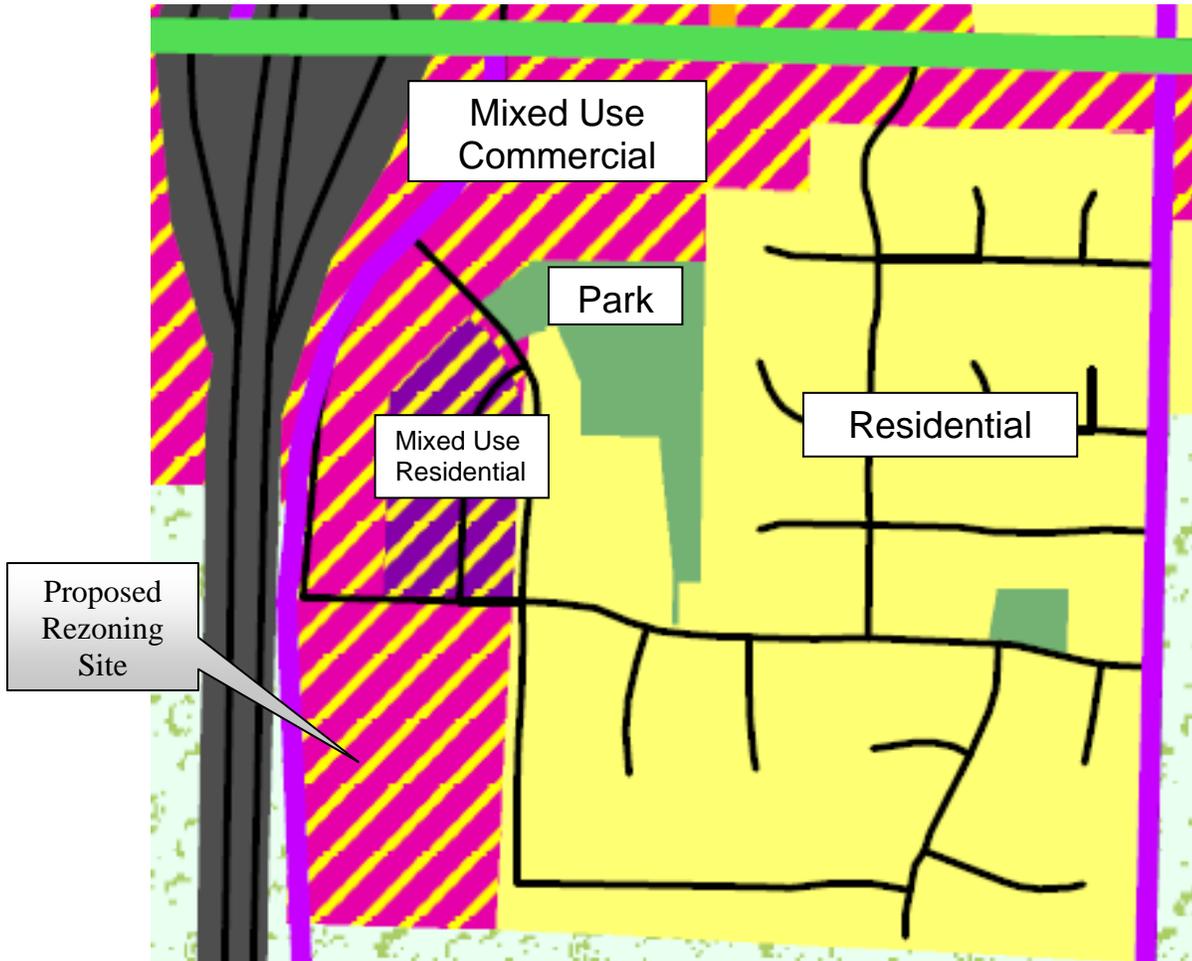
# AREA PHOTO



# AREA ZONING



## FUTURE LAND USE



### **BACKGROUND:**

An application has been received requesting the above shown property be rezoned from C-2 (General Business District) to RP-4 (Planned Multi-Family District). The property located at the southwest corner of 226th and Franklin Street is a 13.68 acre site for a planned development consisting of 228, one and two bedroom apartments contained in seven buildings. The buildings will be a combination of two and three story buildings with exterior finishes consisting of a combination of brick, stucco, horizontal and sheet siding and have laminated asphalt shingles on the roof.

In addition to the seven apartment buildings the complex will have a club house and pool, storm water detention basin, a play area, six garage units (5-6 bays), six carport units (5-6 bays), a trash compaction area and two mail box sites. The preliminary landscape plan identifies an earthen berm located adjacent to Franklin Street to screen the parking areas from view and will contain landscaping items in excess of the minimum required by the zoning regulations.

Access to the complex will be via two entrances located along Harrison Street which will be extended from 226th Street to the south property line of the subject tract where a temporary turn-around will be installed. Adequate parking is provided for the anticipated occupancy of the complex and includes handicap accessible parking areas.

Some members of the Planning Commission and citizens from the surrounding area may recall a 2003 rezoning application at this location that was denied. While the concept of multi-family apartments may be similar, this application is not identical to the 2003 application. It should also be noted that the Comprehensive Plan has undergone significant changes and updates since the 2003 application. This staff report will focus on the current application and will reference the Comprehensive Plan and Zoning Regulations currently adopted by the City of Spring Hill. Records from the 2003 application are on file with the City of Spring Hill and are available through the open records request with the City Clerk.

Included with this staff report you will find the preliminary development plan as required to be submitted with a planned zoning request. The development plan consists of a site plan, landscape plan, building elevations, and floor plans of the various buildings along with individual one and two bedroom apartment floor plans.

Section 17.332.A of the Spring Hill Zoning Regulations indicates the "zoning of land to a Planned District shall be for the purpose of encouraging and requiring orderly development on a quality level generally equal to that of the equivalent zoning district, but permitting deviations from the normal and established development techniques". As noted above, a planned zoning request requires the submission of a preliminary development plan. If the preliminary development plan is approved, the Planning Commission and Governing Body must then approve a final development plan prior to the issuance of any permits for construction. A final development plan can be considered by the Planning Commission and Governing Body without a public hearing provided it is in substantial compliance with the preliminary plan and contains no substantial or significant changes. Procedures for the approval process including details on substantial or significant changes are found in Section 17.332 of the Spring Hill Zoning Regulations, 2009 Third Edition.

### **REZONING:**

The review of the proposed rezonings are consistent with Golden v. City of Overland Park, 224 Kan. 591, 584 P. 2d 130 (1978).

- 1. Consistent with purposes of the regulations and intent and purpose of the proposed district:** The proposed use of the property for multi-family residential units is an allowed use in an RP-4 District and consistent with the proposed zoning. Multi-family residential is defined as the use of a site for three or more dwelling units within a single building. Typical uses include triplexes, fourplexes, apartments, residential condominiums and town houses.
- 2. Neighborhood Character:** As shown on the aerial photo (page 2), the surrounding neighborhood is single family residential to the east, two family residential and vacant

commercial to the north, highway right-of-way to the west, and vacant agricultural ground to the south.

- 3. Zoning and uses of nearby parcels:** As shown on the area zoning map (page 3), the area to the east is zoned R-1 (Single Family Residential), the area to the north is zoned R-2 (Two-Family Residential) and C-2 (General Business District), the area to the west is US Highway right-of-way, and the area to the south is unincorporated Miami County zoning of Countryside. According to the Miami County Planning Department this zoning district allows for larger tract single family residential and agricultural uses.

With respect to current uses of nearby parcels, the area to the east is developed as single family residential, the R-2 area to the north is developed as two-family residential, the area to the north zoned C-2 is vacant, the area to the west is US Highway 169, and the area to the south is vacant agricultural ground.

- 4. Requested because of changing conditions:** During the 2003 rezoning process for this tract opinions were voiced that the property's best use was commercial based on location and the comprehensive plan adopted at that time. According to the owner, the property has been heavily marketed since 2003 as commercial with no interest from potential buyers. The Future Land Use Map of the Comprehensive Plan identifies the property as "Mixed Use Commercial". Section 4.2.2 of the Comprehensive Plan defines "Mixed Use Commercial" as a category that promotes a mixture of neighborhood-oriented office, retail-commercial, institutional, civic, and medium to higher density residential uses intermixed through compatible site planning and building design. As a result conditions have changed since 2003 as the Comprehensive Plan recognizes multi-family projects as compatible in a mixed use designation and the property seems to be unmarketable as commercial.
- 5. Suitability of parcel for uses restricted by the current zone:** As noted in item #4, this property has little appeal for commercial development. The proposed use as multi-family residential is not allowed in a C-2 district. Section 5.6.1 of the Comprehensive Plan recommends the use of well designed multi-family housing to transition between single-family housing and areas of higher intensity including commercial uses, industrial uses, highways and/or railroads. As a result, the property seems to be more suitable for uses restricted by the current zone than those uses that are allowed in a C-2 district.
- 6. Suitability of parcel for uses permitted by the proposed district:** The proposed use of the parcel for multi-family apartments is consistent with and an allowed use in the proposed district of RP-4. The base district of R-4 also identifies multi-family residential as an allowed use.
- 7. Detrimental Effect of Zoning Change:** As with most rezoning requests, the surrounding owners and residents can best speak to the issue of detrimental effects if the application is approved. Based on the length of time the subject property has been

vacant along with continued efforts to market the property as commercial, it is reasonable to anticipate a hardship to the owner in the form of unmarketable property if the application is denied.

- 8. Proposed amendment corrects an error:** No error is being corrected.
- 9. Length of property has been vacant:** The property has never been developed and remains vacant.
- 10. Adequacy of facilities:** Adequate utilities are available at the property. Extensions of main lines for water and sewer are required and identified on the preliminary development plan.
- 11. Conformance with Comprehensive Plan.** As noted above the Future Land Use Map identifies this property as "Mixed Use Commercial". The proposed project is in compliance with the Comprehensive Plan as medium to higher density residential uses are noted as being compatible within this category. In addition it provides a transition area or buffer between the highway and neighboring residential and commercial zones and developments.

In addition, Section 17.318.A of the Spring Hill Zoning Regulations indicates an R-4 district (underlying zone for RP-4) is generally appropriate for areas designated as "Mixed-Use" by the Spring Hill Comprehensive Plan.

- 12. Hardship if application is denied:** It is staff's opinion the applicant is better qualified to respond to this issue. However, with the length of time the property has been zoned C-2 combined with the efforts of the owner to sell the property as commercial being unsuccessful, denial of the request could result in the property remaining vacant for many years
- 13. Recommendation:** Staff recommends approval of rezoning application Z-02-13 from C-2 to RP-4.

**SPRING HILL PLANNING COMMISSION  
ZONING STAFF REPORT**

**Case #:** Z-02-13 Prelim. Dev. Plan      **Meeting Date:** February 6, 2014

**Description:** Preliminary Development Plan, Blackhawk Apartments

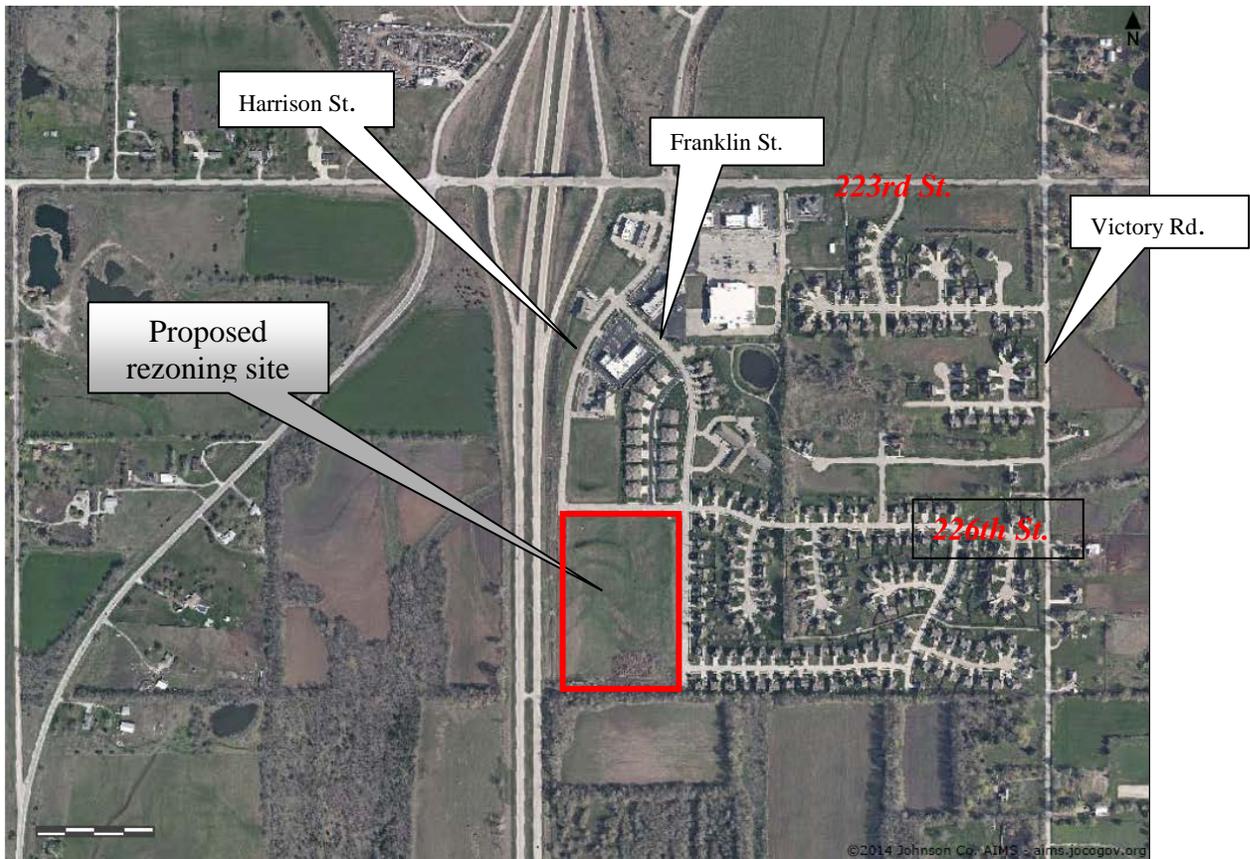
**Location:** Southwest corner of Franklin & 226th St.

**Applicant:** Blackhawk Development, LLC

**Engineer:** Allenbrand-Drews & Assoc., Inc.

**Site Area:** 13.68 Ac.      **Number of Lots:** 1

**AREA PHOTO**



## **REQUIREMENTS OF THE SPRING HILL ZONING REGULATIONS FOR PRELIMINARY DEVELOPMENT PLANS ASSOCIATED WITH PLANNED ZONING**

**Section 17.332.F Spring Hill Zoning Regulations:** When a property is zoned as a planned district, the development plan shall be considered as preliminary and approved as part of the rezoning application.

**Section 17.332.H Spring Hill Zoning Regulations:** The Planning Commission shall advertise and hold a public hearing on the plan as provided by law and as set forth in Section 17.364. The review criteria set forth in Section 17.364.D (see note below) and the statement of objectives of planned zoning provided in Section 17.332.B (below) shall apply to the approval of planned districts and the associated preliminary plan.

NOTE: The review criteria provided in Section 17.364.D are the criteria established in *Golden v. City of Overland Park* and are detailed in the staff report for rezoning of the subject tract from C-2 to RP-4.

### **Section 17.332.B Spring Hill Zoning Regulations:**

**NOTE:** *For the purposes of this report items #5, 8 and 9 have been deleted as they address commercial planned developments.*

**Statement of Objectives.** The zoning of land in the City of Spring Hill to one of the Planned Districts (RP-1 through RP-4 and CP-0 through CP-2) shall be for the purpose of encouraging and requiring orderly development on a quality level generally equal to that of the equivalent standard zoning districts, but permitting deviations from the normal and established development techniques. The use of planned zoning procedures is intended to encourage large-scale development tracts, efficient development of small tracts, innovative and imaginative site planning, conservation of natural resources and minimizing the inefficient use of land. Planned Districts are expected to be consistent with the *Comprehensive Plan* recommendations, including the Planning Principles and Design Guidelines. The following are specific objectives of this section.

1. A proposal to rezone land to a planned district shall be subject to the same criteria relative to compliance with master plans, land use policies, neighborhood compatibility, adequacy of streets and utilities and other elements as are normal in rezoning deliberations.
2. The submittal by the developer and the approval by the City of the approved plan in concept, intensity of use, aesthetic levels and quantities and qualities of open space.
3. Deviations in yard requirements, setbacks and relationship between buildings as set out in the Standards of Development of the underlying district may be approved if it is deemed that other amenities or conditions will be gained to the extent that an equal or higher quality of development is produced.

4. Residential areas will be planned and developed in a manner that will produce more useable open space, better recreational opportunities, safer and more attractive neighborhoods than under standard zoning and development techniques.
6. The developer will be given latitude in using innovative techniques in the development of land not feasible under application of standard zoning requirements.
7. Planned zoning shall not be used as a refuge from the requirements of the equivalent district as to intensity of land use, amount of open space to other established development criteria. Nor will any use be permitted in the planned district that is not clearly permitted in the equivalent district.
10. Open space in planned developments shall contribute to the use and enjoyment of the development's residents or users. Open space shall be provided in useful, quality spaces integrated purposefully into the overall development design. Residual areas left over after buildings and parking areas are sited are not considered acceptable useful open space.

This staff report will address the requirements of a preliminary development plan for Blackhawk Apartments and will be considered during the public hearing for rezoning the subject tract from C-2 to RP-4. If approved, the developer shall file with the Register of Deeds a statement that such a plan has been filed with the City of Spring Hill and has been approved, and that such planned unit development is applicable to certain specific legally described land and such statement recorded shall also specify the nature of the plan, the proposed density or intensity of land uses and other pertinent information sufficient to notify any prospective purchaser of users of land of the existence of such plan (Sec. 17.332.I.1 Spring Hill Zoning Regulations).

Approval of a final development plan is required any time a preliminary development plan is required and approved for a zoning district. No building permit shall be issued until a final development plan is approved and the property is platted as applicable (Sec. 17.332.K Spring Hill Zoning Regulations).

Final development plan review shall be performed by the Zoning Administrator and presented to the Planning Commission for approval. The Planning Commission shall forward the plan to the City Council for consideration with recommendations(s) (Sec. 17.332.M.1 Spring Hill Zoning Regulations).

#### **BACKGROUND**

An application has been received requesting the above shown property be rezoned from C-2 (General Business District) to RP-4 (Planned Multi-Family District). The property located at the southwest corner of 226th and Franklin Street is a 13.68 acre site for a planned development consisting of 228, one and two bedroom apartments contained in seven buildings. The buildings will be a combination of two and three story buildings

with exterior finishes consisting of a combination of brick, stucco, horizontal and sheet siding and laminated asphalt shingles.

In addition to the seven apartment buildings the complex will have a club house and pool, storm water detention basin, a play area, six garage units (5-6 bays), six carport units (5-6 bays), a trash compaction area and two mail box sites. An earthen berm will be created adjacent to Franklin Street to screen the parking areas from view and will contain landscaping items in excess of the minimum required by the zoning regulations (see preliminary landscape plan).

Access to the complex will be via two entrances located along Harrison Street. Harrison Street will be extended from 226th Street to the south property line of the subject tract where a temporary cul-de-sac will be installed. Adequate parking, including handicap accessible stalls, is provided for the anticipated occupancy of the complex.

Some members of the Planning Commission and citizens from the surrounding area may recall a 2003 rezoning application at this location that was denied. While the concept of multi-family apartments may be similar, this application is not identical to the 2003 application. It should also be noted that the Comprehensive Plan has undergone significant changes and updates since the 2003 application. This staff report will focus on the current application and will reference the Comprehensive Plan and Zoning Regulations currently adopted by the City of Spring Hill. Records from the 2003 application are on file with the City of Spring Hill and are available through an open records request with the City Clerk.

Included with this staff report you will find the preliminary development plan as required to be submitted with a planned zoning request. The development plan consists of a site plan, landscape plan, building elevations, floor plans of the various buildings along with floor plans for one and two bedroom apartments.

Section 17.332.A of the Spring Hill Zoning Regulations indicates the "zoning of land to a Planned District shall be for the purpose of encouraging and requiring orderly development on a quality level generally equal to that of the equivalent zoning district, but permitting deviations from the normal and established development techniques". As noted above, a planned zoning request requires the submission of a preliminary development plan. If the preliminary development plan is approved, the Planning Commission and Governing Body must then approve a final development plan prior to the issuance of any permits for construction. A final development plan can be considered by the Planning Commission and Governing Body without a public hearing provided it is in substantial compliance with the preliminary plan and contains no substantial or significant changes. Procedures for the approval process including details on substantial or significant changes are found in Section 17.332 of the Spring Hill Zoning Regulations, 2009 Third Edition.

**SECTION 17.332.F - PLANNED DISTRICT PRELIMINARY DEVELOPMENT PLANS - CONTENTS AND SUBMISSION REQUIREMENTS**

**F. Planned District Preliminary Development Plans – Contents and Submission Requirements.** When property is zoned a planned district, the development plan shall be considered as preliminary and approved as part of the rezoning application. Due to the nature of planned districts, the preliminary site development plan may be more schematic and general in nature than a final plan that is more detailed in nature. The proponents of a planned district shall prepare and submit to the Planning Commission 16 copies of the preliminary development plan and a digital format approved by the Zoning Administrator, containing the following information:

1. A development plan showing the property to be included in the proposed development, plus the area within 200 feet thereof.

*Comment: Submitted and acceptable*

- a. Existing topography with contours at two-foot intervals, and delineating any land areas subject to one hundred-year flood, including those areas identified by flood studies prepared by the Johnson County Storm Water Management Program.

*Comment: Submitted with storm water study and acceptable*

- b. Location of existing or proposed buildings and other structures, parking areas, drives, walks, screening, drainage patterns and drainage controls, public streets, proposed utility connection layouts for water and sewer, any existing easements, and areas of existing tree cover.

*Comment: Submitted and acceptable*

- c. Sufficient dimensions to indicate relationship between buildings, property lines, parking areas, and other elements of the plan.

*Comment: Submitted and acceptable*

- d. General extent and character of proposed landscaping, including common names and planting size.

*Comment: Submitted and acceptable.*

- e. Exterior Building Elevations. Preliminary sketches depicting the general style, size and exterior construction materials of the buildings proposed. In the event of several buildings, a typical sketch may be submitted. In case several building types, such as apartments and business buildings, are proposed on the plan, a separate sketch shall be prepared for each type. Such sketches shall include elevation drawings and a floor plan, but detailed drawings and perspectives are not required.

*Comment: Submitted and acceptable*

f. Schedules. A schedule shall be included indicating total floor area, dwelling units, land area, number of required and proposed parking spaces, and other quantities relative to the submitted plan in order that compliance with requirements of this title can be determined.

*Comment: Submitted and acceptable*

g. Amenities. Proposed development amenities shall be identified, including but not limited to pedestrian walkways and trails, neighborhood parks, plazas, landscaped open spaces, recreational facilities, pools, clubhouses or community buildings, and any other site amenities.

*Comment: Submitted and acceptable*

2. The following information shall be shown on the same drawing within the 200-foot adjacent area:

a. Any public streets, which are of record.

*Comment: Submitted and acceptable*

b. Any drives which exist or which are proposed to the degree that they appear on plans on file with the City of Spring Hill, except those serving single-family houses.

*Comment: Submitted and acceptable*

c. Any buildings, which exist or are proposed to the degree that their location and size are shown on plans on file with the City of Spring Hill. Single and two family residential buildings may be shown in approximate location and general size and shape.

*Comment: See aerial photo on page 1 of this staff report*

d. The location and size of any drainage structure, such as culvert, paved or earthen ditches or storm water sewers and inlets.

*Comment: Location of storm water facilities shown on site plan. Sizes to be determined and submitted on final development plan.*

3. The following other relevant information including:

a. Name, address, telephone number, and fax number of the landowner, as well as the architect, landscape architect, land planner, engineer, surveyor, or other person involved in the preparation of the plan, technical studies, and documents submitted with the application.

*Comment: Submitted and acceptable*

b. Date of plan preparation.

*Comment: Submitted and acceptable*



g. Maximum Height (feet) Stories 50/4

*Comment: All buildings are in compliance with items b-g noted above.*

2. Pedestrian systems should be located and designed to provide adequate physical separation from vehicles.

*Comment: Sidewalks are separated from vehicle areas by curbs and earth area.*

3. Lighting Standards (see section 17.338.A.6):

*Comment: Details to be provided with Final Development Plan*

4. Minimum Dwelling Size for Multi-Family  
1 bedroom 600 sq. ft.  
2 bedroom 720 sq. ft.

*Comment: Plan identifies the following sizes for apartments:*

*1 bedroom 732 & 746 sq. ft.*

*2 bedroom 997 & 1,125 sq. ft.*

*Apartments are in excess of the minimum requirements*

5. Parking: Two off-street parking spaces per unit shall be provided, or 456 spaces.

*Comment: Parking provided 453 stalls ( including 10 handicap)  
33 garage bays  
486 total spaces*

*Parking requirements noted above are satisfied.*

*NOTE: Rental agreements/contracts will prohibit the parking of boats, trailers, recreational vehicles, etc. on the property.*

6. Dimensions of Parking Area:

Minimum size 9 ft. x 19 ft.

90 degree pattern with single loaded aisle 42 ft. wheel stop to opposite curb

90 degree pattern with double loaded aisle 60 ft. wheel stop to wheel stop

*Comment: Parking shown on plan is compliant with regulations.*

7. Lighting of Parking Area: Any lights used to light the parking area shall be arranged, located, shielded and screened to direct light away from any adjoining or abutting residential districts, and shall be provided in accordance with Section 17.338.A.6.

*Comment: Parking lot lighting is not identified on the preliminary development plan. Any lighting to be installed will be detailed on the final development plan and in compliance with the section noted above.*

8. 17.338.A.4 Nonresidential uses which are proposed for the benefit of or as an amenity to a particular development and not for use by the general public should be centrally located within the interior of the development and accessible to a majority of residents or users of the development. Alternative locations where deemed appropriate may be approved by the Planning Commission and Governing Body.

*Comment: Nonresidential uses for this development include the garage bays, clubhouse and pool, and playground area. While not located in the center of the development, the playground, pool and clubhouse are located to minimize the impact on surrounding properties from noise and activity. With the highway located to the west of the development, locating the pool and playground on the western side of the development seems reasonable. The garage bays are centrally located throughout the development.*

9. 17.332.E.5 The design of all planned projects, whether residential or commercial shall be such that access and circulation by firefighting equipment is assured and may not be retarded by steep grades, heavy landscaping or building space.

*Comment: The layout of the project assures access throughout the development for firefighting equipment. This was verified by Johnson County Fire District #2 through their comments on plan review. As suggested by the Fire Department personnel, a temporary turn around will be provided on the south end of Harrison St. at the south property line of the subject tract.*

10. 17.332.E.8 Residential and commercial zoned planned developments are expected to use higher-quality durable building materials and architectural-design features that provide an increase in visual interest over conventional zoned developments.

*Comment: The building elevation drawings show the project utilizes brick and stucco and minimizes the amount of horizontal lap siding. The use of straight edge shingle siding panels in many of the roof gable ends also provides a higher quality product over conventional construction techniques. The variety of hips and gables in the roof structure work to break up any straight line affect many roofs tend to have and work to increase the visual interest of the development. The use of the combination of two and three story buildings also adds to the visual interest of the development.*

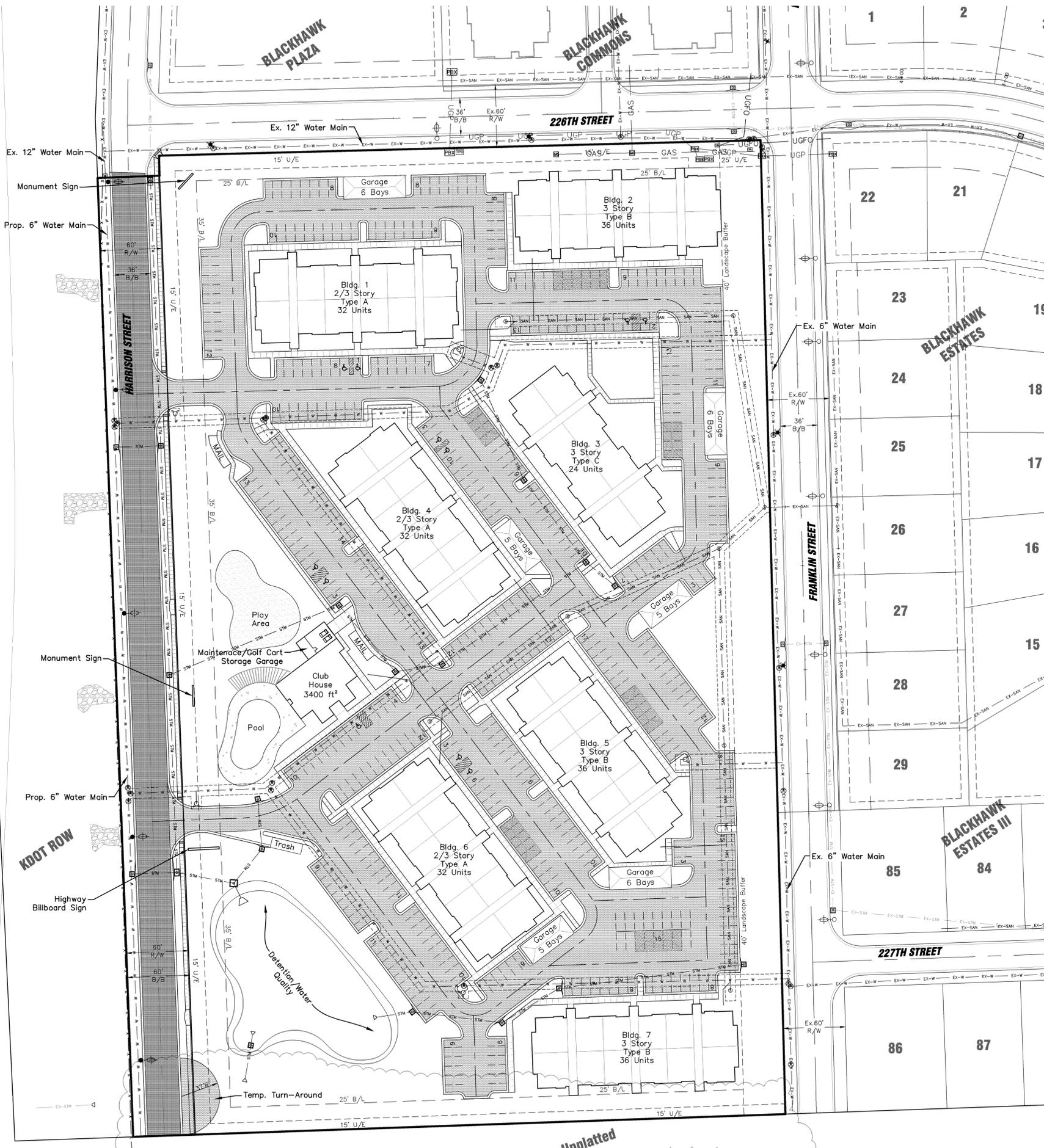
11. Landscaping:

*Comment: As shown on the preliminary landscape plan, the project is in compliance with the landscaping requirements of the zoning regulations. The final landscape plan will provide additional detail on tree and plant species*

**Recommendation:** Staff recommends approval of Preliminary Development Plan for Blackhawk Apartments.

Attachments: Site Plan  
Landscape Plan  
Building Elevations

Floor Plans  
2003 Traffic Study  
Olsson & Assoc. Traffic Review and Update



**LEGEND**

- STM— Storm Sewer
- SAN— Sanitary Sewer
- W— Water Main
- EX-STM- Ex. Storm Sewer
- EX-SAN- Ex. Sanitary Sewer
- EX-W- Ex. Water Main
- GAS- Ex. Gas
- OHP- Ex. Overhead Power Lines
- UGT- Ex. Underground Telephone
- UGP- Ex. Underground Power
- X- Ex. Fence
- Prop. Carport
- Proposed Fire Hydrant
- Proposed Sanitary Manhole
- Curb Inlet
- Junction Box
- Ex. Gas Meter
- Ex. Water Valve
- Ex. Sanitary Manhole
- Ex. Fire Hydrant
- Ex. Power Box
- Ex. Telephone Pedestal
- Ex. Street Light
- Ex. Sign

Total Lot Area: 13.68 acres  
 Current Zoning: C2  
 Proposed Zoning: RP-4  
 Total Open Space: 46.3%

**Building Area:**  
 Type A (2/3 Story) - 14,108 ft<sup>2</sup>/floor (First two floors) = 37,466 ft<sup>2</sup>  
 9,250 ft<sup>2</sup>/floor (Top floor) = 40,302 ft<sup>2</sup>  
 Type B (3 Story) - 13,424 ft<sup>2</sup>/floor = 34,020 ft<sup>2</sup>  
 Type C (3 Story) - 11,340 ft<sup>2</sup>/floor = 34,020 ft<sup>2</sup>

**Unit Count:**

	# of Bldgs	# of 1 Br	# of 2Br
Type A	3	72	24
Type B	3	72	36
Type C	1		24
<b>Total</b>	<b>7</b>	<b>144</b>	<b>84</b>

Total Number of Units - 228  
 16.7 Units/ac.

Parking Spaces Required: 456  
 Handicapped Spaces Required: 9

Parking Stalls Provided: 453 stalls  
 (Includes 10 Handicap Stalls)  
 Garage Bays Provided: 33 bays

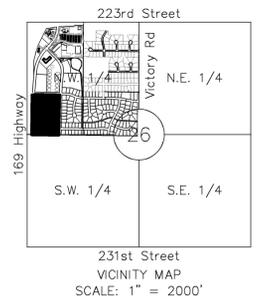
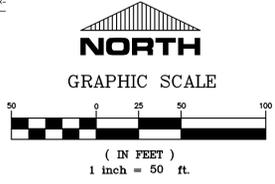
Total Parking Provided: 486 stalls

All parking stalls are 9'x19'  
 All drive aisles are 25' wide

Parking at Club House (3400 ft<sup>2</sup>)  
 Maintenance/Golf Cart Storage Garage (Attached)  
 14 Stalls (Including 1 handicapped stall)

Area is not located in a flood zone per FEMA Map Number 20091C0153G, dated August 2, 2009

Actual garage and carport locations and quantities are subject to change based on market conditions. If either the garages or carports are not constructed in the locations shown, parking stalls will be constructed in their place. Also, market conditions may dictate switching either a type A or B building with a type C to even out the 1 bedroom to 2 bedroom ratio.



PROJECT LOCATION  
 SECTION 26-15-23

Revisions	No.	Date	By
4			
3			
2			
1			

Designed By: JLL  
 Drawn By: JLL  
 Checked By: JLL  
 Date: 11/13  
 Job No.: 29831

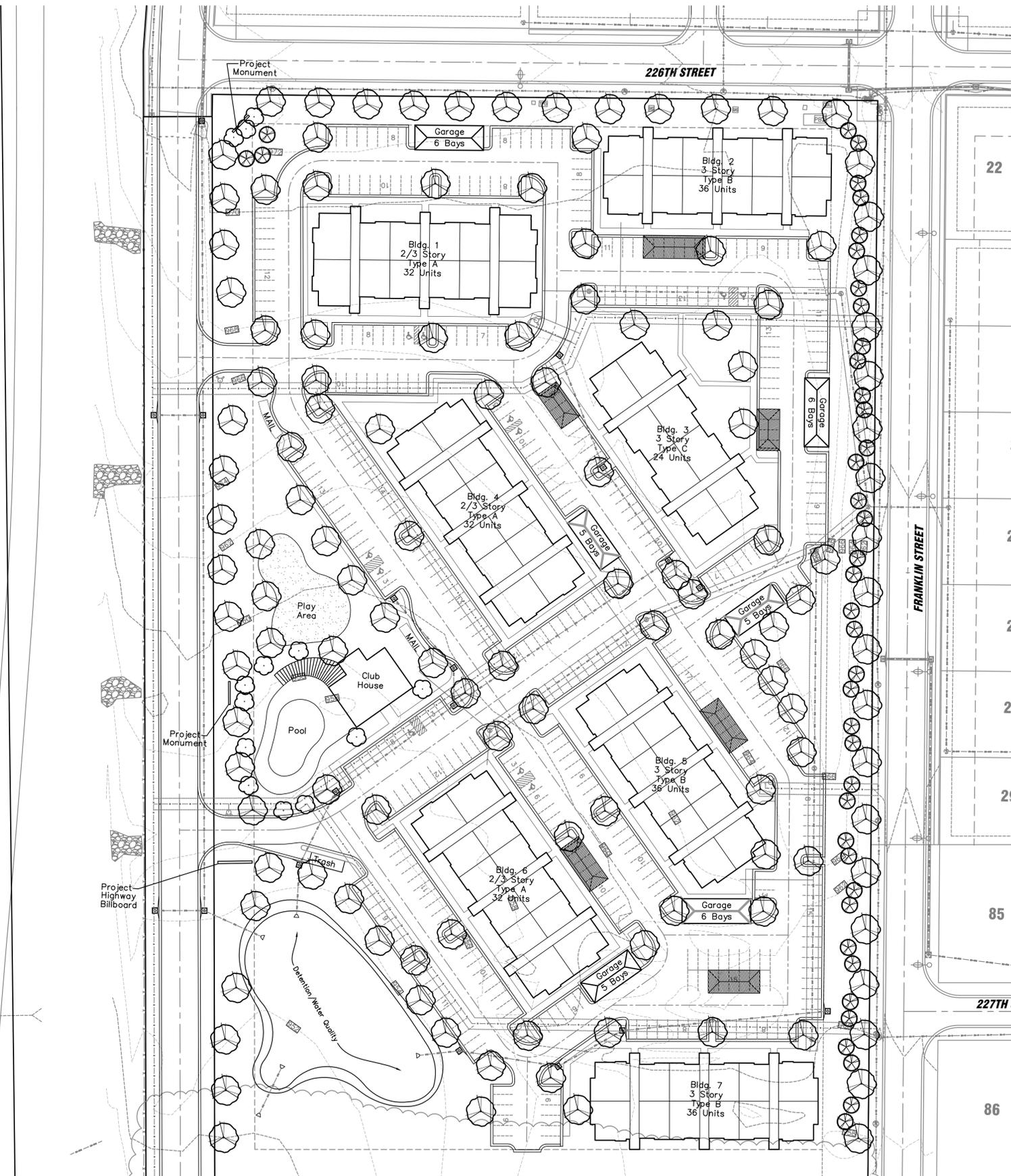
**CIVIL ENGINEERS**  
**LAND SURVEYORS - LAND PLANNERS**  
 14 W. PEORIA  
 PAOLA, KANSAS 66071  
 PHONE: (913) 557-1076  
 FAX: (913) 557-6904



**Blackhawk Apartments**  
**Preliminary Development and Rezoning Plan**

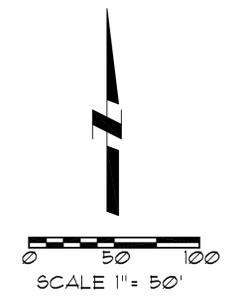
Sheet No.  
 1 of 1

T:\UPRAWKS\_2000\29831-Blackhawk\Development Plan\Development Plan-Option 2.dwg Scale=1:50 Drawn January 23, 2014 - 1:53pm By: jll



CONCEPT PLANT SCHEDULE

	SHADE TREES	129	2 1/2' cal.
	EVERGREEN TREES	41	6' hgt.
	ORNAMENTAL TREES	13	1 1/2' cal.



**Preliminary Landscape Plan**  
**Blackhawk Apartments**  
 Spring Hill, Kansas

 Oppermann LandDesign, LLC  
 Land Planning • Landscape Architecture  
 18990 West 117th Street  
 Olathe, Kansas 66061  
 oppermannlanddesign.com  
 pete@opperland.com  
 913.894.9407



**BCS Design, Inc.**

A Full Service  
Architectural Firm  
WWW.BCSARCHITECTS.COM  
19920 West 161st Street  
Olathe, Kansas 66062  
Phone: (913) 780-4820  
Fax: (913) 780-5088

**Black Hawk Apartments**  
226th & Franklin Streets  
Spring Hill, Kansas



**4 BUILDING - SIDE ELEVATION**  
3/32" = 1'-0" (2.5-Story)



**2 BUILDING - SIDE ELEVATION**  
3/32" = 1'-0" (2.5-Story)



**3 BUILDING - REAR ELEVATION**  
3/32" = 1'-0" (2.5-Story)



**1 BUILDING - FRONT ELEVATION**  
3/32" = 1'-0" (2.5-Story)

Preliminary Not For Construction

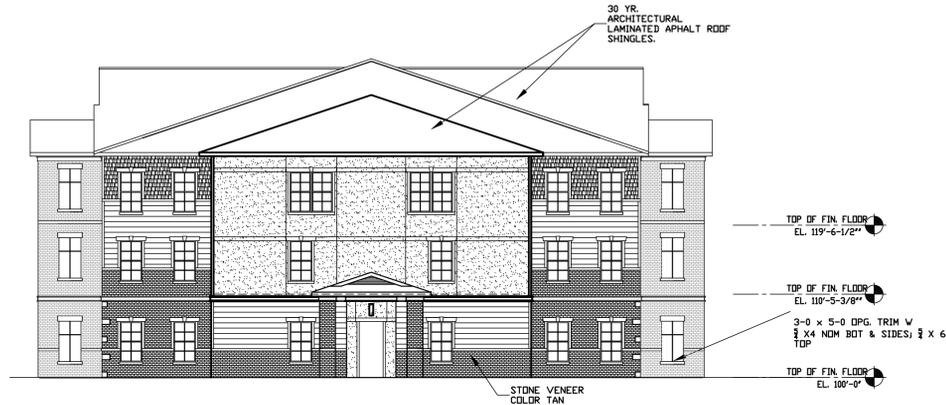
PROJECT NO. : 2013-78  
DATE : 11.26.2013  
DRAWN BY : BCS STAFF  
REVIEWED BY :

REVISID:  
© BCS Design, Inc. 2013  
This drawing is COPYRIGHTED work by BCS Design, Inc. in either electronic or printed form. This drawing may not be photographed, traced, or copied in any manner without the written permission of BCS Design, Inc.

SHEET NO.  
**A200**  
copyright © 2013



**4 BUILDING - SIDE ELEVATION**  
 3/32" = 1'-0" (3-Story)



**2 BUILDING - SIDE ELEVATION**  
 3/32" = 1'-0" (3-Story)



**3 BUILDING - REAR ELEVATION**  
 3/32" = 1'-0" (3-Story)



**1 BUILDING - FRONT ELEVATION**  
 3/32" = 1'-0" (3-Story)

**Black Hawk Apartments**  
 226th & Franklin Streets  
 Spring Hill, Kansas

Preliminary Not For Construction

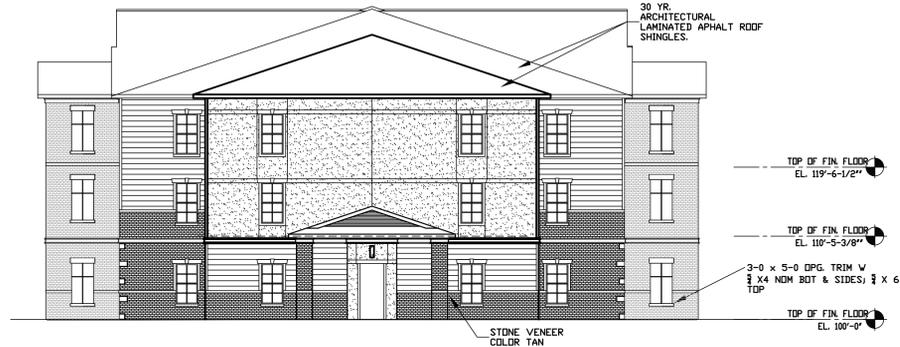
PROJECT NO. : 2013-78  
 DATE : 11.26.2013  
 DRAWN BY : BCS STAFF  
 REVIEWED BY :

REVISIED:  
 © BCS Design, Inc. 2013  
 This drawing is COPYRIGHTED work by BCS Design, Inc. in either electronic or printed form. This drawing may not be photographed, traced, printed or copied in any manner without the written permission of BCS Design, Inc.

SHEET NO.  
**A201**  
 copyright © 2013



**4 BUILDING - SIDE ELEVATION**  
3/32" = 1'-0" (3-Story - BLDG 'C')



**2 BUILDING - SIDE ELEVATION**  
3/32" = 1'-0" (3-Story - BLDG 'C')

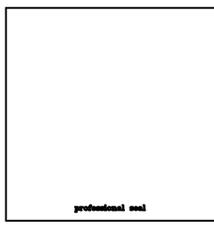


**3 BUILDING - REAR ELEVATION**  
3/32" = 1'-0" (3-Story - BLDG 'C')



**1 BUILDING - FRONT ELEVATION**  
3/32" = 1'-0" (3-Story - BLDG 'C')

Preliminary Not For Construction

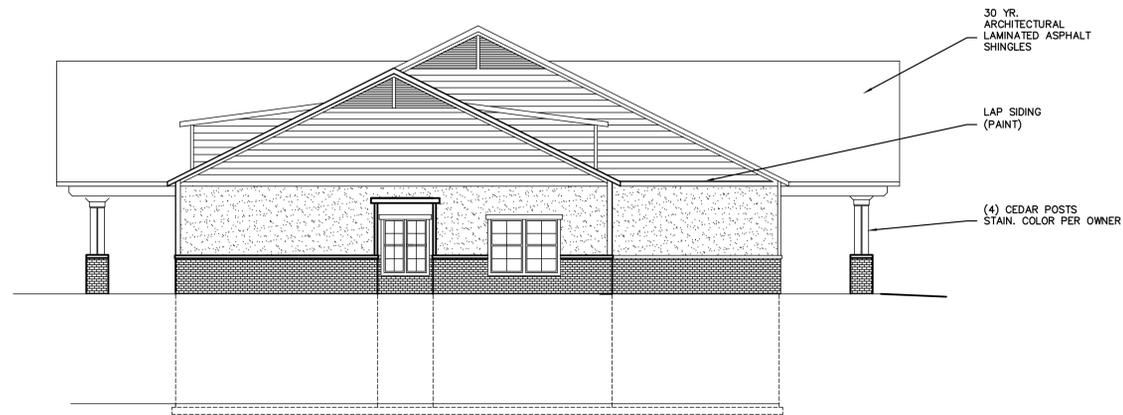


PROJECT NO. : 2013-78  
DATE : 11.26.2013  
DRAWN BY : BCS STAFF  
REVIEWED BY :

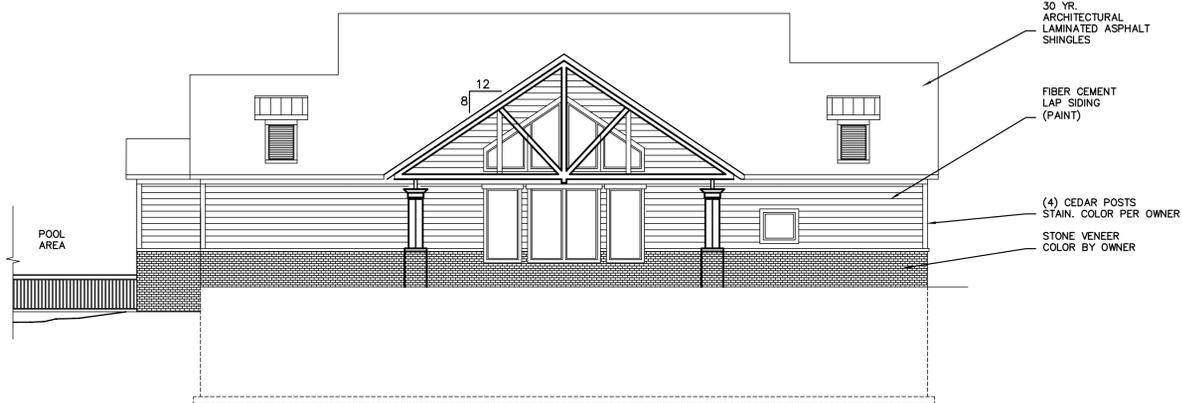
REVISED:

© BCS Design, Inc. 2013  
This drawing is COPYRIGHTED work by BCS Design, Inc. in either electronic or printed form. This drawing may not be photographed, traced, printed or copied in any manner without the written permission of BCS Design, Inc.

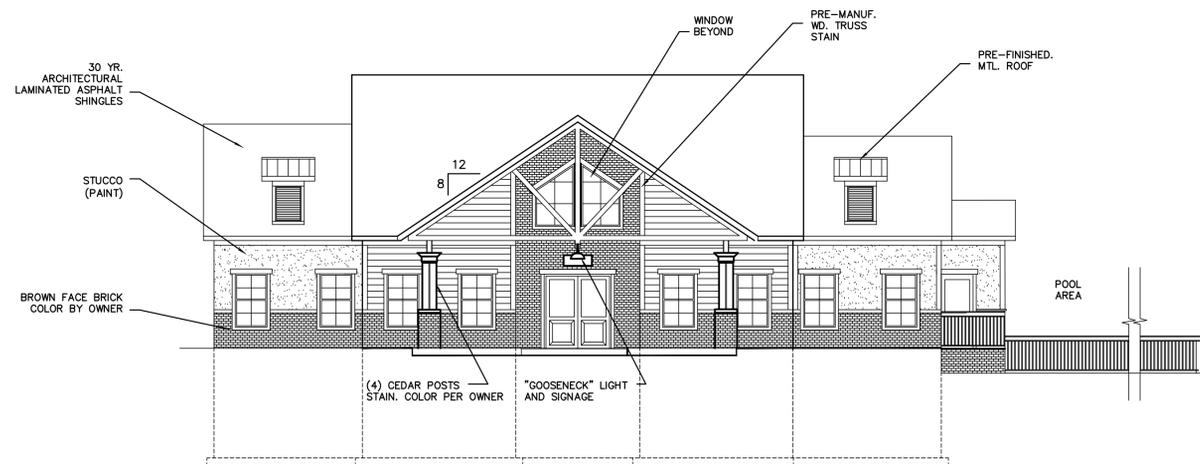
SHEET NO.  
**A202**  
copyright © 2013



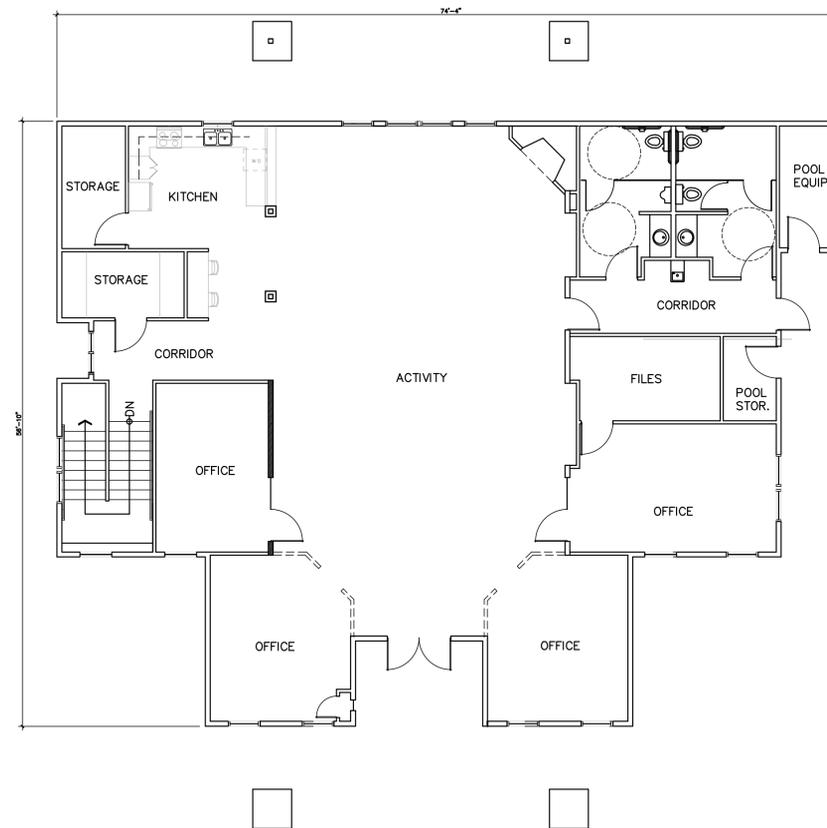
**5 CLUBHOUSE SIDE ELEVATION**  
1/8" = 1'-0"



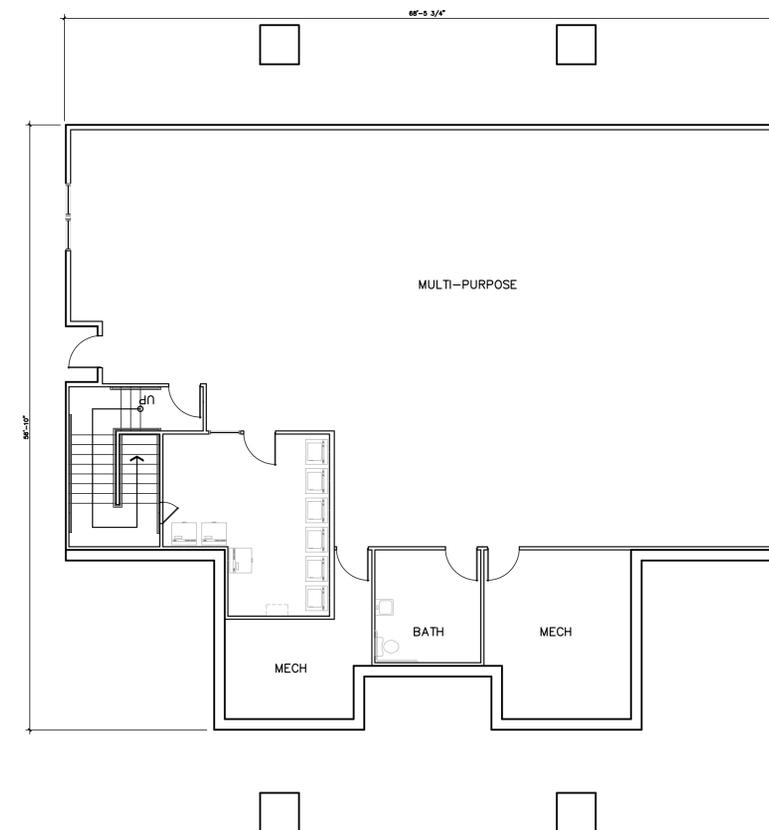
**4 CLUBHOUSE REAR ELEVATION**  
1/8" = 1'-0"



**3 CLUBHOUSE FRONT ELEVATION**  
1/8" = 1'-0"



**2 CLUBHOUSE MAIN FLOOR PLAN**  
1/4" = 1'-0"



**1 CLUBHOUSE LOWER FLOOR PLAN**  
1/8" = 1'-0"



**BCS Design, Inc.**

A Full Service  
Architectural Firm  
WWW.BCSARCHITECTS.COM  
19920 West 161st Street  
Olathe, Kansas 66062  
Phone: (913) 780-4820  
Fax: (913) 780-5088

**Black Hawk Apartments**  
226th & Franklin Streets  
Spring Hill, Kansas

Preliminary Not For Construction

PROJECT NO. : 2013-78  
DATE : 11.26.2013  
DRAWN BY : BCS STAFF  
REVIEWED BY :

REVISED:

© BCS Design, Inc. 2013  
This drawing is COPYRIGHTED work by BCS Design, Inc. in either electronic or printed form. This drawing may not be photographed, traced, printed or copied in any manner without the written permission of BCS Design, Inc.

SHEET NO.

**A104**

copyright © 2013



FRONT VIEW

**BLACKHAWK APARTMENTS**

226th & Franklin Streets - Spring Hill, Kansas



BACK VIEW

**BLACKHAWK APARTMENTS**

226th & Franklin Streets - Spring Hill, Kansas



SIDE VIEW WITH GABLE END



SIDE VIEW WITH HIP

**BLACKHAWK APARTMENTS**

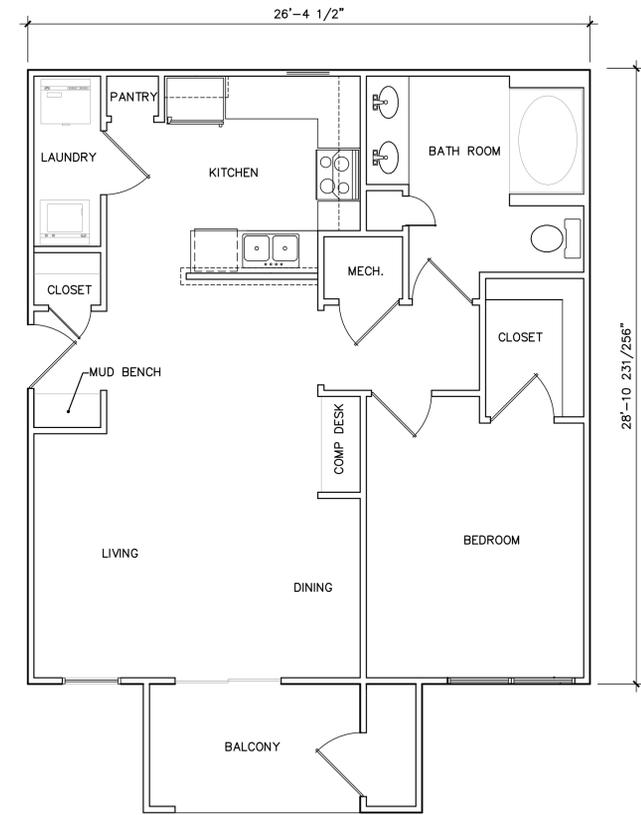
226th & Franklin Streets - Spring Hill, Kansas



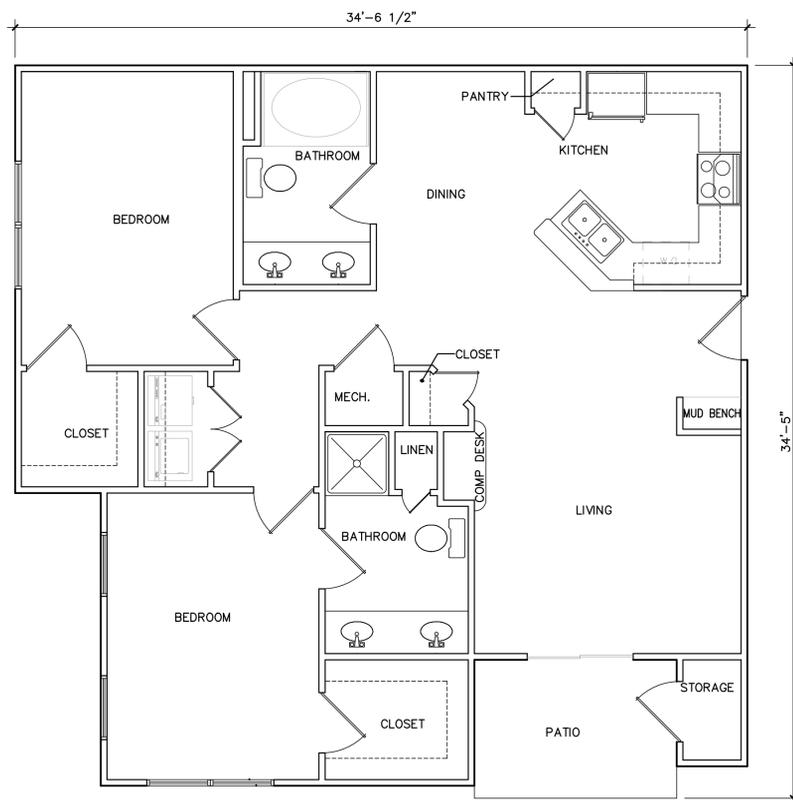
**BCS Design, Inc.**

A Full Service  
Architectural Firm  
WWW.BCSARCHITECTS.COM  
19920 West 161st Street  
Olathe, Kansas 66062  
Phone: (913) 780-4820  
Fax: (913) 780-5088

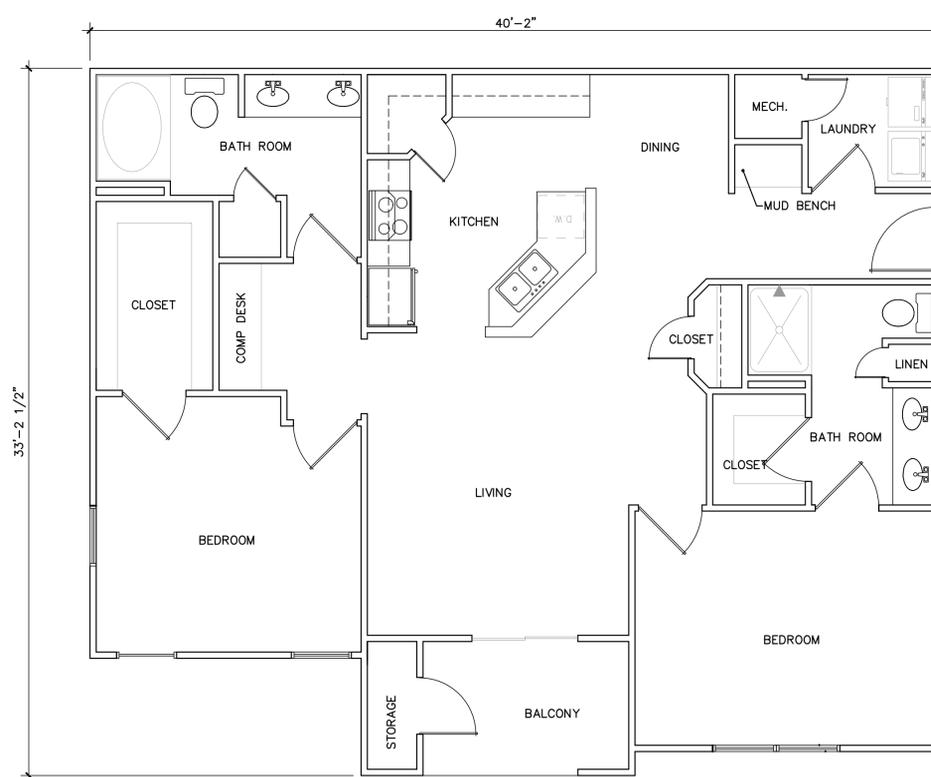
**Black Hawk Apartments**  
226th & Franklin Streets  
Spring Hill, Kansas



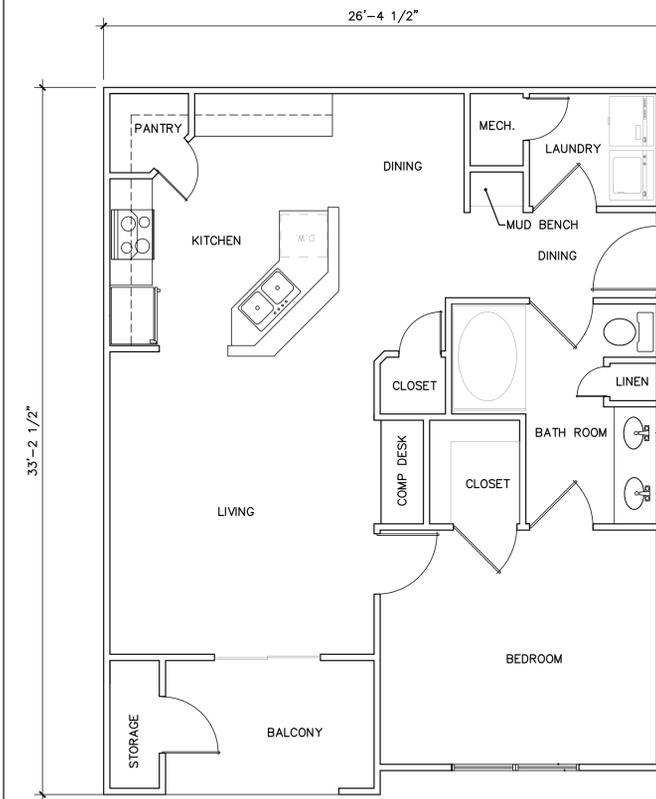
**4 FLOOR PLAN - 1 Bedroom, 1 Bath**  
1/4" = 1'-0" 732 S.F. Balcony 63 S.F.



**3 FLOOR PLAN - 2 Bedroom, 2 Bath**  
1/4" = 1'-0" 997 S.F. Balcony 63 S.F.



**2 FLOOR PLAN - 2 Bedroom, 2 Bath**  
1/4" = 1'-0" 1,125 S.F. Balcony 63 S.F.



**1 FLOOR PLAN - 1 Bedroom, 1 Bath**  
1/4" = 1'-0" 746 S.F. Balcony 63 S.F.

Preliminary Not For Construction

PROJECT NO. : 2013-78  
DATE : 11.26.2013  
DRAWN BY : BCS STAFF  
REVIEWED BY :

REVISED:

© BCS Design, Inc. 2013  
This drawing is COPYRIGHTED work by BCS Design, Inc.  
in either electronic or printed form. This drawing may not be  
photographed, traced, printed or copied in any manner without  
the written permission of BCS Design, Inc.

SHEET NO.

**A100**

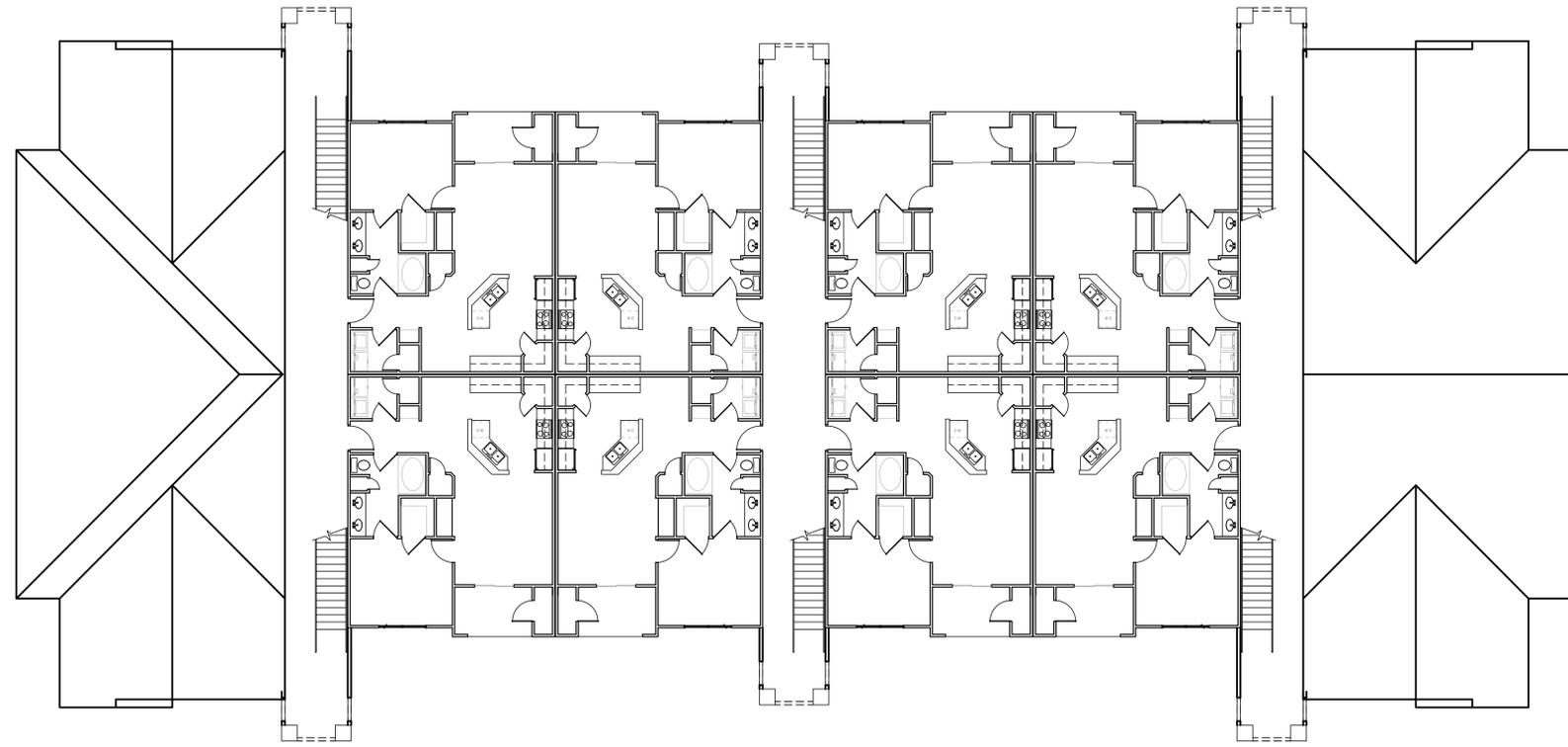
copyright © 2013



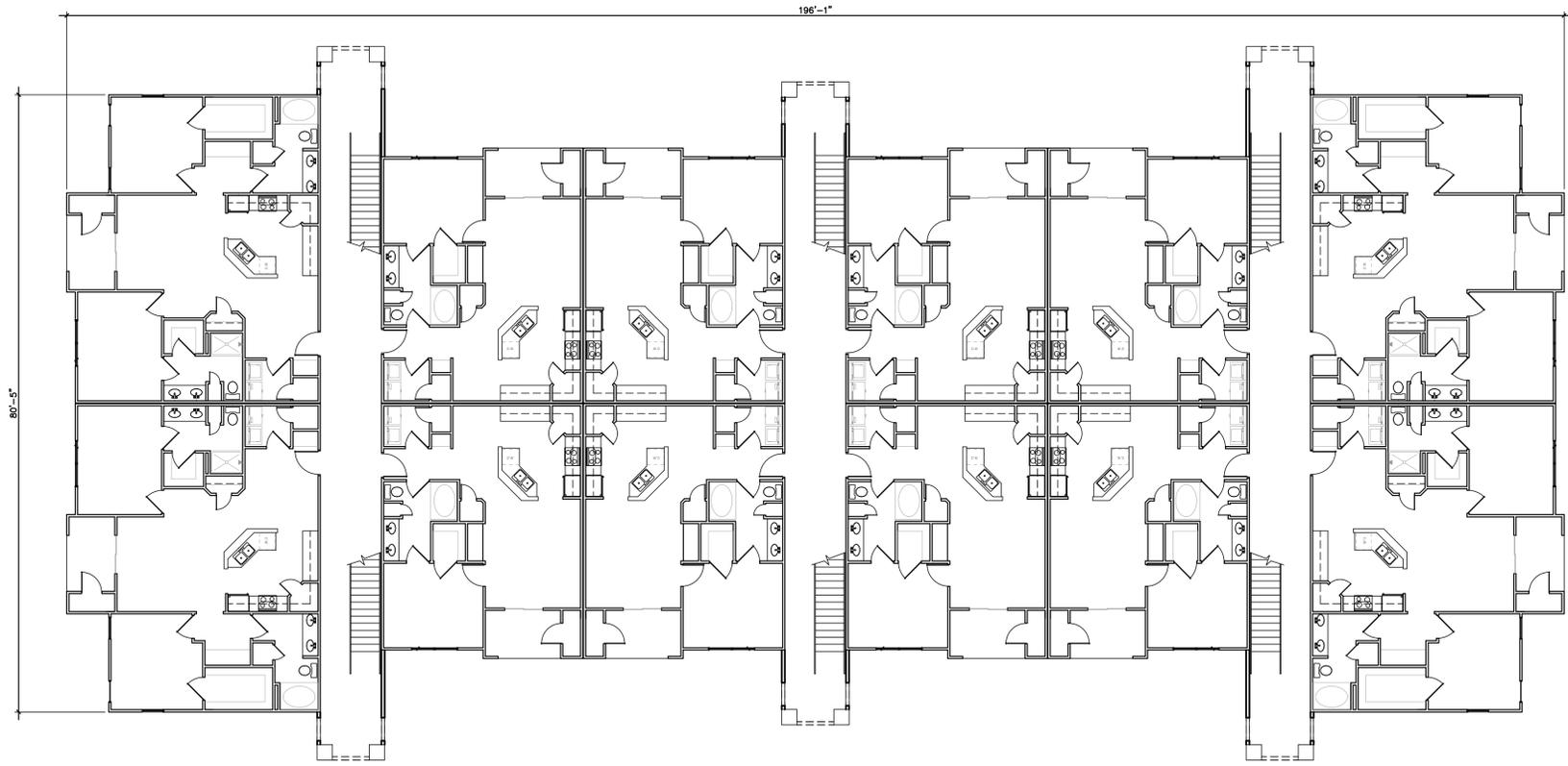
**BCS Design, Inc.**

A Full Service  
Architectural Firm  
WWW.BCSARCHITECTS.COM  
19920 West 161st Street  
Olathe, Kansas 66062  
Phone: (913) 780-4820  
Fax: (913) 780-5088

**Black Hawk Apartments**  
226th & Franklin Streets  
Spring Hill, Kansas



**2 THIRD FLOOR PLAN (2.5 STORY)**  
3/32" = 1'-0"



**1 FIRST FLOOR PLAN - SECOND FLOOR SIMILAR (2.5 STORY)**  
3/32" = 1'-0"

Preliminary Not For Construction

PROJECT NO. : 2013-78  
DATE : 11.26.2013  
DRAWN BY : BCS STAFF  
REVIEWED BY :

REVISED:

© BCS Design, Inc. 2013  
This drawing is COPYRIGHTED work by BCS Design, Inc.  
in either electronic or printed form. This drawing may not be  
photographed, traced, printed or copied in any manner without  
the written permission of BCS Design, Inc.

SHEET NO.

**A101**

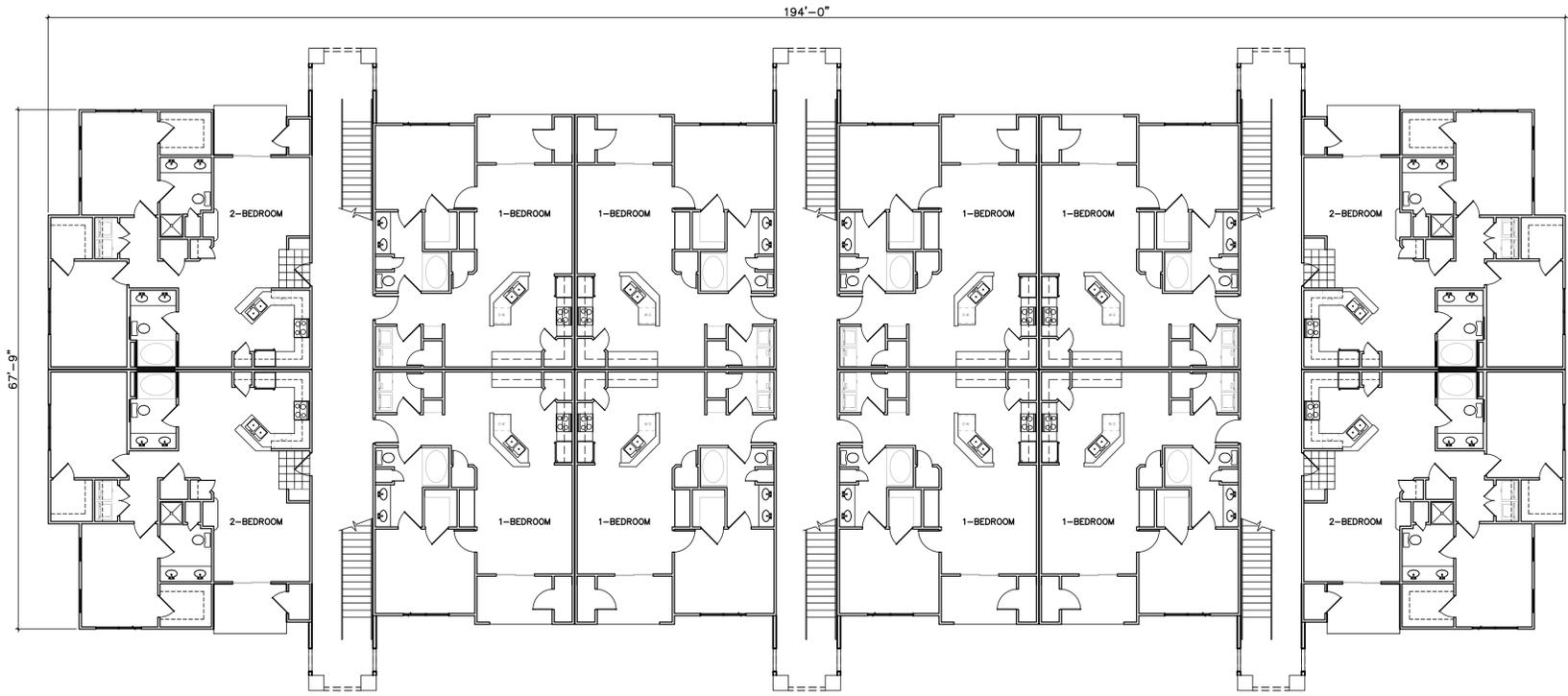
copyright © 2013



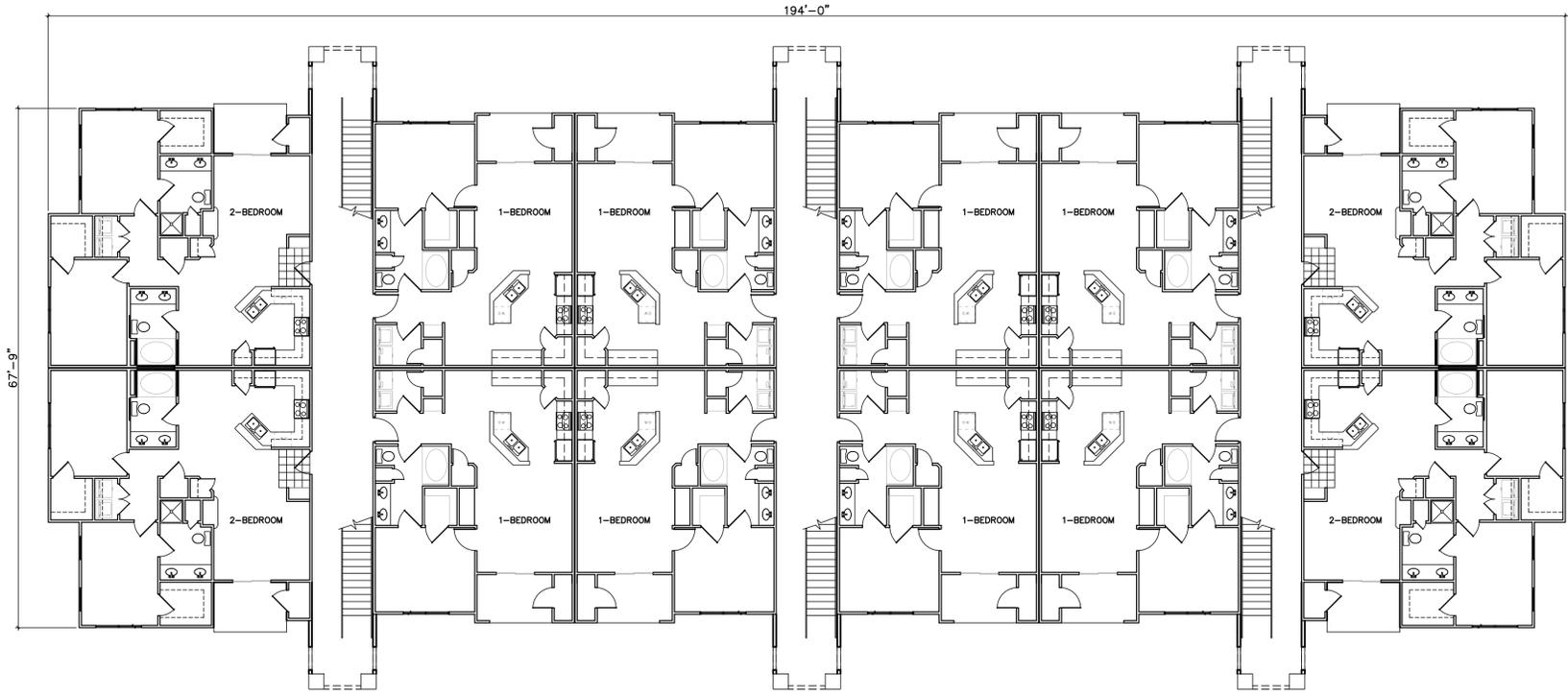
BCS Design, Inc.

A Full Service  
Architectural Firm  
WWW.BCSARCHITECTS.COM  
19920 West 161st Street  
Olathe, Kansas 66062  
Phone: (913) 780-4820  
Fax: (913) 780-5088

**Black Hawk Apartments**  
226th & Franklin Streets  
Spring Hill, Kansas



**2 SECOND FLOOR PLAN - THIRD FLOOR SIMILAR (3 STORY)**  
3/32" = 1'-0" 13,434 SQ.FT.



**1 FIRST FLOOR PLAN (3 STORY)**  
3/32" = 1'-0" 13,434 SQ.FT.

Preliminary Not For Construction

PROJECT NO. : 2013-78  
DATE : 11.26.2013  
DRAWN BY : BCS STAFF  
REVIEWED BY :

REVISED:

© BCS Design, Inc. 2013  
This drawing is COPYRIGHTED work by BCS Design, Inc.  
in either electronic or printed form. This drawing may not be  
photographed, traced, printed or copied in any manner without  
the written permission of BCS Design, Inc.

SHEET NO.

**A102**

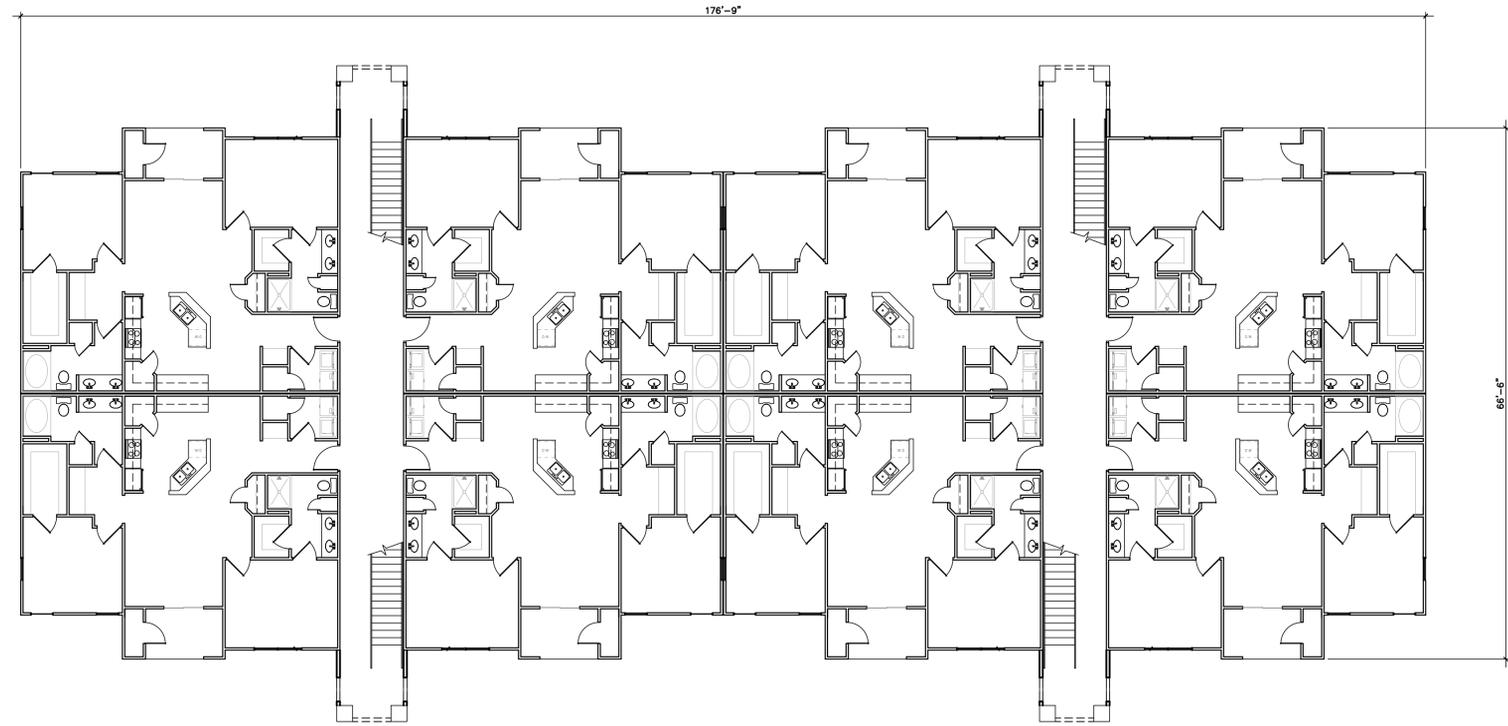
copyright © 2013



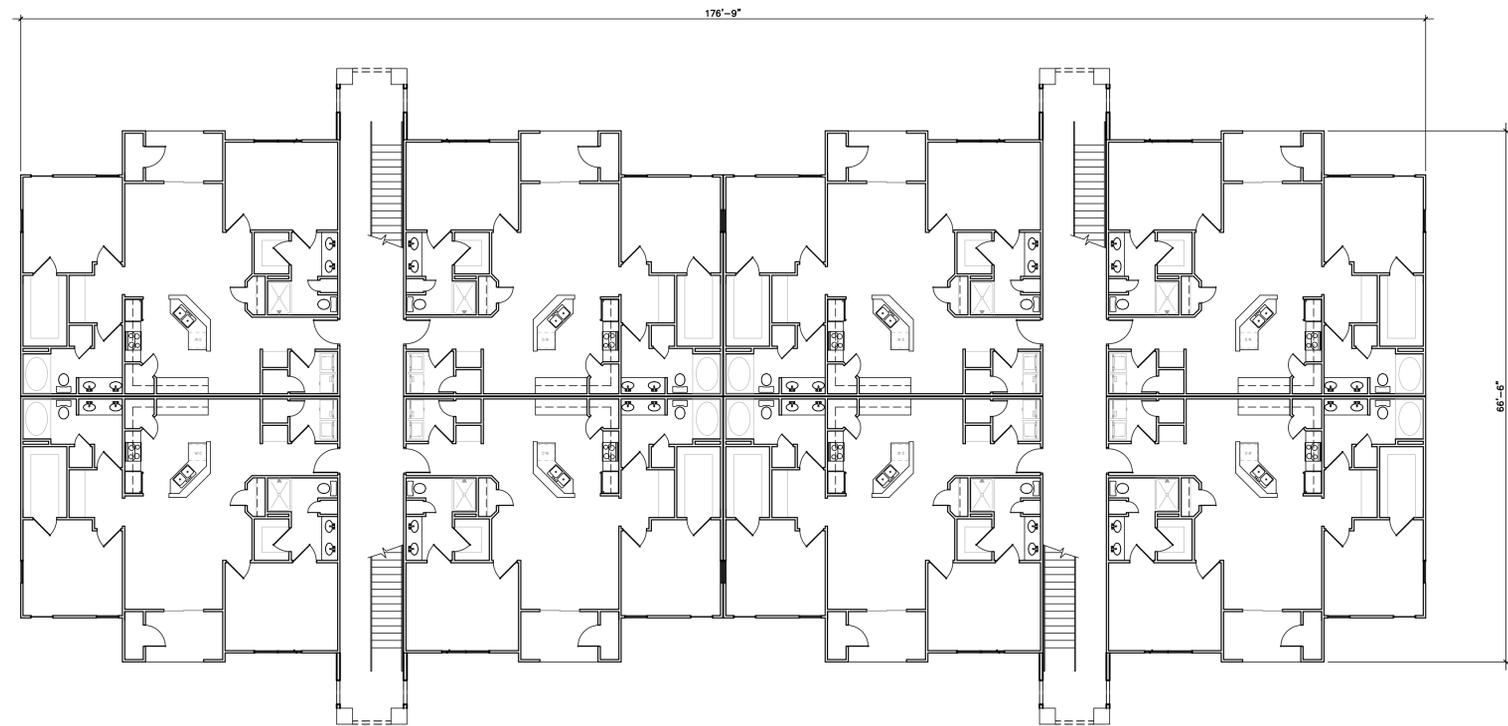
**BCS Design, Inc.**

A Full Service  
Architectural Firm  
WWW.BCSARCHITECTS.COM  
19920 West 161st Street  
Olathe, Kansas 66062  
Phone: (913) 780-4820  
Fax: (913) 780-5088

**Black Hawk Apartments**  
226th & Franklin Streets  
Spring Hill, Kansas



**2 SECOND FLOOR PLAN - THIRD FLOOR SIMILAR (3 STORY - 2 BEDROOM)**  
3/32" = 1'-0" 11,340 SQ.FT.



**1 FIRST FLOOR PLAN (3 STORY - 2 BEDROOM)**  
3/32" = 1'-0" 11,340 SQ.FT.

Preliminary Not For Construction

professional seal

PROJECT NO. : 2013-78  
DATE : 11.26.2013  
DRAWN BY : BCS STAFF  
REVIEWED BY :

REVISED:

© BCS Design, Inc. 2013  
This drawing is COPYRIGHTED work by BCS Design, Inc.  
in either electronic or printed form. This drawing may not be  
photographed, traced, printed or copied in any manner without  
the written permission of BCS Design, Inc.

SHEET NO.

**A103**

copyright © 2013

# **T**RAFFIC **E**NGINEERING **C**ONSULTANTS

October 29, 2002

Mr. Larry Winn  
Polsinelli, White, Vardeman, Shalton  
6201 College Blvd.  
Ste. 500  
Overland Park, KS 66211

Dear Mr. Winn:

As per your request, I have reviewed the types of land uses and the expected trip generation for each for a proposed project south of 223<sup>rd</sup> Street and east of 169 Highway. The master development plan is known as Blackhawk Business Center. The phase I analyzed was in the southwest quadrant of the overall development.

The steady area is approximately 14.86 acres. It is currently zoned as commercial land and could be developed as either commercial or office. The request is to down zone the property from commercial to multi-family. I have developed a comparison of the expected amount of traffic to be generated if the 14.86 acres is developed as multi-family, office, or commercial. Table 1 attached to this letter shows the expected trip generations for each use. The overall assumption is the commercial and office uses could be developed to a density of .22 floor area ratio. This floor area ratio is moderate density without any type of parking structures. The proposed project would construct 180 multi-family units.

There are three basic time periods used to compare expected trips to be generated by different land uses. Each of these is shown in Table 1. The first is the expected total number of vehicles per day made to and from the site. In the third column, multi-family is expected to generate approximately 1,193 trips per day. In comparison a retail use could be expected to generate over seven times as many trips per day at 8,500 trips. An office use would generate 1,740 trips per day which is also a substantial increase from multi-family.

In the fourth column the table shows the amount of trips expected to be generated during the a.m. peak period and in the fifth column during the p.m. peak period. For comparison purposes the multi-family is expected to generate 92 trips during the a.m. peak period, while the shopping

center would be twice that amount at 197 trips per hour. The office is 2 ½ times greater at 247 trips per hour during the a.m. peak period.

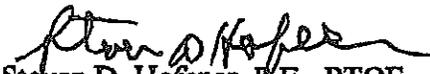
For the p.m. peak period the multi-family would be expected to generate 112 trips per hour. The shopping center again is nearly seven times this amount at 793 trips per hour and the office is approximately twice as much at 239 trips per hour during the p.m. peak period.

In consideration of the down zoning there are three areas of note from a traffic standpoint. The first is the fact that the density of development that could occur today with commercial use is substantially higher (seven times) than the amount of traffic generated by the multi-family housing. Secondly, the reduction in trips for this parcel of land would only help any future considerations of how to handle the traffic at 223<sup>rd</sup> Street and Harrison. Third, the street network as currently laid out provides for the ability of traffic from this parcel of land to proceed east to Victory or in the future to proceed east and then north to a potential new location of an intersection at 223<sup>rd</sup> Street. The street the traffic would use would be 226<sup>th</sup> Street which goes through the single family residential area. Residential traffic from the multi-family use would be much more compatible with the single family residential use than commercial or office traffic.

From a planning standpoint, parcels of land that abut a major highway such as 169, typically step down to single family use. Single family housing next to a highway is not compatible. Even though the property is currently zoned commercial, a more compatible step down would be the multi-family housing. It is more compatible from the amount of trips expected to be generated, commonality as a residential use with the single family housing, and the traffic generated is more compatible with the residential traffic.

Should you have questions or require additional analysis, please contact me.

Sincerely,

  
Steven D. Hofener, F.E., PTOE  
President

SDH/tm

enclosure

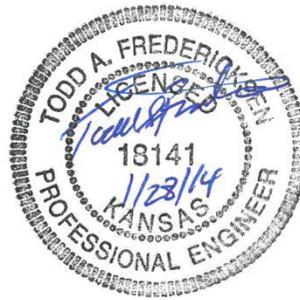
cc: Grant Merritt - Blackhawk Development

**TABLE 1**  
TRAFFIC PROJECTION COMPARISON

LAND USE TYPE	APPROX. GROSS FLOOR AREA (SF)	AVERAGE WEEKDAY		AVERAGE WEEKEND		AVERAGE WEEKDAY		AVERAGE WEEKEND		AVERAGE WEEKDAY		AVERAGE WEEKEND	
		PER DAY (PEP)	PER DAY (OPE)										
TRIP RATE*	no. units	6.63	0.51	0.62	0.16	0.84	15	77	0.67	0.33	75	37	
MULTI-FAMILY	180	1193	92	112									
TRIP RATE*		60.09	1.39	5.57	0.61	0.39	120	77	0.48	0.52	380	412	
SHOPPING CENTER	142,340	8554	197	793									
TRIP RATE*		12.23	1.74	1.68	0.88	0.12	217	30	0.17	0.83	41	198	
OFFICE	142,340	1740	247	239									

\* Average Trip Rates from "TRIP GENERATION", 6th Edition, Institute of Transportation Engineers, 1997.

# MEMO



<input type="checkbox"/>	Overnight
<input type="checkbox"/>	Regular Mail
<input type="checkbox"/>	Hand Delivery
<input checked="" type="checkbox"/>	Other: Email

<b>TO:</b>	Jim Hendershot, Community Development Director
<b>FROM:</b>	Todd Fredericksen, P.E., P.T.O.E. Tom Fulton, Senior Project Manager
<b>RE:</b>	Blackhawk Development Trip Generation Comparison
<b>DATE:</b>	January 28, 2014
<b>PROJECT #:</b>	014-0074
<b>PHASE:</b>	

This technical memorandum addresses a request from the City of Spring Hill, Kansas to review the update to the dwelling unit density within the Blackhawk Development located in Spring Hill, Kansas. Specifically, the original study completed by Traffic Engineering Consultants, Inc. in May of 2003 cited 180 dwelling units of multi-family residential development, and the updated plan changes the density to 228 dwelling units. A trip generation comparison was performed to examine the effects of this change on the amount of trips entering and exiting the site.

### Trip Generation Comparison

A trip generation was completed for the proposed land use following the procedures outlined in the Institute of Transportation Engineers (ITE) Trip Generation Manual (9<sup>th</sup> Edition). In the previous study the 6<sup>th</sup> Edition of the Manual was used, and in order to be the most up to date with the trip generation numbers the original 180 dwelling unit density as well as the proposed 228 dwelling unit density were evaluated using the 9<sup>th</sup> edition. A land use of Apartment (ITE Land Use 220) was selected for the trip generation analysis.

Upon performing the trip generation it was found that the 180 dwelling unit multi-family development is expected to generate 1,215 daily trips, 92 AM peak hour trips, and 117 PM peak hour trips.

Using the same analysis techniques a trip generation was performed for a 228 dwelling unit multi-family development. This density is expected to generate 1,506 daily trips, 116 AM peak hour trips, and 144 PM peak hour trips.

According to the analysis it was found that there is expected to be an overall increase of 291 daily trips, 24 AM peak hour trips, and 27 PM peak hour trips when comparing the proposed 228 dwelling unit density to the previously studied 180 dwelling unit density.

Even though the trips are expected to increase from the 48 additional multi-family units, downzoning this parcel from its current C-2 Commercial zoning to multi-family will generate less traffic than the retail development that would be built. The traffic that will be generated as a result of the multi-family development will be more compatible with the surrounding residential

land uses, and the impact of the expected traffic generated from this development will not adversely impact any of the surrounding street systems. The number of trips added are within acceptable limits.

**Tables 1, 2 and 3** detail the 180 dwelling unit trip generation, 228 dwelling unit trip generation, and comparison, respectively.

**Table 1: 180 Dwelling Unit Trip Generation**

Daily Trip Generation A									
ITE Code/Page	Land Use	Size	Unit	Trip Gen. Avg. Rate/Eq.	Daily Trips	Trip Distribution		Daily Trips	
						Enter	Exit	Enter	Exit
220/333	Apartment	180	DU	Equation	1,215	50%	50%	608	607
<b>Total</b>					<b>1,215</b>			<b>608</b>	<b>607</b>
AM Peak Hour Trip Generation A									
ITE Code/Page	Land Use	Size	Unit	Trip Gen. Avg. Rate/Eq.	AM Peak Hour Trips	Trip Distribution		AM Peak Hour Trips	
						Enter	Exit	Enter	Exit
220/334	Apartment	180	DU	Equation	92	20%	80%	19	73
<b>Total</b>					<b>92</b>			<b>19</b>	<b>73</b>
PM Peak Hour Trip Generation A									
ITE Code/Page	Land Use	Size	Unit	Trip Gen. Avg. Rate/Eq.	PM Peak Hour Trips	Trip Distribution		PM Peak Hour Trips	
						Enter	Exit	Enter	Exit
220/335	Apartment	180	DU	Equation	117	65%	35%	77	40
<b>Total</b>					<b>117</b>			<b>77</b>	<b>40</b>

**Table 2: 228 Dwelling Unit Trip Generation**

Daily Trip Generation B									
ITE Code/Page	Land Use	Size	Unit	Trip Gen. Avg. Rate/Eq.	Daily Trips	Trip Distribution		Daily Trips	
						Enter	Exit	Enter	Exit
220/333	Apartment	228	DU	Equation	1,506	50%	50%	753	753
<b>Total</b>					<b>1,506</b>			<b>753</b>	<b>753</b>
AM Peak Hour Trip Generation B									
ITE Code/Page	Land Use	Size	Unit	Trip Gen. Avg. Rate/Eq.	AM Peak Hour Trips	Trip Distribution		Daily Trips	
						Enter	Exit	Enter	Exit
220/334	Apartment	228	DU	Equation	116	20%	80%	24	92
<b>Total</b>					<b>116</b>			<b>24</b>	<b>92</b>
PM Peak Hour Trip Generation B									
ITE Code/Page	Land Use	Size	Unit	Trip Gen. Avg. Rate/Eq.	PM Peak Hour Trips	Trip Distribution		Daily Trips	
						Enter	Exit	Enter	Exit
220/335	Apartment	228	DU	Equation	144	65%	35%	94	50
<b>Total</b>					<b>144</b>			<b>94</b>	<b>50</b>

**Table 3: Trip Generation Comparison**

	Trip Generation A				Trip Generation B				Trip Generation Comparison			
Daily Comparison	Apartment				Apartment				Increase in Expected Trips			
	180 DU				228 DU				228 DU vs. 180 DU			
	Enter	Exit	Total		Enter	Exit	Total		Enter	Exit	Total	Percent Increase
	608	607	1,215		753	753	1,506		145	146	291	24%
AM Comparison	Apartment				Apartment				Increase in Expected Trips			
	180 DU				228 DU				228 DU vs. 180 DU			
	Enter	Exit	Total		Enter	Exit	Total		Enter	Exit	Total	Percent Increase
	19	73	92		24	92	116		5	19	24	26%
PM Comparison	Apartment				Apartment				Increase in Expected Trips			
	180 DU				228 DU				228 DU vs. 180 DU			
	Enter	Exit	Total		Enter	Exit	Total		Enter	Exit	Total	Percent Increase
	77	40	117		94	50	144		17	10	27	23%

**Summary/Conclusion**

Based on the results of the trip generation comparison the proposed density is expected to experience an increase of 291 daily trips, 24 AM peak hour trips, and 27 PM peak hour trips when compared to the original density. Overall this ranges between a 23-26% increase for Daily, AM, and PM peak hours.

Utilizing the distribution assumptions contained within the previously study completed by TEC in 2003, the study intersection of 223<sup>rd</sup> Street and Harrison was examined to determine the impact of the increase in land use density.

In the AM peak hour, 8 more trips are expected to enter the development via the east and west directions on 223<sup>rd</sup> Street turning south on to Harrison. In addition, 12 additional trips are expected to exit the development to the north on Harrison, where they will turn east or west on to 223<sup>rd</sup> Street.

In the PM peak hour, 18 more trips are expected to enter the development via the east and west directions on 223<sup>rd</sup> Street turning south on to Harrison. In addition, 12 additional trips are expected to exit the development to the north on Harrison, where they will turn east or west on to 223<sup>rd</sup> Street.

Overall, this increase in trips due to the increase in land use density will have a negligible effect on traffic operations at the study intersection of 223<sup>rd</sup> Street and Harrison.

To conclude that the proposed multi-family land use in the study area would result in less traffic than office or retail land uses is reasonable and logical based on the results of the study. Any perceived adverse traffic impacts should not be a significant issue in consideration of this proposed down zoning.



**BRUNGARDT HONOMICHL & COMPANY, P.A.**  
CONSULTING ENGINEERS

July 3, 2003

*Summary of Cities  
Review of our  
Traffic Study*

City of Spring Hill  
P.O. Box 424  
Spring Hill, Kansas 66083  
Attention: David Peterson, Planning & Development Coordinator

**RE: Z-7-02, Blackhawk Re-Zoning Request**

Mayor and City Council:

Pursuant to Contract Modification No. 2 between the City of Spring Hill and Brungardt Honomichl & Company, P.A. (BHC), we are pleased to submit this written commentary for review of the "TRAFFIC STUDY for Proposed Multi-Family Units in Blackhawk" prepared by Traffic Engineering Consultants, Inc. (TEC) of Oklahoma City, Oklahoma dated May 2003.

I have done a cursory review of the professional credentials of Steven D. Hofener, P.E., and Traffic Engineering Consultants, Inc. and have verified that Mr. Hofener is licensed to practice Engineering in Kansas, however Traffic Engineering Consultants, Inc. does not have a current Certificate of Authorization to offer engineering services in Kansas. This may, or may not, have any bearing on your consideration of their work.

In general, a study of future traffic conditions, like any prediction of future events or conditions involves assumptions based upon observed current conditions. The practitioner then applies accepted research, various models of predicting future conditions, and professional judgment while using the research and models to predict future conditions for a specific area, location or situation. I have found the methodology, research, data collection, and analysis of TEC's STUDY to comply with accepted standards of Traffic Engineering.

Specific comments on various aspects of the STUDY include the following:

- Methodology- Meets standards for Traffic Engineering practice.
- Trip Generation- Prediction of trip generation rates for various types of future development is not an exact science. Accepted professional references, for example the Institute of Transportation Engineers (ITE) recommend a range of rates, depending on the specific type of use. In this case, Office and Retail land uses can be broken down to more precise types, and each type will have a different range of trip generation rates. I have found the trip generation rates assumed for the various land uses in the STUDY to fall in the middle of the expected ranges published in ITE references. Those assumptions are reasonable, however different results could be obtained by using rates higher or lower in each respective range.

- **Hourly Peak Traffic & Turning Movements-** As with trip generation, factors are used to predict future events. The factors are based on research of historical data and statistical analysis, then published in ITE references. Traffic counts for future Peaks and Turn Movements are derived by applying an assumed factor (within a range) to estimated future trip counts. The results give a number, but that number is the product of two assumed numbers, and should not be taken as an exact prediction.
- **TEC STUDY Conclusions-** The conclusions are reasonable, well thought out, and consistent with known data. Estimates of future development and accompanying traffic volume and behavior are based on accepted Traffic Engineering practice and ITE standards for future traffic analysis.

In summary, BHC offers the following conclusions based on review of the referenced STUDY:

1. As with any prediction of the future, many assumptions must be made to predict future traffic in the Study Area. Assumptions made in the TEC STUDY are reasonable.
2. Accepted Traffic Engineering research and references give ranges of rates for Trip Generation for various land uses, Peak Hourly Volume for future traffic, and distribution of traffic through available turning movements. The factors used by TEC fall in the middle of accepted ranges, and are reasonable.
3. Numerical results derived in the Study could vary considerably, if different assumptions were made and a different factor within accepted ranges were used in computing future traffic volume and characteristics. The numerical results in the TEC STUDY are reasonable, and their conclusion stating that proposed multi-family land use in the Study Area would result in less traffic than office or retail land uses, is reasonable, and a logical conclusion based on the STUDY results.
- ④ 4. Perceived adverse traffic impacts should not be a significant issue in consideration of this proposed re-zoning.

BHC is pleased to provide this information to the City Council and Planning Commission for their consideration. Steven K. Bachenberg is scheduled to meet with the Spring Hill Planning Commission at their July 10, 2003 meeting to discuss this matter.

Respectfully Submitted,

*Steven K. Bachenberg*

Steven K. Bachenberg, P.E.  
Project Manager

**BHC**

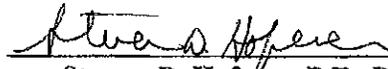
**TRAFFIC STUDY**

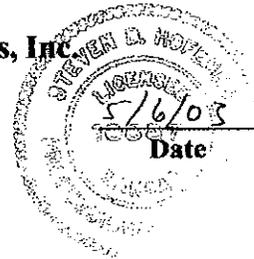
**Proposed Multi-Family Units  
Blackhawk Development  
Spring Hill, Kansas**

**Prepared for:  
Polisinelli, White, Vardeman, Shalton**

**May 2003**

**Prepared by:  
Traffic Engineering Consultants, Inc.**

  
Steven D. Hofener, P.E., PTOE  
Kansas P.E. # 10657



**T**RAFFIC  
**E**NGINEERING  
**C**ONSULTANTS

6000 S. Western, Ste 300 ♦ Oklahoma City, OK 73139  
405-720-7721 ♦ 405-720-9848 fax ♦ website: tecokc.com  
6931 S. 66<sup>th</sup> E. Avenue, Ste. 100 ♦ Tulsa, OK 74133  
918-481-8484 ♦ 918-481-3163 fax

## TABLE OF CONTENTS

Introduction .....	1
Figure 1 .....	2
Trip Generation .....	1
Table 1 .....	3
Existing Traffic .....	4
Figure 2 .....	5
Trip Distribution .....	6
Figure 3 .....	7
Figure 4 .....	9
Figure 5 .....	10
Future Development .....	11
Table 2 .....	12
Summary .....	11
Appendix .....	

---

## INTRODUCTION

A Master Plan Development is under construction in the southeast quadrant of U.S. 169 and 223<sup>rd</sup> Street in Spring Hill, Kansas. A substantial number of the single family units platted as part of the development are either occupied or under construction. A convenience store/gas station, oil change center, a bank, and some retail space has also been developed. Parcels of land yet to be developed include a quality restaurant, a grocery store, additional retail development, a post office, a hotel, and townhomes. The parcel of land considered in this study is Parcel I. **Figure 1** shows the general street layout of the planned development. It also shows the proposed location for Parcel I.

Parcel I is approximately 11.82 acres. It is currently zoned commercial. It could be constructed as either offices or a retail development center. This parcel of land serves as a buffer between U.S. 169 and the residential area. The developer is wishing to down zone the property from office/commercial to multi-family. One hundred and eighty multi-family units are planned if the zoning is approved. The purpose of the traffic study was to analyze the effects of the down zoning on the surrounding residential area as well as the street network.

## TRIP GENERATION

The first step was to make traffic projections for the planned developments. The latest edition of the ITE Trip Generation Manual was used to derive projected trips. **Table 1** is a comparison of the possible three types of land use for Parcel I. The first projection shows the number of trips projected for the average day, the a.m. peak hour, and the p.m. peak hour for 180 units of multi-family housing. The second land use projected is retail development. It was assumed the land could be developed to a floor area ratio of .2 resulting in approximately 130,000 square feet of retail development. The shopping center trip generation rates were used to make these calculations. The third type of use projected assumes buildout of Parcel I as office. In part of the preliminary master plan, projections were made as to the total square feet of office space that could be developed. This was estimated at approximately 81,000 square feet.

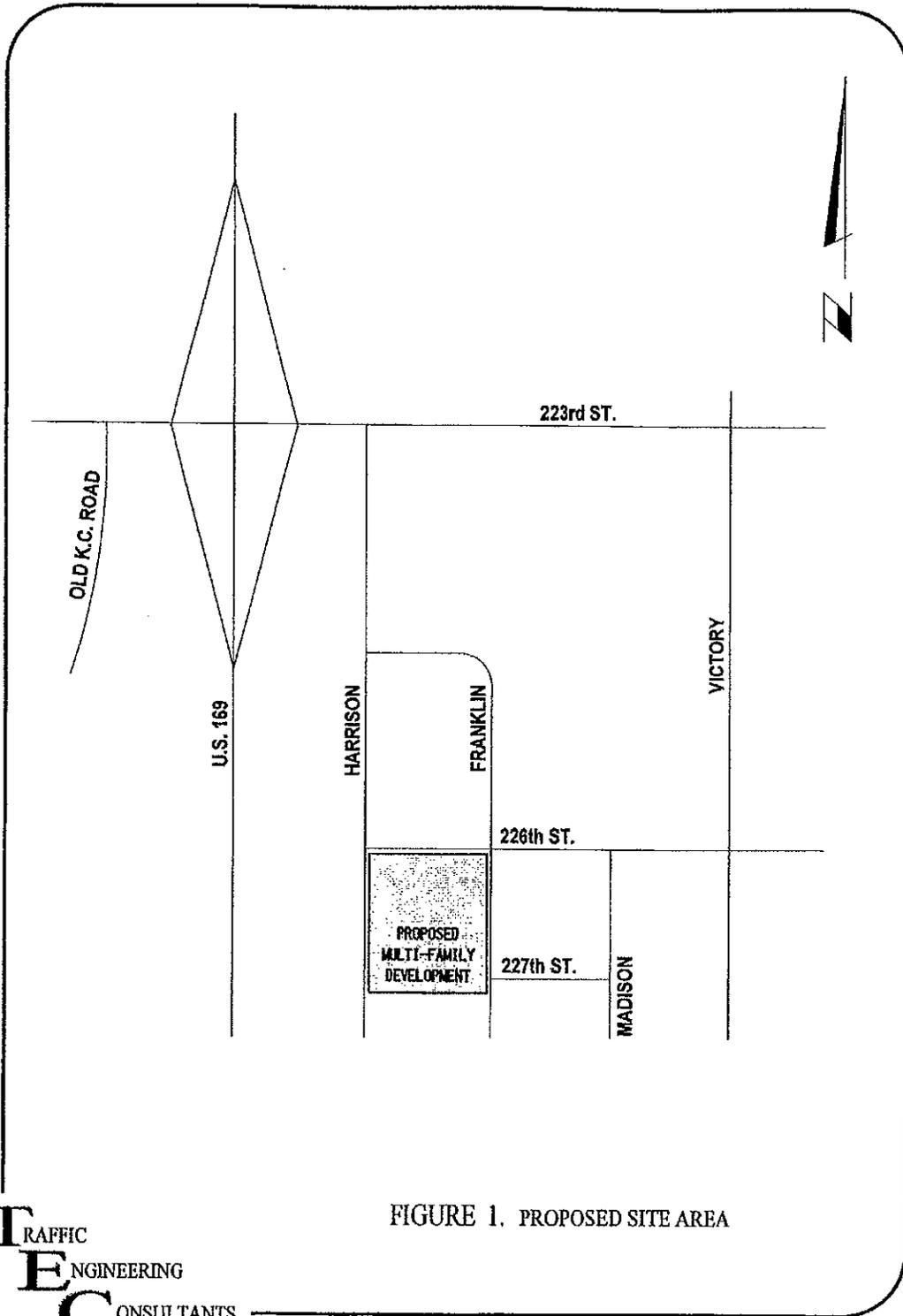


FIGURE 1. PROPOSED SITE AREA

**T**RAFFIC  
**E**NGINEERING  
**C**ONSULTANTS

**TABLE 1**  
TRAFFIC PROJECTION COMPARISON

LAND USE TYPE	APPROX. GROSS FLOOR AREA (sf)	PER DAY (vpd)	PER PEAK HOUR ADJACENT STREET TRAFFIC ONE HOUR BETWEEN 7:00am & 9:00am (vph)	AVERAGE WEEKDAY VEHICLE TRIP ENDS												Total Peak Hr Trips
				AM Peak Hr		Mid Peak Hr		PM Peak Hr		AM Peak Hr		Mid Peak Hr		PM Peak Hr		
				Directional Distribution	Volume	Directional Distribution	Volume	Directional Distribution	Volume	Directional Distribution	Volume	Directional Distribution	Volume	Directional Distribution	Volume	
TRIP RATE* MULTI-FAMILY	no. units 180	6.63 1,193	0.51 92	0.62 112	0.16	0.84	15	77	0.67	0.33	75	37	203			
TRIP RATE* SHOPPING CENTER	130,000	62.07 8,069	1.44 187	5.74 747	0.61	0.39	114	73	0.48	0.52	358	388	933			
TRIP RATE* OFFICE	81,054	13.93 1,129	1.95 158	2.10 170	0.88	0.12	139	19	0.17	0.83	29	141	328			

\* Average Trip Rates from "TRIP GENERATION", 6th Edition, Institute of Transportation Engineers, 1997.

In reviewing **Table 1**, it can be seen that the multi-family projected trips are lower than either of the other two types of permitted land uses. The last column on the page shows a comparison of the peak hour trips. Multi-family units will generate 120 fewer trips than the office use. The multi-family use will generate four times less trips than the shopping center use. It should also be noted that the multi-family type of trip is residential in nature. This is not the case for the shopping center trips or the office trips. The average number of trips on a per day basis for the multi-family is slightly higher (54 trips) as compared to the office trips. The multi-family use would generate eight times less trips than the shopping center.

Although the master plan shows the office proposed at 81,000 square feet, the land could be developed to include 140,000 square feet of office. If 140,000 square feet of office were developed, the amount of traffic for the office use would be substantially higher than the multi-family use.

#### **EXISTING TRAFFIC**

Traffic counts were not available for the residential streets in the development. Traffic counts were conducted by Traffic Engineering Consultants, Inc. (TEC) the week of April 21, 2003. The complete traffic counts can be found in the appendix. The traffic counts are summarized in **Figure 2**. Harrison serves as the major ingress and egress point to the development. At its intersection with 223<sup>rd</sup> Street, the average daily traffic (ADT) is approximately 5,100 vehicles per day (vpd).

226<sup>th</sup> Street is continuous from Harrison east to Victory. There is a major concern that the proposed development will add substantial traffic to this segment of roadway. From Franklin Road East, the road serves as a residential collector street. On the east end of 226<sup>th</sup> Street, there are approximately 230 vpd. On the west end, just east of Franklin Road, there are 915 vpd. A traffic count was also taken on Franklin Road just north of 227<sup>th</sup> Street. The total number of vehicles is 250 vpd at this location. The summation of the three count locations internal to the neighborhood gave a good estimation of the number of trips being generated by the single family

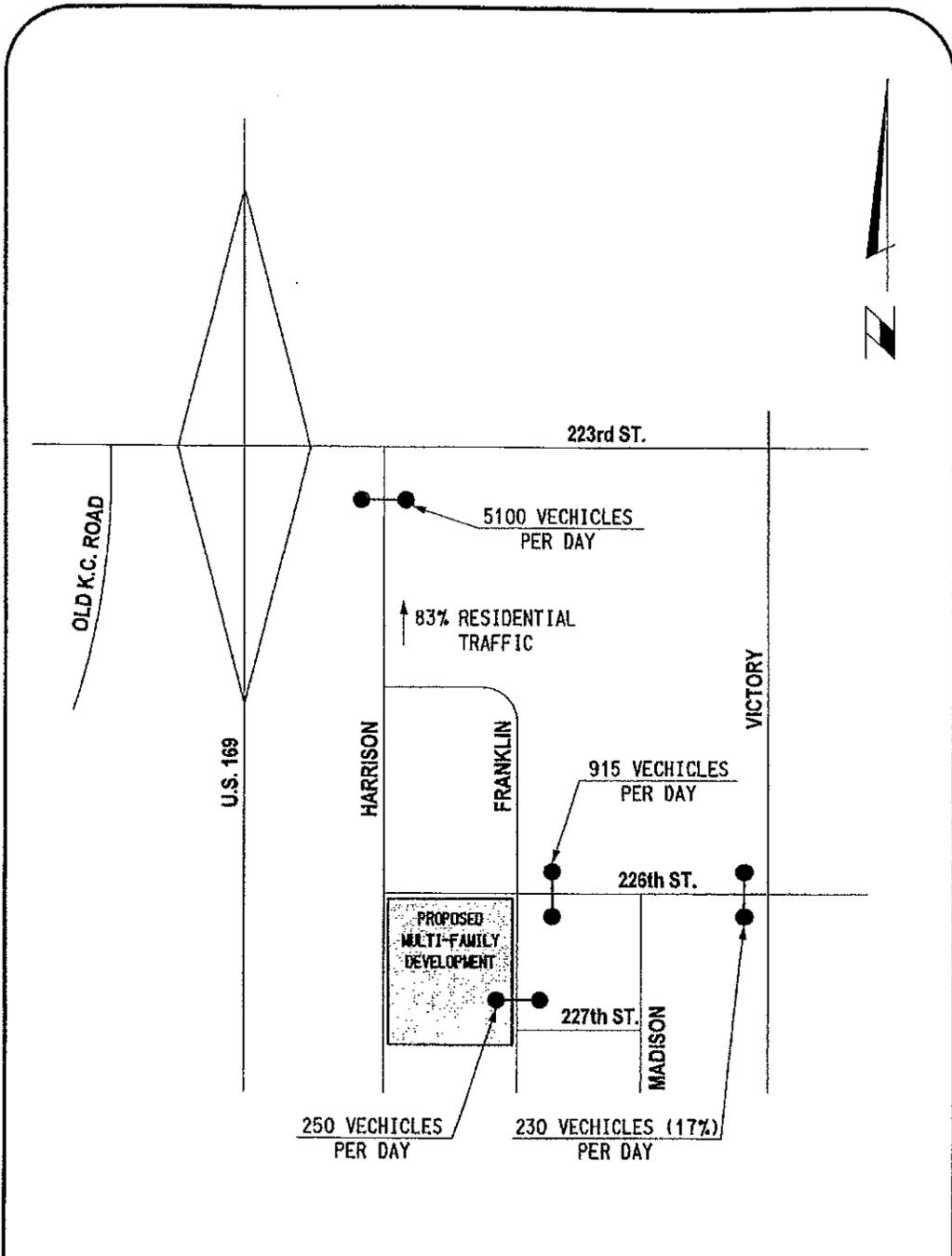


FIGURE 2. TRAFFIC COUNT SUMMARY  
AVERAGE DAILY TRAFFIC

residential development. This is a total of approximately 1,400 vpd. Approximately 17% of the residential traffic uses Victory and 83% of the residential traffic uses Harrison to 223<sup>rd</sup> Street. The current traffic volumes on 226<sup>th</sup> Street are within acceptable limits for a residential collector street. Residential collector streets can be expected to carry 1,000 to 1,500 vpd. The heaviest volume on 226<sup>th</sup> Street is closest to Franklin Road indicating the desire of most of the residents to access 223<sup>rd</sup> Street at Harrison.

### **TRIP DISTRIBUTION**

The next step was to distribute the projected traffic throughout the street network system. There have been two regionwide studies conducted in the past two years. Both studies were available for review. The first study was conducted by Bucher, Willis, and Ratliff completed in January 2002. This study was conducted for Miami County, Kansas. It reviewed several miles of 223<sup>rd</sup> Street.

In July 2002 another study was completed by TransSystems Corporation. The study was prepared for Miami County, Kansas and the Kansas Department of Transportation. This study was a more detailed study in a much smaller area. It addressed the Blackhawk development as well as surrounding land uses. Contained within this study were assumptions in regards to trip distribution and directions. These trip distributions were used as a basis for this study.

Adjustments were necessary in the trip distributions. The TransSystems report assumed 5% of the 223<sup>rd</sup> Street traffic would enter and leave 223<sup>rd</sup> Street on Harrison into the Blackhawk development. As the Blackhawk development is the subject of this report, the 5% was redistributed to Victory Street north, 223<sup>rd</sup> Street east, and Victory south. Rather than 5% of the trips entering and exiting the Blackhawk development, 100% of the trips enter or exit the Blackhawk development when it is the area being studied. **Figure 3** is a detailed summary of the trip distribution assumptions. The significant assumption is the amount of traffic that will use 226<sup>th</sup> Street. From the previous discussions, only 17% of the residential traffic currently uses Victory. To be conservative, it was assumed that 30% of the proposed multi-family traffic would

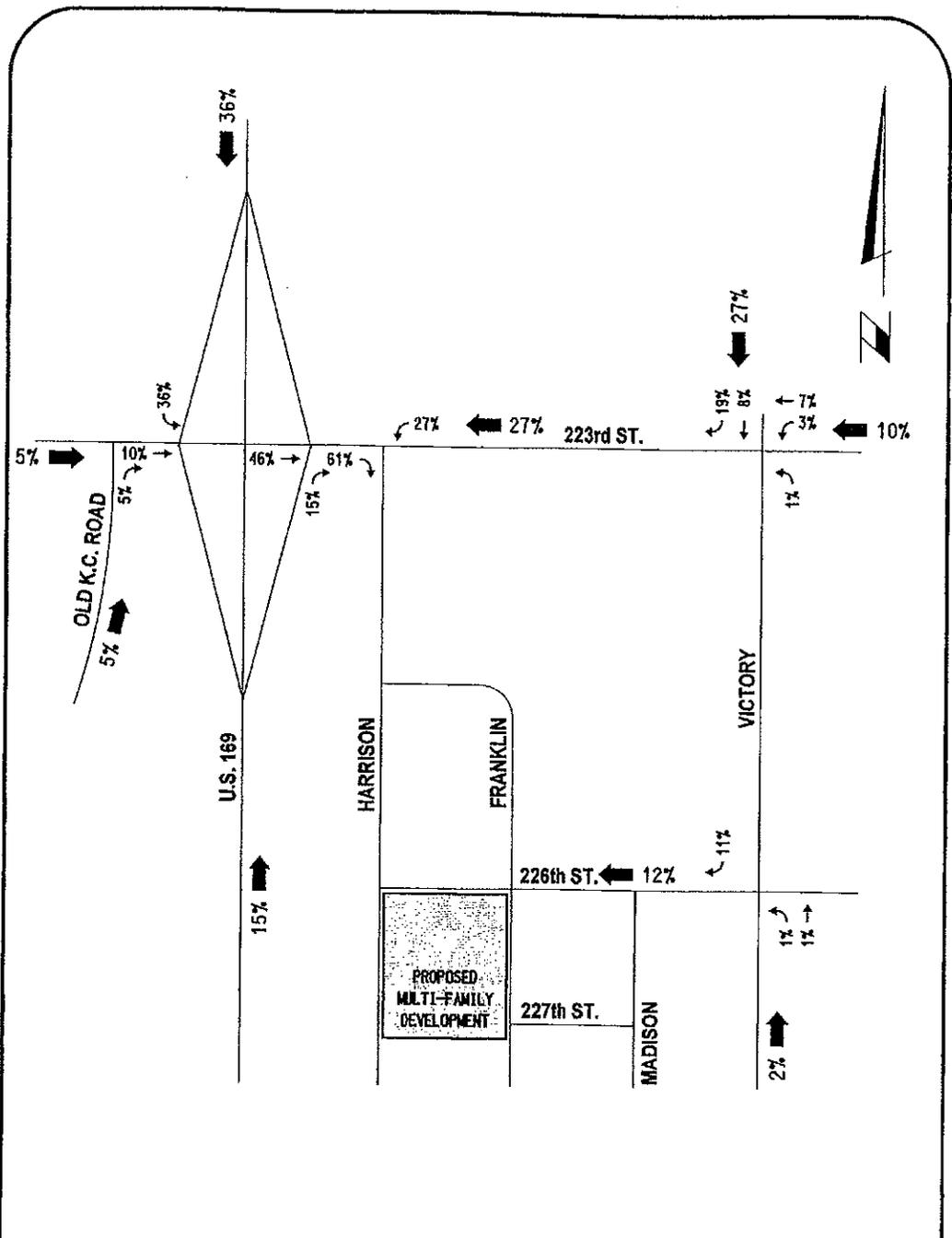


FIGURE 3. TRIP DISTRIBUTIONS ASSUMPTIONS

use 226<sup>th</sup> Street to either go south on Victory, north on Victory or east on 223<sup>rd</sup> Street. When balanced with the other assumptions, this results in 12% of the overall traffic from the proposed multi-family housing using 226<sup>th</sup> Street. These assumptions were used to distribute the peak hour traffic estimated in the trip generation for both the a.m. and the p.m. peak periods. **Figure 4** shows the total number of trips at each of the intersections as a result of the analysis for the a.m. peak hour. **Figure 5** shows the number of trips at each intersection for the p.m. peak hour.

For the trip distribution and the calculation of trips using 226<sup>th</sup> Street, it was assumed that Harrison would be realigned with Victory. All of the Harrison trip distribution traffic assumed in the TransSystems report was moved to Victory. This would create an additional attraction for the multi-family units to use Victory.

With these conservative assumptions, it was found the increase in trips for 226<sup>th</sup> Street would be ten trips eastbound and two trips westbound in the morning and five trips eastbound and nine trips westbound in the evening. It is estimated the total ADT increase would be less than 100 vpd.

There are several points that need to be considered when looking at the increase in traffic. First, the parcel under consideration will be developed at some point in the future whether it is a multi-family, office or commercial development. Multi-family housing will generate the least traffic. Second, when the parcel of land is developed, traffic from that parcel will use 226<sup>th</sup> Street. The less traffic generated by the development, the less traffic that will use 226<sup>th</sup> Street. Third, residential traffic such as multi-family unit traffic is more compatible with a single family residences along 226<sup>th</sup> Street. Commercial or office traffic is less likely to feel a part of the community of the residential neighborhood. Compliance with speed limits, traffic control devices, and an overall awareness of the environment is less likely for drivers coming to or leaving an office or retail complex.

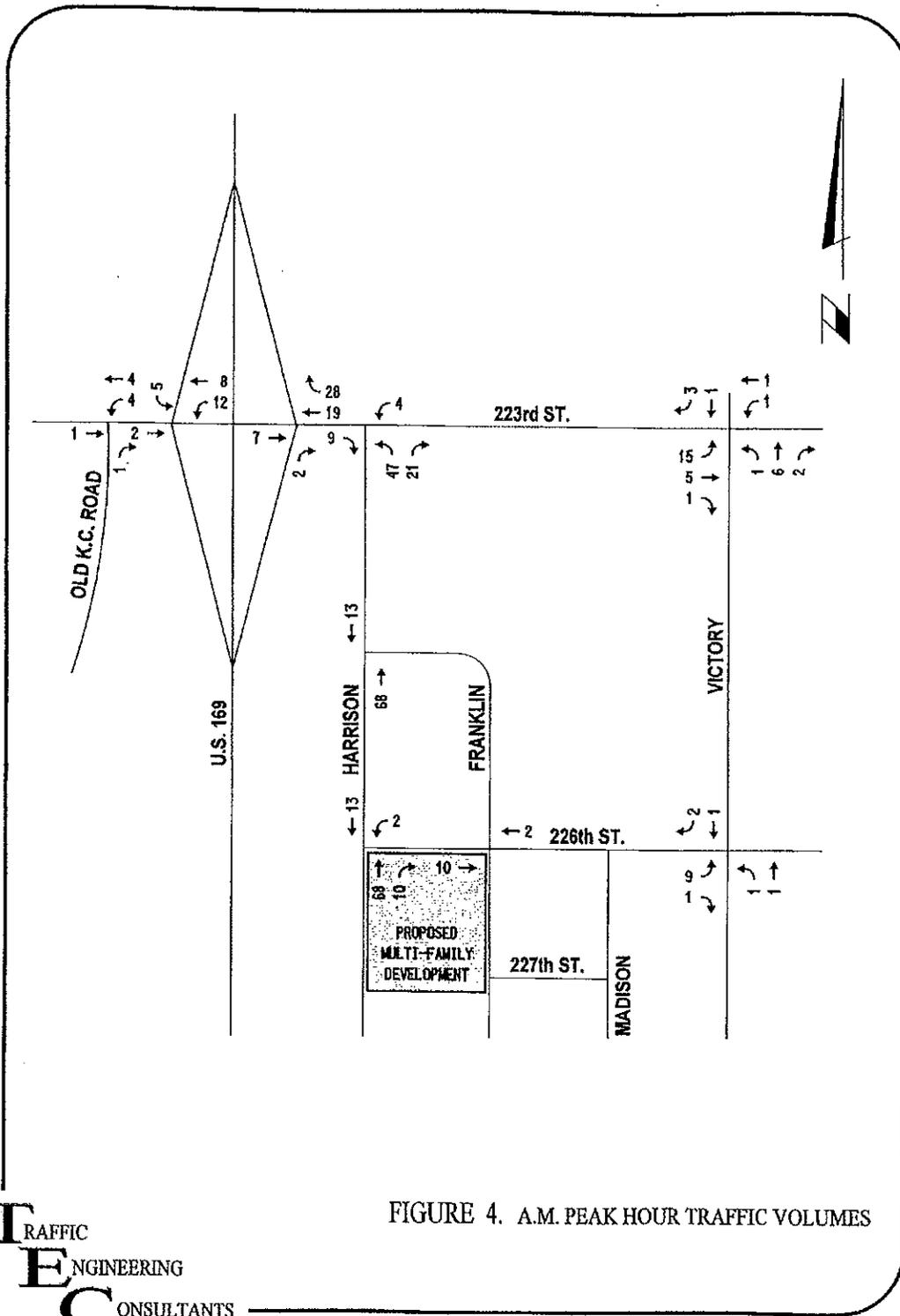


FIGURE 4. A.M. PEAK HOUR TRAFFIC VOLUMES

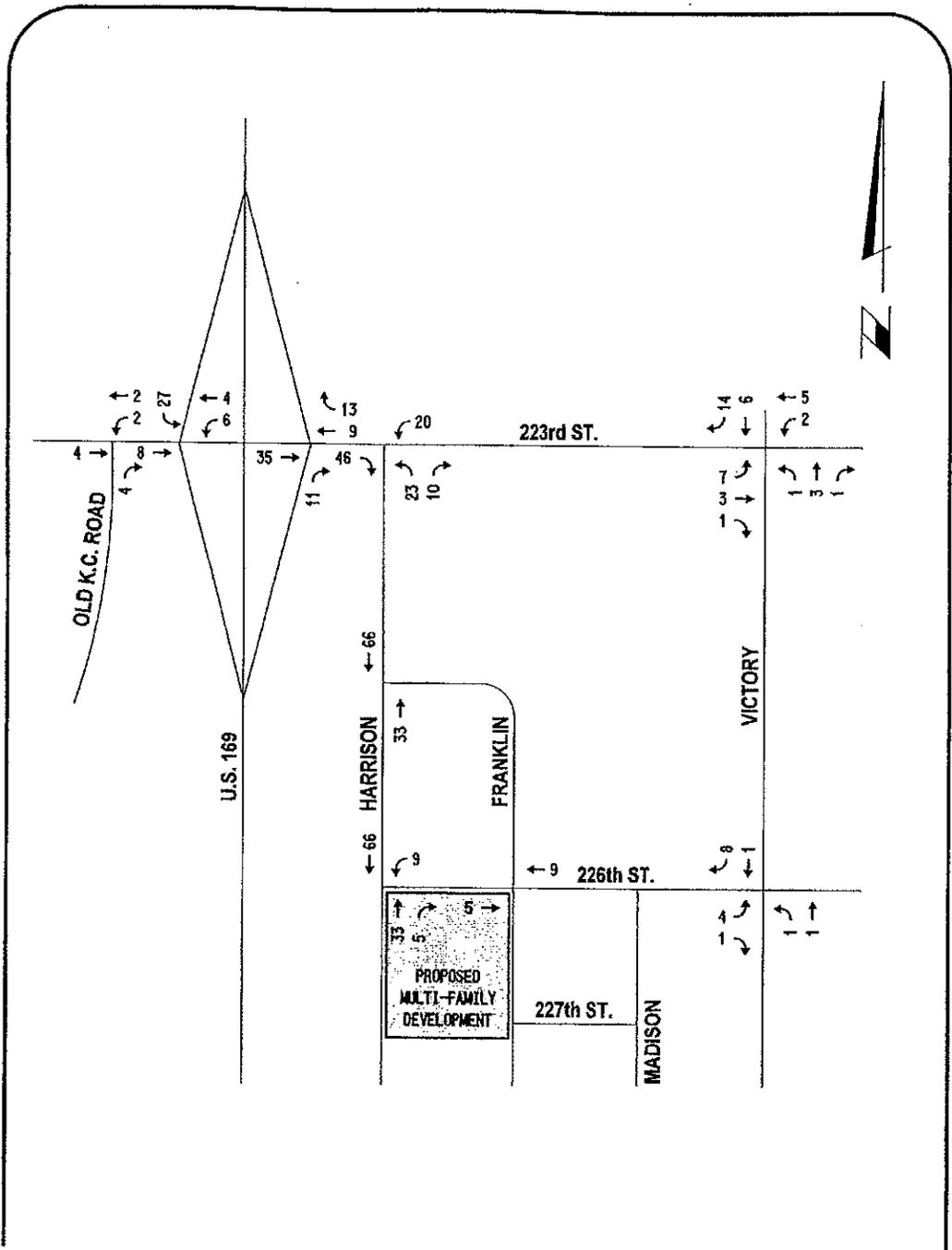


FIGURE 5. P.M. PEAK HOUR TRAFFIC VOLUMES

## **FUTURE DEVELOPMENT**

City staff asked that trip generation information be developed for the remaining parcels of land not currently developed in the Blackhawk Development. In reviewing the master plan and existing development, six separate types of uses are not currently constructed. These include a sit down restaurant of approximately 2,000 square feet, additional retail development of approximately 48,600 square feet, a grocery at full buildout at 60,000 square feet, a post office at 7,200 square feet, a 60 room hotel, 34 townhomes or duplex units. Table 2 shows the expected trip generation from these land uses. The table can be used along with the current traffic counts to provide information on the future amount of traffic for full buildout of the area. It is provided for informational purposes for the City's use.

## **SUMMARY**

In summary, the switch to multi-family units for the proposed development is a down zoning. The multi-family units will generate less traffic. The traffic that is generated is more compatible with the surrounding residential land uses. The multi-family units also provide a buffer or step down zoning from the U.S. 169 corridor to the single family residential area. The impacts of the expected traffic to be generated from the multi-family development will not adversely impact any of the surrounding street system including 226<sup>th</sup> Street.

**TABLE 2**  
BLACKHAWK DEVELOPMENT NOT BUILT

LAND USE TYPE	APPROX GROSS FLOOR AREA (SF)	AVERAGE WEEKDAY VEHICLE TRIP ENDS												Total Peak-Hour Trips		
		PER DAY (Vpd)	PER PEAK HOUR ADJACENT STREET TRAFFIC ONE HOUR BETWEEN 7:00am & 9:00am (Vph)	AM Peak Hr		PM Peak Hr		AM Peak Hr		PM Peak Hr		Directional Distribution			Directional Distribution	
				IN	OUT		IN	OUT								
PER DAY (Vpd)	PER PEAK HOUR ADJACENT STREET TRAFFIC ONE HOUR BETWEEN 7:00am & 9:00am (Vph)	AM Peak Hr Directional Distribution	PM Peak Hr Directional Distribution	AM Peak Hr Directional Distribution	PM Peak Hr Directional Distribution	AM Peak Hr Directional Distribution	PM Peak Hr Directional Distribution	AM Peak Hr Directional Distribution	PM Peak Hr Directional Distribution	AM Peak Hr Directional Distribution	PM Peak Hr Directional Distribution	AM Peak Hr Directional Distribution	PM Peak Hr Directional Distribution			
TRIP RATE* SIT DOWN RESTAURANT	2,000	130.34	9.27	10.86	0.52	0.48	10	9	0.60	0.40	13	9	40			
TRIP RATE* SHOPPING CENTER	48,600	88.19	2.14	8.03	0.61	0.39	63	41	0.48	0.52	187	203	494			
TRIP RATE* GROCERY	60,000	111.51	3.25	11.51	0.61	0.39	119	76	0.51	0.49	352	338	886			
TRIP RATE* POST OFFICE	7,200	108.19	8.02	10.79	0.52	0.48	30	28	0.51	0.49	40	38	135			
TRIP RATE* HOTEL	60	8.92	0.67	0.71	0.58	0.42	23	17	0.49	0.51	21	22	83			
TRIP RATE* TOWNHOMES	54	5.86	0.44	0.54	0.17	0.83	3	12	0.67	0.33	12	6	33			
<b>TOTALS</b>		12,751	430	1,241			248	182			625	616				

\* Average Trip Rates from "TRIP GENERATION", 6th Edition, Institute of Transportation Engineers, 1997.

***APPENDIX***

---

***TRAFFIC COUNTS***

---

Traffic Engineering Consultants  
 5000 S. Western Ste. 300  
 Oklahoma City, Ok. 73139

Site Code: 000000000001

Station ID:

226th STREET  
 EAST OF VICTORY

Latitude: 0.000

Week Average

Start Time	21-Apr-03		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1	1
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4	4
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14	6
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	19	4
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9	5
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12	7
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13	4
01:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7	4
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9	2
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	26	9
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8	4
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5	2
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12	6
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12	5
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1	1
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6	2
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4	1
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1	1
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163	64
Day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	227	227
AM															08:00	10:00
Peak															19	7
Volume															14:00	14:00
PM															26	9
Peak															26	9
Volume															26	9

Comb. Total

ADT

0

0

63

164

0

Not Calculated

0

227

Traffic Engineering Consultants  
 6000 S. Western Ste. 300  
 Oklahoma City, Ok. 73139

Site Code: 000000000002  
 Station ID:  
 226th STREET  
 WEST OF FRANKLIN  
 Latitude: 0.000  
 Week Average

Start Time	21-Apr-03		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM																
01:00																
02:00																
03:00																
04:00																
05:00																
06:00																
07:00																
08:00																
09:00																
10:00																
11:00																
12:00																
PM																
01:00																
02:00																
03:00																
04:00																
05:00																
06:00																
07:00																
08:00																
09:00																
10:00																
11:00																
12:00																
Day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM																
Peak																
Volume																
PM																
Peak																
Volume																
10:00	21	39	10:00	250	114	123	237	07:00	46	07:00	46	07:00	07:00	07:00	46	46
17:00	70	32	17:00	70	32	17:00	70	14:00	32	17:00	70	14:00	17:00	14:00	32	32

Comb. Total 0 0 675 237 0 912

ADT Not Calculated

Traffic Engineering Consultants  
 6000 S. Western Ste. 300  
 Oklahoma City, Ok. 73139

Site Code: 000000000003

Station ID:  
 FRANKLIN

NORTH OF 227TH

Latitude: 0.000  
 Week Average

Start Time	21-Apr-03		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM																
01:00																
02:00																
03:00																
04:00																
05:00																
06:00																
07:00																
08:00																
09:00																
10:00																
11:00																
12:00																
PM																
01:00																
02:00																
03:00																
04:00																
05:00																
06:00																
07:00																
08:00																
09:00																
10:00																
11:00																
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Day	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM																
Peak																
Volume																
PM																
Peak																
Volume																
11:00	6	7	66	104	53	30	0	0	0	0	0	0	0	0	119	134
07:00																
09:00																
17:00	16	8	170	253	83	8	0	0	0	0	0	0	0	0	19	26
17:00	12	26														

Comb. Total 0 0 170 83 0 0 253

ADT Not Calculated

Traffic Engineering Consultants  
 6000 S. Western Ste. 300  
 Oklahoma City, Ok. 73139

Site Code: 00000000000004  
 Station ID:  
 HARRISON  
 SOUTH OF 223RD  
 Latitude: 0.000  
 Week Average

Start Time	21-Apr-03		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10	14
01:00	*	*	*	*	*	*	4	4	*	*	*	*	*	*	4	4
02:00	*	*	*	*	*	*	2	2	*	*	*	*	*	*	2	3
03:00	*	*	*	*	*	*	3	3	*	*	*	*	*	*	3	2
04:00	*	*	*	*	*	*	5	5	*	*	*	*	*	*	5	9
05:00	*	*	*	*	*	*	46	58	*	*	*	*	*	*	48	59
06:00	*	*	*	*	*	*	119	148	*	*	*	*	*	*	119	148
07:00	*	*	*	*	*	*	183	241	*	*	*	*	*	*	183	241
08:00	*	*	*	*	*	*	131	148	*	*	*	*	*	*	131	148
09:00	*	*	*	*	*	*	123	129	*	*	*	*	*	*	123	129
10:00	*	*	*	*	*	*	133	133	*	*	*	*	*	*	106	115
11:00	*	*	*	*	*	*	164	147	*	*	*	*	*	*	164	147
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	149	145
01:00	*	*	*	*	*	*	149	145	*	*	*	*	*	*	146	142
02:00	*	*	*	*	*	*	137	141	*	*	*	*	*	*	137	141
03:00	*	*	*	*	*	*	184	163	*	*	*	*	*	*	184	163
04:00	*	*	*	*	*	*	214	191	*	*	*	*	*	*	214	191
05:00	*	*	*	*	*	*	267	232	*	*	*	*	*	*	267	232
06:00	*	*	*	*	*	*	166	178	*	*	*	*	*	*	166	178
07:00	*	*	*	*	*	*	118	126	*	*	*	*	*	*	118	126
08:00	*	*	*	*	*	*	96	105	*	*	*	*	*	*	96	105
09:00	*	*	*	*	*	*	51	80	*	*	*	*	*	*	51	80
10:00	*	*	*	*	*	*	28	34	*	*	*	*	*	*	28	34
11:00	*	*	*	*	*	*	30	24	*	*	*	*	*	*	30	24
Lane	0	0	0	0	0	0	1877	1841	713	854	0	0	0	0	2484	2680
Day AM	0	0	0	0	0	0	1567	1567	0	0	0	0	0	0	5064	5064
Peak Volume							11:00	11:00	07:00	07:00					07:00	07:00
PM							184	147	183	241					183	241
Peak Volume							17:00	17:00							17:00	17:00
							267	232							267	232

Comb. Total 0 0 3718 1567 0 0 5064  
 ADT Not Calculated

***TRIP DISTRIBUTION***

---

**Detailed Volume Report**

Workbook : C:\Documents and Settings\Steve Hofener\My Documents\Datafiles\Blackhawk\lam\VT.xls  
 Written on : May. 05, '03, 2:41 PM

Network :Network

Intersection :Old K.C. Road, 223 rd Street, Node # 23

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Multi-Family	223rd West												4
Multi-Family	Old K.C. Road South										4		
223rd West	Multi-Family								1				
Old K.C. Road Sout	Multi-Family			1									
	Total			1					1		4	4	

Network :Network

Intersection :U.S. 169 S.B. Off, 223 rd Street, Node # 24

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Multi-Family	223rd West												4
Multi-Family	Old K.C. Road South												4
Multi-Family	U.S. 169 SB On										12		
U.S. 169 SB Off	Multi-Family				5								
223rd West	Multi-Family								1				
Old K.C. Road Sout	Multi-Family								1				
	Total				5				2		12	8	

Network :Network

Intersection :U.S. 169 N.B. On, 223 rd Street, Node # 25

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Multi-Family	U.S. 169 NB On												28
Multi-Family	223rd West												4
Multi-Family	Old K.C. Road South												4
Multi-Family	U.S. 169 SB On												12
U.S. 169 SB Off	Multi-Family								5				
223rd West	Multi-Family								1				
Old K.C. Road Sout	Multi-Family								1				
U.S. 169 NB Off	Multi-Family			2									
	Total			2					7			19	28

Network :Network

Intersection :Harrison, 223 rd Street, Node # 26

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Multi-Family	U.S. 169 NB On	28											
Multi-Family	Victory North			15									
Multi-Family	223rd West	4											
Multi-Family	223rd East			5									
Multi-Family	Old K.C. Road Sout	4											
Multi-Family	U.S. 169 SB On	12											
Multi-Family	Victory South			1									
U.S. 169 SB Off	Multi-Family								5				
Victory North	Multi-Family										3		
223rd West	Multi-Family								1				
223rd East	Multi-Family										1		
Old K.C. Road Sout	Multi-Family								1				
U.S. 169 NB Off	Multi-Family								2				
Victory South	Multi-Family										0		
	Total	47		21					9		4		

Network :Network

Intersection :Victory, 223 rd Street, Node # 29

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR



**Detailed Volume Report**

Workbook : C:\Documents and Settings\Steve Hofener\My Documents\Datafiles\Blackhawk\pmVT.xls  
 Written on : May. 05, '03, 2:42 PM

Network :Network

Intersection :Old K.C. Road, 223 rd Street, Node # 23

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Multi-Family	223rd West											2	
Multi-Family	Old K.C. Road South										2		
223rd West	Multi-Family								4				
Old K.C. Road Sout	Multi-Family			4									
Total				4					4		2	2	

Network :Network

Intersection :U.S. 169 S.B. Off, 223 rd Street, Node # 24

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Multi-Family	223rd West											2	
Multi-Family	Old K.C. Road South											2	
Multi-Family	U.S. 169 SB On										6		
U.S. 169 SB Off	Multi-Family				27								
223rd West	Multi-Family								4				
Old K.C. Road Sout	Multi-Family								4				
Total					27				8		6	4	

Network :Network

Intersection :U.S. 169 N.B. On, 223 rd Street, Node # 25

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Multi-Family	U.S. 169 NB On												13
Multi-Family	223rd West											2	
Multi-Family	Old K.C. Road South											2	
Multi-Family	U.S. 169 SB On											6	
U.S. 169 SB Off	Multi-Family								27				
223rd West	Multi-Family								4				
Old K.C. Road Sout	Multi-Family								4				
U.S. 169 NB Off	Multi-Family			11									
Total				11					35			9	13

Network :Network

Intersection :Harrison, 223 rd Street, Node # 26

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Multi-Family	U.S. 169 NB On	13											
Multi-Family	Victory North			7									
Multi-Family	223rd West	2											
Multi-Family	223rd East			3									
Multi-Family	Old K.C. Road Sout	2											
Multi-Family	U.S. 169 SB On	6											
Multi-Family	Victory South			0									
U.S. 169 SB Off	Multi-Family								27				
Victory North	Multi-Family										14		
223rd West	Multi-Family								4				
223rd East	Multi-Family										5		
Old K.C. Road Sout	Multi-Family								4				
U.S. 169 NB Off	Multi-Family								11				
Victory South	Multi-Family										1		
Total		23		10					46		20		

Network :Network

Intersection :Victory, 223 rd Street, Node # 29

Volume Source:		Turning Movements:											
Origin	Destination	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR



