

Traffic Impact Data

for

Microbrewery and Tap Room

706 E. 23rd Street Lawrence, Kansas

Prepared for Grob Engineering Services, LLC

> Prepared By





Mehrdad Givechi, P.E., P.T.O.E.

June 2016

According to City Ordinance #7650, collection of Traffic Impact Data (TID) is required for all non-residential new developments or redevelopments and all residential developments of eleven (11) or more lots or dwelling units. The following information is compiled to fulfill the requirements of this ordinance for the proposed <u>*Microbrewery and Tap Room*</u> redevelopment located at 706 E. 23rd Street in Lawrence, Kansas (See Location Map in the Appendix).

1. The site is currently occupied by an abandoned building with access at one point onto E. 23rd Street. This access point is a shared driveway also providing access to the two adjoining businesses to the east (i.e. *Solar Concepts Window Tilting* and *Wash Me Carwash*).

Under the proposed redevelopment plan, as shown on the Site Plan in the Appendix, the building will be remodeled and the site will be reconfigured to provide for

- A restaurant / tap room with a total floor area of approximately 3,680 sq. ft. (kitchen = 1,080 sq. ft.; indoor seating = 1,350 sq. ft.; and outdoor patio = 1,250 sq. ft.);
- A microbrewery (manufacturing and production) area of approximately 5,000 sq. ft.; and
- A new parking lot on the west side of the site with a new access drive onto E.
 22nd Street, while still maintaining the existing shared driveway on E. 23rd
 Street. Delivery trucks enter the site from E. 23rd Street and exit the site onto E. 22nd Street.
- The existing zoning for this site is General Industrial (IG). The proposed zoning will be CS (Commercial Strip). According to the Horizon 2020 (Map 3-2), the designated land use for this site is "Office Research and/or Industrial/Warehouse/Distribution".
- 3. The street network surrounding the site consists of:
 - E. 23rd Street, running east/west along south side of the site, designated as "Principal Arterial" on <u>City's T2040 Thoroughfare Map</u>.

- Haskell Avenue, running north/south approximately 660 ft. east of the site, designated as "Minor Arterial" north of E. 23rd Street and as "Principal Arterial" south of E. 23rd Street on <u>City's T2040 Thoroughfare Map</u>.
- E. 22nd Street, running east/west along north side of the site, designated as "Local Street" on <u>City's T2040 Thoroughfare Map</u>.
- 4. Under the existing conditions, the site is served by a shared access drive onto E. 23rd Street that also serves the two adjoining businesses to the east (i.e. *Solar Concepts Window Tilting* and *Wash Me Carwash*). The proposed redevelopment plan calls for no change to this access, but adds a new access drive onto E. 22nd Street on the northwest corner of the site as shown on the Site Plan.
- 5. In the vicinity of this redevelopment:
 - E. 23rd Street is a four-lane divided roadway with a Two-Way Left-Turn Lane (TWLTL) and posted speed limit of 35 mph. On-street parking is prohibited on both sides.
 - Haskell Avenue is a two-way two-lane roadway with posted speed limit of 30 mph north of E. 23rd Street and 35 mph south of E. 23rd Street. On-street parking is prohibited on both sides.
 - E. 22nd Street is a two-way, two-lane, dead-end local street with no posted speed limit (Statutory speed limit = 30 mph).
 - The intersection of E. 23rd Street and Haskell Avenue is a fully-actuated signalized intersection with camera detection and "protected/permissive" leftturn phasing for north/south approaches and "protected only" left-turn phasing for east/west approaches.
 - East/west approach, each has two through lanes with a dedicated leftturn lane and no dedicated right-turn lane. There is a near-side bus stop for both westbound and eastbound movements on E. 23rd Street.
 - North/south approach, each has one through lane, one dedicated leftturn lane and one dedicated right-turn lane.
 - The intersection of Haskell Avenue and E. 22nd Street is a "T" intersection controlled by stop sign on E. 22nd Street. Each approach has a single lane.

- 6. As mentioned earlier, under the proposed redevelopment plan, the existing curb cut on E. 23rd Street remains unchanged at its current location. Moreover, a new access drive is proposed on the northwest corner of the site providing access to the proposed parking lot along the west side of the site. Field observations indicate that sight distance is not restricted at either of the two driveways.
- 7. The trip generation of a proposed land development project is typically estimated using trip generation rates suggested by the latest edition of the <u>Institute of</u> <u>Transportation Engineers, Trip Generation Manual</u> (Currently, the 9th Edition). For this analysis, ITE Land Use Codes that are most similar to the proposed uses were examined and the scenario that generated most trip numbers was selected.
 - For the Tap Room/Bar area (3,680 sq. ft.), ITE Codes 925 (Drinking Place) and 932 (High-Turnover Sit-Down Restaurant) with "gross floor area" as independent variable were examined.
 - For the Microbrewery area with 5,000 sq. ft., ITE Codes 110 (General Light Industrial) and 140 (Manufacturing) with "gross floor area" as independent variable were examined.

The results, as summarized in the Appendix, indicate that total number of trips likely to be generated by the proposed redevelopment will be below the threshold of 100 trip-ends during the critical peak period of a typical weekday as follows:

- On average, 5 trip-ends (4 inbound and 1 outbound) during the morning peak-hour of <u>adjacent street network;</u>
- On average, 54 trip-ends (30 inbound and 24 outbound) during the afternoon peak-hour of *generator*, and
- On average, 47 trip-ends (29 inbound and 18 outbound) during the afternoon peak-hour of <u>adjacent street network</u>; and
- On average, 73 trip-ends (38 inbound and 35 outbound) during the afternoon peak-hour of *generator*.

APPENDIX

- Location Map
- Site Plan
- Results of Trip Generation Analysis, Using the ITE Trip Generation Manual, 9th Edition

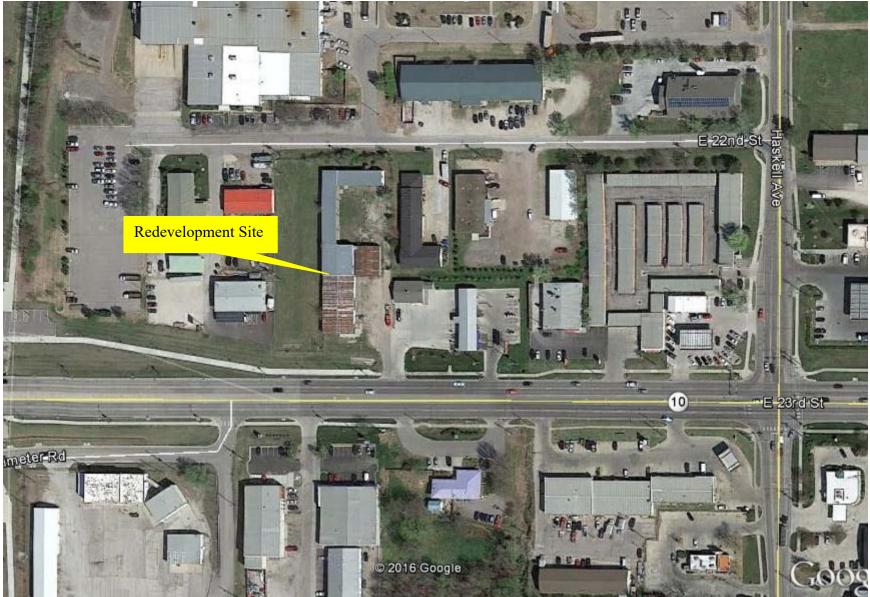
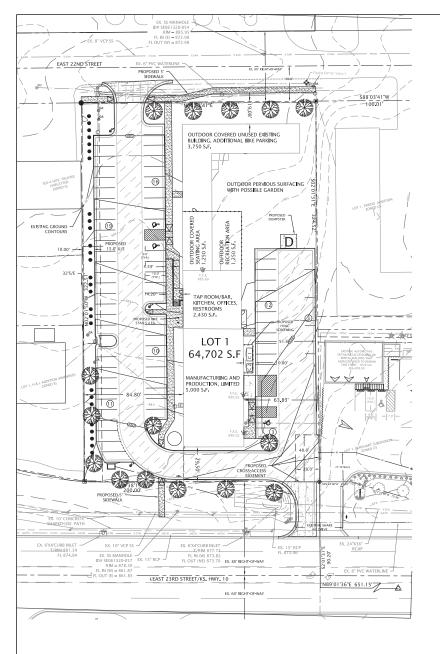


Figure 1 Location Map



DEVELOPMENT SUMMARY

Existing Summary	AREA (SQ. FT.)	Summary After Project Completio	AREA (SQ. FT.)			
Existing Building	14,780	Proposed Buildings	12,640			
Existing Pavement	47,452	Proposed Pavement	32,437			
Existing Impervious	62,232	Proposed Imperviou	5 45,077			
Existing Pervious	2,470	Proposed Pervious	19,625			
Property Area	64,702		64,702			
BUILDING COVE IMPERVIOUS LOT CO		BUILDING COVERAGE 19.5% IMPERVIOUS LOT COVERAGE 69.7%				
	PARKING					

1 PER 3 PE	AR OR LOUNG RSONS MAXI 1 PER EMPLI	MUM OCC.	184 OCC. 5 EMPLOYEES		66 SPACES				
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PAR	KING PROV	DED							
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STA	NDARD SPA	CES	71						
ADA H	IANDICAP S	PACES	3						
		LANDSC	APING SCHEDUL	E .					
SYMBOL	QUANT.		NAME		SIZE & COND				
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*	0		NG CONIFEROUS TREES		-				
*	15		D SITE AND STREET TRE		2-1/2"				
*	26	CARPET S BLUE HO	DWARF BURNING BUSH, MAGIC CARPET SPIREA, KNOCK-OUT ROSES, BLUE HOLLY, OR APPROVED EQUAL						
			IPAVED AREAS SHALL BE ED WITH TURF GRASSES						

PAVING SCHEDULE SYMBOL NAME 4" CONCRETE PAVING FOR SIDEWALK 5.5" ASPHALT PAVING 7" ASPHALT PAVING 6* CONCRETE PAVING CONCRETE PAVING CITY SPEC. FOR APPR

LOCATION MAP



LEGEND											
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LEGAL DESCRIPTION

LOT 1, JOHNSTON ADDITION, LOCATED IN THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 13 SOUTH, RANGE 20 EAST OF THE SIXTH PRINCIPAL MERIDIAN, IN THE CITY OF LAWRENCE, DOUGLAS COUNTY KAN

GENERAL NOTES

Lawrence Brothers, LLC
879 N 200 Road
Baldwin City, Kansas 66006
Johnston Investments Company, LLC
10745 S. Oakcrest Lane
Olathe, Kansas 66061
Grob Engineering Services, LLC
3210 Mesa Way, Sulte A
Lawrence, Kansas 66049
All Points Surveying, LP
P.O. Box 4444
Lawrence, Kansas 66045

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THIS DOCUMENT IS FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION

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City of Lawrence Douglas County

Approved and Released

Case No._____ Approval Date:__ Release Date:___ Planner:____

_____of____ Asst./Director

PROJECT BENCH MARK:

OLCU T DELEVENTY PRELE WORKS CHARN DG41 NORTHINE 233.503.53 EASTING, 210.078.917 CHRELED SQUARE IN THE WY CORKER OF CONCRETE STORMMATER INLET IN THE WEST OF ENTRANCE TO PROPERTY ON 23RD STREET, ELEVATION – 977.79.

DESIGNED BY IDG CHECKED BY IDG ISSUE DATE JUNE 20, 2016 REVISIONS

SHEET

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GES

GROB ENGINEERING SERVICES, LLC

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SPECIAL USE PERMIT SITE PLAN FOR MICROBREWERY AND TAP ROOM 706 E. 23RD STREET LAWRENCE, KANSAS

A * Lawr awrence, 900 * Fax

Suite 2 02 * Lá 856-19

Mesa P.O.

\$210

SPECIAL USE PERMIT SITE PLAN for **MICROBREWERY AND TAP ROOM**

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Detailed Land Use Data For 3.68 Gross Floor Area 1000 SF of RESTAURANTHT 1 (932) High-Turnover (Sit-Down) Restaurant

Project: Microbrewery and Tap Room

Phase: Restaurant

Description: 706 E. 23rd Street, Lawrence, KS

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	468	0	127.15	73.51	246	41.77	7	50	50	False		
Weekday AM Peak Hour of Generator	49	0	13.33	3	54.09	9.44	7	53	47	False		
Weekday AM Peak Hour of Adjacent Street Traffic	40	0	10.81	2.32	25.6	6.59	6	55	45	False		
Weekday PM Peak Hour of Generator	68	0	18.49	5.6	69.2	13.32	5	54	46	False		
Weekday PM Peak Hour of Adjacent Street Traffic	36	0	9.85	0.92	62	8.54	6	60	40	False		
Saturday Average Daily Trips	583	0	158.37	144.6	172.71		5	50	50	False		
Saturday Peak Hour of Generator	52	0	14.07	4.44	50.4	12.19	4	53	47	False		
Sunday Average Daily Trips	485	0	131.84	119.38	143.8		5	50	50	False		
Sunday Peak Hour of Generator	68	0	18.46	9.79	43.2	13.74	4	55	45	False		

Detailed Land Use Data For 5 Gross Floor Area 1000 SF of MANUFACTURING 1 (140) Manufacturing

Project: Microbrewery and Tap Room

Phase: Manufacturing

Description: 706 E. 23rd Street, Lawrence, KS

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% _Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	19	0	3.82	0.5	52.05	3.07	349	50	50	False	T = 3.88(X) - 20.70	0.87
Weekday AM Peak Hour of Generator	4	0	0.79	0.1	8.75	1.02	363	68	32	False	T = 0.83(X) - 14.26	0.81
Weekday AM Peak Hour of Adjacent Street Traffic	4	0	0.73	0.1	8.75	1.04	293	78	22	False	T = 0.83(X) - 29.52	0.67
Weekday PM Peak Hour of Generator	4	0	0.75	0.09	7.85	0.98	370	52	48	False	T = 0.76(X) - 5.15	0.83
Weekday PM Peak Hour of Adjacent Street Traffic	4	0	0.73	0.07	7.85	1.01	318	36	64	False	T = 0.78(X) - 15.97	0.75
Saturday Average Daily Trips	7	0	1.49	0.88	6.42		483	50	50	False		
Saturday Peak Hour of Generator	1	0	0.28	0.2	0.94		483	50	50	False		
Sunday Average Daily Trips	3	0	0.62	0.07	5.09		483	50	50	False		
Sunday Peak Hour of Generator	0	0	0.09	0.01	0.75		483	50	50	False		

Detailed Land Use Data For 5 Gross Floor Area 1000 SF of GINDUSTRIAL 1 (110) General Light Industrial

Project: Microbrewery and Tap Room

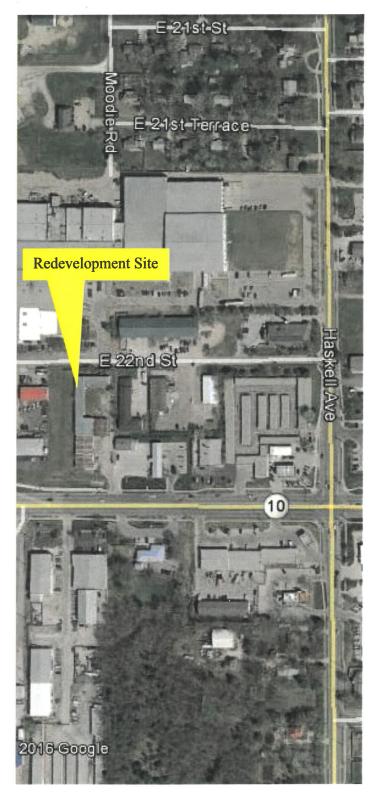
Phase: General Light Industry

Description: 706 E. 23rd Street, Lawrence, KS

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq	Equation	R2
Weekday Average Daily Trips	35	0	6.97	1.58	16.88	4.24	203	50	50	False	T = 7.47(X) - 101.92	0.81
Weekday AM Peak Hour of Generator	5	0	1.01	0.27	4	1.1	358	90	10	False	T = 1.18(X) - 60.80	0.92
Weekday AM Peak Hour of Adjacent Street Traffic	5	0	0.92	0.17	4	1.07	336	88	12	False	T = 1.18(X) - 89.28	0.92
Weekday PM Peak Hour of Generator	5	0	1.08	0.36	4.5	1.18	364	14	86	False	T = 1.42(X) - 125.20	0.89
Weekday PM Peak Hour of Adjacent Street Traffic	5	0	0.97	0.08	4.5	1.16	345	12	88	False	T = 1.43(X) - 157.36	0.88
Saturday Average Daily Trips	7	0	1.32	0.69	5.78	1.48	351	50	50	False	T = 0.85(X) + 163.06	0.6
Saturday Peak Hour of Generator	1	0	0.14	0.08	0.94	0.41	410	47	53	False		
Sunday Average Daily Trips	3	0	0.68	0.28	5	1.14	486	50	50	False		
Sunday Peak Hour of Generator	1	0	0.1	0.05	0.69	0.33	486	48	52	False		

Detailed Land Use Data For 3.68 Gross Floor Area 1000 SF of BAR 1 (925) Drinking Place

Phase:	Microbrewery and Tap Roc Drinking Place 706 E. 23rd Street, Lawren											•	/18/2016 /18/2016
Day / Period		Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% _Enter_	% Xit	Use Eq.	Equation	R2
Weekday PM Peak	Hour of Generator	57	0	15.49	3.73	29.98	8.63	3	68	32	False		
Weekday PM Peak	Hour of Adjacent Street Traffic	42	0	11.34	3.73	29.98	8.04	4	66	34	False		



Basic Traffic Impact Study

for

Microbrewery and Tap Room

706 E. 23rd Street Lawrence, Kansas

Prepared for Grob Engineering Services, LLC

Prepared By MGineering Solutions Serving Communities Through Excellence Kansas - Missouri - Michigan - California MAD G/L CENS CONSCIENT 44522 MAL COMPANY MAL COM

Mehrdad Givechi, P.E., P.T.O.E.

August 2016

Background

Per the requirements of City of Lawrence Ordinance #7650, a Traffic Impact Data (TID) report was prepared for the proposed *Microbrewery and Tap Room* redevelopment on 6/20/16. Because one of the proposed access drives to the redevelopment site is on the State Highway K-10 (E. 23rd Street), KDOT staff has requested that a Basic Traffic Impact Study (BTIS) be conducted to assess the impact on the subject access drive. This document is prepared as an addendum to the TID to fulfill KDOT's Access Management Policy requirements for this redevelopment.

Proposed Development Plan

- <u>Location Description</u> The proposed Microbrewery and Tap Room redevelopment is located at 706 E. 23rd Street, Lawrence, Kansas, in Douglas County, KDOT District 1, Area 2 (See Location Map, Figure 1 of Appendix I);
- <u>Land Use</u> The site is currently occupied by abandoned buildings. Under the proposed redevelopment plan, as shown on the Site Plan (Figure 2 of Appendix I), the site will be reconfigured to provide for
 - A restaurant / tap room with a total floor area of approximately 3,680 sq. ft.
 (kitchen = 1,080 sq. ft.; indoor seating = 1,350 sq. ft.; and outdoor patio = 1,250 sq. ft.);
 - A microbrewery (manufacturing and production) area of approximately 5,000 sq. ft.; and
 - A new parking lot on the west side of the site with a new access drive onto
 E. 22nd Street, while still maintaining the existing shared driveway on E.
 23rd Street.
- <u>Zoning</u> The site is currently zoned as IG (General Industrial). The proposed zoning will be CS (Commercial Strip). According to the City's Horizon 2020 (Map 3-2), the designated land use for this site is "Office Research and/or Industrial/Warehouse/Distribution".
- <u>Access (Existing and Proposed)</u> The site is currently served by a shared driveway on E. 23rd Street that also provides access to the two adjoining businesses to the east – namely, *Solar Concepts Window Tilting* and *Wash Me*

Carwash. This driveway serves as <u>ingress only</u> for the carwash and as <u>ingress/egress</u> for the other business. The <u>egress</u> for the carwash is located approximately 165 ft. (CL to CL) to the east of the project access.

Access to the proposed redevelopment site, as illustrated on the Site Plan (Figure 2 of Appendix I), will be provided at two locations:

- The existing access on E. 23rd Street will remain in place as a shared driveway. This access is approximately 655 ft. (CL to CL) west of Haskell Avenue.
- A new full-access drive on the northwest corner of the site on E. 22nd
 Street, near the west property line, approximately 810 ft. (CL to CL) west of Haskell Avenue.

Highway and Area Street Characteristics

In the vicinity of the project site

- <u>KDOT Approved Functional Classification</u> E. 23rd Street is designated as "Other Principal Arterials"
- <u>National Highway System</u> E. 23rd Street is on the National Highway System
- <u>KDOT Access Route Classification</u> E. 23rd Street is classified as "Class B" highway because it is on the National Highway System.
- <u>KDOT Access Control Classification</u> E. 23rd Street is designated as "Full Access Control".
- <u>Posted Speed Limit</u> E. 23rd Street is a 45 mph facility. (Note: In the previously submitted TID report, the posted speed limit was inadvertently listed as 35 mph. The 35 mph zone starts ¼ mile west of the project site.)
- <u>On-Street Parking</u> Parking prohibited on both sides of E. 23rd Street.
- <u>Type of Area</u> This site is located within the city limits of Lawrence, Kansas in a developed area.
- <u>Roadway Characteristics</u> E. 23rd Street is a 4-lane divided roadway with a Two-Way Left-Turn Lane (TWLTL) that runs east/west along the south side of the

project site and has a 64 ft. wide asphalt pavement (EOP to EOP) with curb/gutter sections.

- <u>Existing Transportation System Plan</u> This site is not located in a planned corridor.
- <u>E. 22nd Street</u> A 2-lane, dead-end roadway that runs east/west along the north side of the project site and has a 22 ft. wide asphalt pavement (EOP to EOP) with open drainage ditches on both sides. Speed limit is not posted (statutory speed limit is 30 mph)
- <u>Haskell Avenue</u> A 2-lane roadway that runs north/south approximately 660 ft. east of the project site, and has a 27 ft. wide asphalt pavement (EOP to EOP) with curb/gutter sections. The posted speed limit is 30 mph and 35 mph north and south of E. 23rd Street, respectively, with on-street parking prohibited on both sides.
- <u>The intersection of E. 23rd Street and Haskell Avenue</u> A fully-actuated signalized intersection with camera detection and "protected/permissive" left-turn phasing for north/south approaches and "protected only" left-turn phasing for east/west approaches.
 - East/west approach, each has two through lanes, a dedicated leftturn lane with storage length of approximately 145 ft. (part of the TWLTL), and no dedicated right-turn lane. There is a near-side bus stop for both westbound and eastbound movements on E. 23rd Street.
 - North approach has one through lane, one dedicated left-turn lane with storage length of approximately 170 ft., and one dedicated right-turn lane with storage length of approximately160 ft.
 - South approach has one through lane, one dedicated left-turn lane and one dedicated right-turn lane, each with storage length of approximately 95 ft.
- <u>The intersection of Haskell Avenue and E. 22nd Street</u> A "T" intersection controlled by stop sign on E. 22nd Street. Each approach has a single lane.

Existing Traffic Condition plus Site Generated Traffic

- <u>Existing Traffic Volumes</u> The most recent turning movement counts for the intersection of E. 23rd Street and Haskell Avenue (obtained from city records dated February 18, 2016) indicate that the peak characteristics of traffic in the study area are as follows (See Appendix II and Figures 3 and 4 of Appendix I for details)
 - On a typical weekday, the morning peak occurs between 7:15 and 8:15 resulting in the following:
 - E. 23rd Street (K-10) carrying peak-hour volumes of approximately 2,280 vph (west of Haskell Avenue) with directional distribution of approximately 54% 46% (westbound eastbound); and 2,350 vph (east of Haskell Avenue) with directional distribution of approximately 46% 54% (westbound eastbound).
 - Haskell Avenue carrying peak-hour volumes of approximately 910 vph (north of E. 23rd Street) with directional distribution of approximately 50% 50% (northbound southbound); and 990 vph (south of E. 23rd Street) with directional distribution of approximately 70% 30% (northbound southbound).
 - On a typical weekday, the afternoon peak occurs between 4:45 and 5:45 resulting in the following:
 - E. 23rd Street (K-10) carrying peak-hour volumes of approximately 2,520 vph (west of Haskell Avenue) with directional distribution of approximately 54% 46% (westbound eastbound); and 2,670 vph (east of Haskell Avenue) with directional distribution of approximately 51% 49% (westbound eastbound).
 - Haskell Avenue carrying peak-hour volumes of approximately 1,090 vph (north of E. 23rd Street) with directional distribution of approximately 40% 60% (northbound southbound); and 1,130 vph (south of E. 23rd Street) with directional distribution of approximately 45% 55% (northbound southbound).

- The intersection of E. 23rd Street (K-10) and Haskell Avenue carries approximately 3,260 vph and 3,700 vph during the morning and afternoon peak-hours, respectively.
- Driveway volume counts were also conducted at the existing shared driveway on E. 23rd Street (project access drive) during the peak-hours of a typical weekday from 7:00 to 9:00 and 4:00 to 6:00 on 8/4/2016. Results, as summarized in Appendix II and shown in Figures 3 and 4 of Appendix I, indicate that driveway volumes during the critical peak-period (afternoon peak-hour of a typical weekday) are 16 vph (13 inbound and 3 outbound).
- <u>ITE Trip Generation (9th Edition)</u> For this analysis, ITE Land Use Codes that are most similar to the proposed uses were examined and the scenario that generated most trip numbers was selected.
 - For the Tap Room/Bar area (3,680 sq. ft.), ITE Codes 925 (Drinking Place) and 932 (High-Turnover Sit-Down Restaurant) with "gross floor area" as independent variable were examined.
 - For the Microbrewery area with 5,000 sq. ft., ITE Codes 110 (General Light Industrial) and 140 (Manufacturing) with "gross floor area" as independent variable were examined.

The results, as summarized in Appendix III, indicate that, <u>under the worst case</u> <u>scenario</u>, total number of <u>unadjusted trips (combined "new" and "pass-by")</u> likely to be generated by the proposed redevelopment, on a typical weekday, will be:

- On average, 5 trip-ends (4 inbound and 1 outbound) during the morning peak-hour of <u>adjacent street network</u>;
- On average, 54 trip-ends (30 inbound and 24 outbound) during the morning peak-hour of <u>generator</u>, and
- On average, 47 trip-ends (29 inbound and 18 outbound) during the afternoon peak-hour of <u>adjacent street network</u>; and
- On average, 73 trip-ends (38 inbound and 35 outbound) during the afternoon peak-hour of <u>generator</u>.
- On average, 503 trip-ends during a 24-hour period.

These trip generation numbers represent total vehicles entering and exiting the site at its proposed driveways. Because the proposed redevelopment is a retailoriented development, it attracts a portion of its trips from the traffic passing the site on the way from origin to an ultimate destination. These retail trips are called "pass-by" trips and do not add new traffic to the adjacent street network. The remaining trips are "new" trips added to the adjacent street network. For the purpose of this report <u>zero</u> pass-by trips are assumed.

<u>Trip Distribution/Assignment</u> – It is assumed that distribution of the site-generated traffic, at its two access points, will be proportionate to the volumes on E. 23rd Street and Haskell Avenue – 70% using the driveway on E. 23rd Street and 30% using the driveway on E. 22nd Street. It is further assumed that directional distribution of the site-generated traffic at its driveway location on E. 23rd Street will follow the existing directional distribution patterns on E. 23rd Street – 54% to/from east and 46% to/from west.

Using these distribution patterns and the ITE's suggested ingress/egress distribution factors, the site generated traffic at its proposed driveway locations will be as follows:

- Afternoon peak-hour of the generator
 - 14 vph westbound right-turn (inbound off of E. 23rd Street)
 - 12 vph eastbound left-turn (inbound off of E. 23rd Street)
 - 12 vph westbound left-turn (inbound off of E. 22nd Street)
 - 13 vph southbound left-turn (outbound onto E. 23rd Street)
 - 11 vph southbound right-turn (outbound onto E. 23rd Street)
 - 11 vph northbound right-turn (outbound onto E. 22nd Street)
- Afternoon peak-hour of adjacent street network
 - 11 vph westbound right-turn (inbound off of E. 23rd Street)
 - 9 vph eastbound left-turn (inbound off of E. 23rd Street)
 - 9 vph westbound left-turn (inbound off of E. 22nd Street)
 - 7 vph southbound left-turn (outbound onto E. 23rd Street)
 - 6 vph southbound right-turn (outbound onto E. 23rd Street)
 - 5 vph northbound right-turn (outbound onto E. 22nd Street)

- o 24-Hour period
 - 352 vpd using driveway on E. 23rd Street
 - 151 vpd using driveway on E. 22nd Street
- <u>Design Vehicle</u> The design vehicle is a passenger car. There will be occasional delivery truck (WB-40), which will enter the site from E. 23rd Street and exit onto E. 22nd Street. The swept paths for the delivery truck are illustrated in Figures 5 and 6 of Appendix I.

Proposed Site Access Characteristics

- <u>Access Type</u> Using the estimated driveway volumes (existing + project), the access on E. 23rd Street will be of KDOT's Type 5 because it will likely carry less than 50 vph and between 50 and 499 vpd.
- <u>Shared Access</u> The proposed access drive on E. 23rd Street is a shared access.
- <u>Access Width and Radii</u> The existing access on E. 23rd Street is 38 ft. wide with no curb/gutter section on the west side and a curb section on the east side. Under the proposed redevelopment plan, a new curb/gutter section will be constructed along the west side of the driveway with 20 ft. radius. The width of the new driveway will be 36 ft. The eastern portion of the driveway is on the adjacent property under a separate ownership.
- <u>Access Surfacing</u> The western portion of the existing driveway on E. 23rd Street is currently constructed with asphalt. The remaining portion is concrete. Under the proposed redevelopment plan, the asphalt portion will be replaced with 8-inch thick concrete in compliance with the policy.
- <u>Drainage Method and Material</u> Access on E. 23rd Street will be designed to drain from the right-of-way line to the street, thence to the existing curb inlet downstream.
- <u>Adjacent Access Spacing</u> The first upstream access (on the same side of E. 23rd Street) is the <u>egress only</u> for the carwash and is located approximately 165 ft. (CL to CL) from the project access. The first downstream access (on the same

side) is Learnard Avenue located ¹/₄ mile from the project access. The recommended access spacing per KDOT AMP (Table 4-6) is 450 ft.

The nearest driveway on the opposite side of E. 23rd Street is located to the east of the project access with a slight offset of approximately 20 ft. with no conflicting left-turn movement. The recommended access offset distance per KDOT AMP (Table 4-9) is 275 ft.

- The new access drive on E. 22nd Street will be 21 ft. wide with curb/gutter sections, concrete apron, and 15 ft. radius on the west side and 25 ft. radius on the east side.
- <u>Intersection Influence Area</u> The nearest intersections (with public streets) are Haskell Avenue (signalized) approximately 655 ft. to the east; and Learnard Avenue approximately ¼ mile to the west. No overlap between upstream and downstream influence areas of these two intersections is anticipated.
- <u>Sight Distance</u> The project access drive on E. 23rd Street is near the low point of a vertical curve with approach downgrade of approximately 3%. The required stopping sight distance per KDOT AMP (Table 4-12) is 378 ft. Field measurements indicate that the available stopping sight distance is greater than 1,000 ft.

The required intersection sight distance per KDOT AMP (Table 4-14) for a passenger car is 530 ft. (for left-turn out) and 430 ft. (for right-turn out). Field measurements indicate that the available intersection sight distance is greater than 1,000 ft. both upstream and downstream of the project access.

<u>Auxiliary Lane</u> – Currently there is a two-way left-turn lane on E. 23rd Street. A dedicated westbound right-turn lane on E. 23rd Street at the project access point is not warranted

Critical peak-hour = Afternoon peak-hour of adjacent street network Advance volume (westbound on E. 23rd Street) = 1347 vph Posted speed limit = 45 mph Westbound right-turn volume (existing + project) = 6+11 = 17 vph < 18 vph (per KDOT AMP, Table 4-26)

Recommendations

The recommended access spacing for an Access Route Class B in a developed area with 45 mph speed limit is 450 ft. (on the same side) and 275 ft. (on the opposite side). The spacing of the project access drive does not meet these KDOT AMP requirements. Given the fact that the project access drive on E. 23rd Street is a shared driveway with eastern half owned by another entity and other constraints, relocation of the project access drive is not feasible.

As part of the proposed redevelopment plan, however, this project driveway on E. 23rd Street will be improved to have a 36 ft. wide throat with curb/gutter sections (on the east side that is under ownership of the project applicant), 20 ft. radius and 8" thick concrete that replaces the existing asphalt.

APPENDIX I

Figures

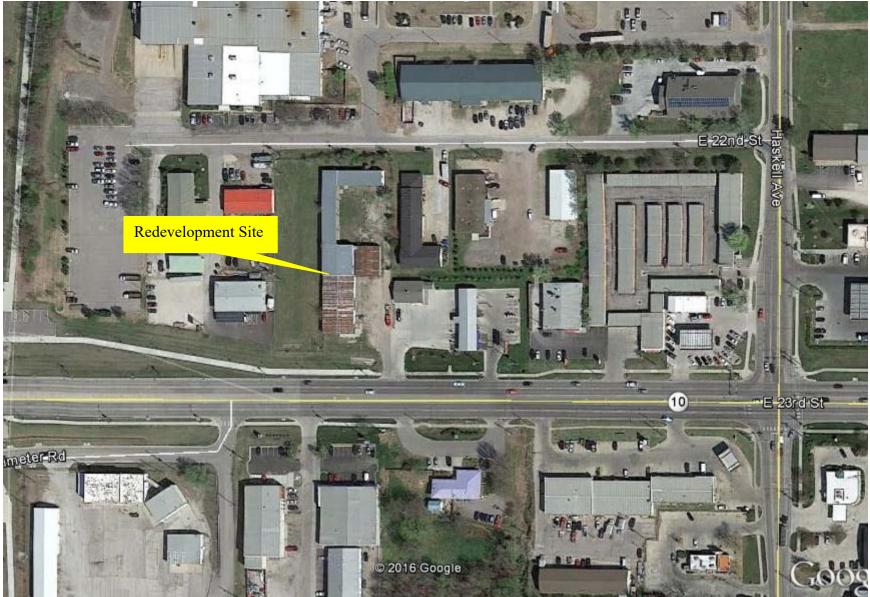
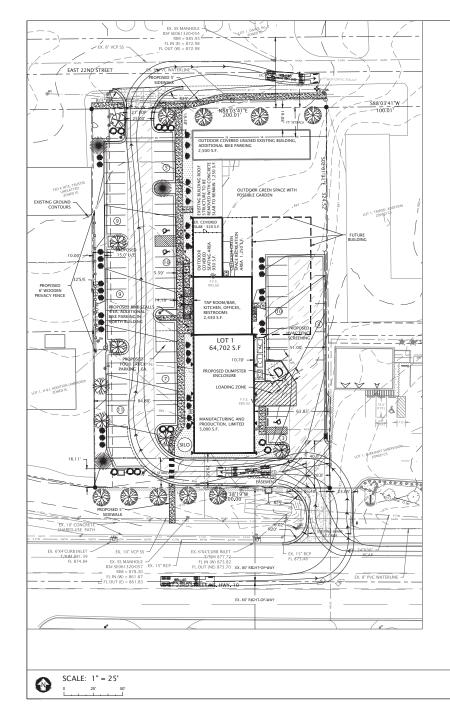


Figure 1 Location Map



|--|

IMPERVIOUS SURFACE SUMMARY									
Existing Summary	AREA (SQ	į. FT.)	Summary After Project Completion		AREA (SQ. FT.)				
Existing Building	14,78	0	Proposed Buil	dings	11,390				
Existing Pavement	47,45	i2	Proposed Pave	ement	33,687				
Existing Impervious	62,23	2	Proposed Impe	rvious	45,077				
Existing Pervious	2,470	0	Proposed Per	vious	19,625				
Property Area	64,70	12			64,702				
BUILDING COVER IMPERVIOUS LOT CO			BUILDING COVERAGE 17.6% IMPERVIOUS LOT COVERAGE 69.7%						
	PARK	ING S	UMMARY						
PARKING REOUIRE	MENT	#	OF UNITS PARKING REQUIRED						

1 PER 3 PERSONS MAXIMUM OCC. PLUS 1 PER EMPLOYEE	162 OCC. 5 EMPLOYEES	59 SPACES
MANUFACTURING AND PRODUCTION, LIMITED 1 PER 1000 SF PLUS 1 PER VEHICLE USED	5,000 S.F. 3 VEHICLES	8 SPACES
PERMANENT FOOD TRUCK	1 VEHICLE	1 SPACE
PARKING PROVIDED		
TOTAL PARKING SPACES	67	
STANDARD SPACES	64	

3 (1 VAN)

ADA HANDICAP SPACES

FOOE	TRUCK 1	8'x30'	1							
		LANDSC	APING SCHEDULI	E						
SYMBOL	QUANT.		NAME		SIZE & COND					
⊙寮	0	EX. CONIF	EX. CONIFEROUS/DECIDUOUS TREES							
*	9	LARGE C SHUMARD C MAPLE,	STREET TREES - 1 PER 40' OF FRONTAGE LARGE CANOPY - LACEBARK ELM, SHUMARD OAK, SUMMERSHADE NORWAY MAPLE, GREENSPIRE LINDEN, OR APPROVED EQUAL (2 SPECIES MIN.)							
⊛	1	GOLDENRA	MEDIUM CANOPY - SHANTUNG MAPLE, GOLDENRAINTREE, CHICKAPIN OAK OR APPROVED EQUAL							
& &	4+1*	1 TREE PER	PERIMETER LANDSCAPING REQUIREMENT 1 TREE PER 25' OF PARKING LOT PLUS CONTIN. ROW OF EVERGREEN SHRUBS * DENOTES COUNTED AS STREET TREES							
*	1+1	LACEBAR SUMMER BOSNIAI	2.5" CAL - B&B 5 GAL - CONT.							
0	12	DWARF BUF SPIRE/	2 GAL.							
		PARKING SHADE TRE (67 STAL SHRUBS) ISLANDS, C AND BET	ANDSCAPING REQUIREM LOTS - 40 S.F. PER STALL E & 3 SHRUBS PER 10 ST LS - 2680 S.F./7 TREES/ AREAS PROVIDED AT EN EENTER ISLANDS; PLANT WEEN FENCE AND PARKI WEEN FENCE AND PARKI SCCEED 3.450 S.F.	L, 1 ALLS 21 VD TERS						
*	5+2	SUMMER GREENSPIE LIMBER	RK ELM, SHUMARD OAK SSHADE NORWAY MAPLI SE LINDEN + BOSNIAN P PINE, WHITE SPRUCE OF APPROVED EQUAL	É, INE,	2.5" CAL - B&B					
* *	21 + 16	SPIREA, KNO OR AF MAINTEN/ PAMPAS GR GRASS, WITI	RNING BUSH, MAGIC CAI DCK-OUT ROSES, BLUE H PROVED EQUAL + LOW NNCE GRASSES - BLUESTI ASS, MAIDEN GRASS, IN A MATURE SPREAD OF B' OR APPROVED EQUAL	EM, DIAN	2 GAL.					
			PE AREAS - MULCH, RIV EL OR OTHER GROUND TREATMENT	ER						
			ED AREAS SHALL BE PLA 1TH TURF GRASSES	NTED						

BUFFERYARD LANDSCAPING REQ.

CS TO IG ZONING - TYPE 1 - 10' TO >25'

REDVELOPMENT FROM IC TO CS TO ALLOW FOR SPECIFIC USS. THIS PROPERTY HAS SIMILAR CHARACTERISTICS TO THE ADJACENT IG ZONED PROPERTIS. THE WEST PROPERTY LINE HAS BEEN LANDSCAPED WITH A TREES, 14 SHRUBS, AND 120 LF. OF 6 FOOT WOODEN PRIVACY FENCE IN ADDITION TO THE EXISTING CHARLINK FENCE TO ACT AS A BUFFERVARD. AS THE INTERN OF A BUFFERVARD HAS BEEN STABLISHED, NO ADDITIONAL BUFFERVARD.

PAVING SCHEDULE

NATE COMPLIANCE - THE PROPERTY WAS REZONED FOR THIS ENT FROM IG TO CS TO ALLOW FOR SPECIFIC USES. THIS PROPERTY

NAME

4" CONCRETE PAVING FOR SIDEWALKS

5.5" ASPHALT PAVING

7" ASPHALT PAVING

8" CONCRETE PAVING CITY SPEC. FOR APPROV

ALTER

SYMBOL

Lawrence Brothers, LLC 879 N 200 Road Baldwin City, Kansas 66006 Johnston Investments Comp Contract Purchase 10745 S. Oakcrest Lane Olathe, Kansas 66061 Grob Engineering Service 3210 Mesa Way, Suite A Lawrence, Kansas 66049 All Points Surveying, LP Land Planner/Engineer Surveyor: Levence, Kansa 66049 Levence, Kansa 66045 Levence, Kansa 6604 14. Exterior ground-mounted or building-mounted equipment including, but not limited to, mechanical equipment, utility boxes and meters, shall be fully screened from view of adjacet properties and solution with the Manual on Unform Traffic Control Devices' and Standard the providence of the federal Highway Administration, with respect to size, shape, color, retro-reflectivity, and position. Per Ordinance ho. 7542. PROJECT BENCH MARK: HARN DG4 JOUGLAS COUNTY PUBLIC NORTHING 233,503.53 FASTING 2,100,788.90 ELEVATION = 862.21 FT CHISELED SQUARE IN THE NW CORNER OF CONCRETE STORMWATER INLET IN THE WEST OF ENTRANCE TO PROPERTY ON 23RD STREET, ELEVATION = 877.79. LOCATION MAP E 21 # 58 E 211 PROJECT 21st Pl 22nd 58 1018 Ave SCALE 1"=1000"

GENERAL NOTES

Indian Ada

Ave (P)

LEGAL DESCRIPTION LOT 1, JOINSTON ADDITION, LOCATED IN THE SOUTHEAST QUARTER OF SECTION 6, TOWNSHIP 13 SOUTH, RANCE 20 EAST OF THE SXTH PRINCIPAL MERIDIAN, IN

OHW OHW	OVERHEAD WIRE	- 61	SANITARY SEWER MANHOLE	8/8	BACK OF CURB/BACK OF CURB
- OHE	OVERHEAD ELECTRICAL	*	STORM MANHOLE	ROW	RICHT-OF-WAY
UCTUCT	UNDERGROUND TELEPHONE	ŵ.	STORM DRAIN	C/L	CENTERLINE
GASGAS	GAS	é.	GUY ANCHOR	D/E	DRAINAGE EASEMENT
_ w w	WATERLINE	ò	UTILITY POLE	U/E	UTILITY EASEMENT
SAN SAN	SANITARY SEWER LINE	e	WATER METER	97	PLATTED
_ 55 55	SANITARY SEWER SERVICE	- e	WATER VALVE	040	MEASURED
STN STN	STORMWATER LINE	6	FIRE HYDRANT	0	CALCULATED
	BUILDING SETBACK LINE	۰	TRAFFIC SIGNAL STR.		PROPERTY CORNER
· · — · — · —	SECTION LINE	6'	GAS VALVE	<u>۲</u>	PROPERTY CONNER
	PAVEMENT/SURFACING	÷.	GAS METER		
	PROPERTY LINE	ø''	LIGHT POLE		
	EASEMENT	-	SIGN		
	RIGHT-OF-WAY ACCESS RESTRICTED	6	ELECTRIC BOX CABLE TV BOX		
OTE: "X" IN UTILITY DENOTES EX	ISTING FEATURE		CHILL IT BUX		

Ы E 25th S Willow



SPECIAL USE PERMIT SITE PLAN for MICROBREWERY AND **TAP ROOM**

THIS DOCUMENT IS FOR PLANNING PURPOSES ONLY

NOT FOR CONSTRUCTION

rence, Kansas 66 Kansas 66044 \mathbf{O} RING S, LLC Mesa Way, Suite A * Lawr P.O. Box 502 * Lawrence, Phone 785 856-1000 * Fax LOB GINEER RVICES $\bowtie Z$ 210 SШS THIS DRAWING IS COPYRIGHTED WORK BY GROB ENGINEERING SERVICES, LIC. THIS DRAWING MAY NOT EE PHOTOGRAPHED, TRACED, OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF GROB ENGINEERING SERVICES, LLC

ROOM E PLAN F TAP SPECIAL USE PERMIT SITE PLAI MICROBREWERY AND TAI 706 E. 23RD STREET LAWRENCE, KANSAS

DESIGNED BY JDG

CHECKED BY

JDG

ISSUE DATE

JUNE 20, 2016

REVISIONS

JULY 29, 2016

AUGUST 8, 2016

SHEET

1

1

FIGURE 3

EXISTING CONDITIONS MORNING PEAK-HOUR

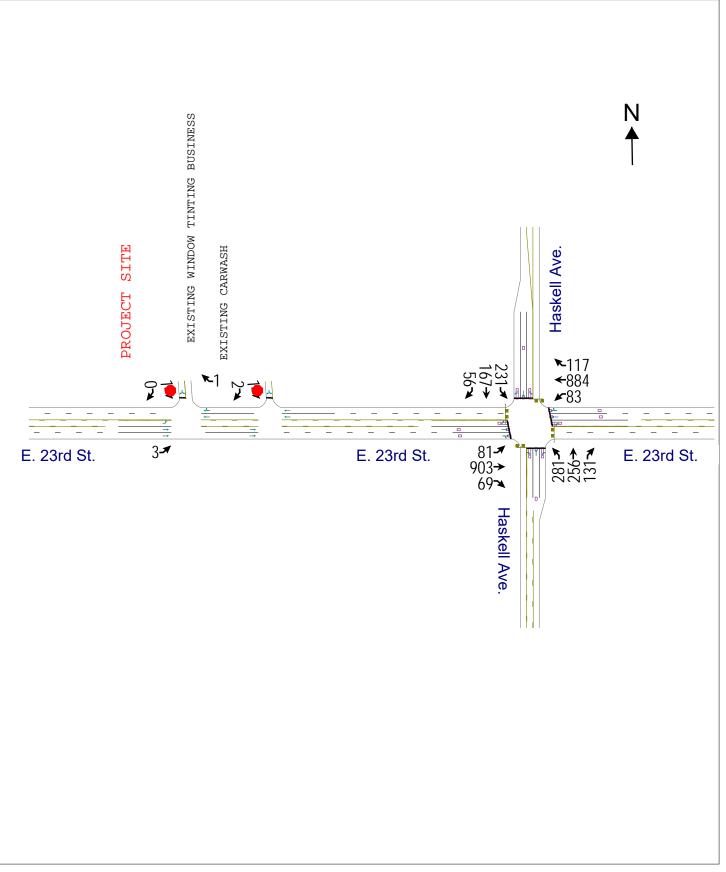
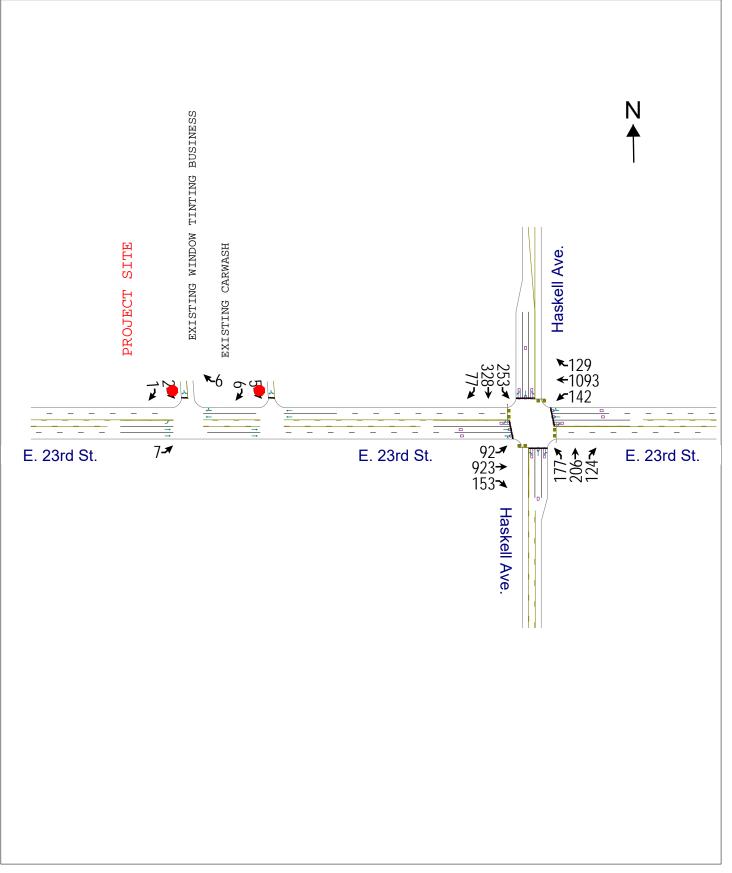
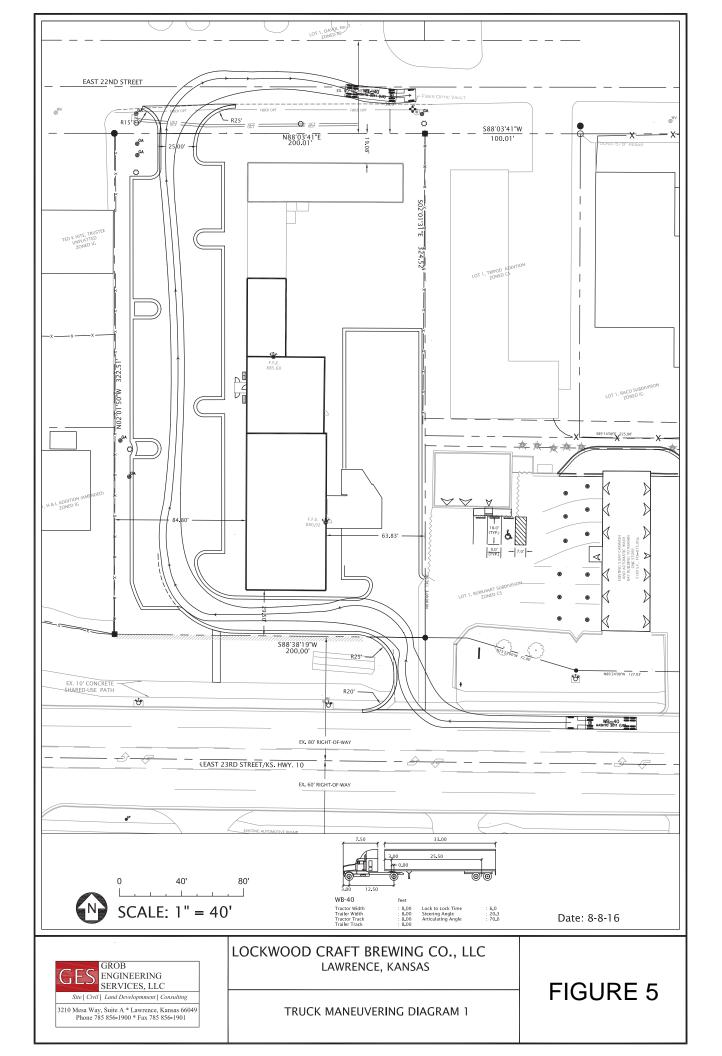
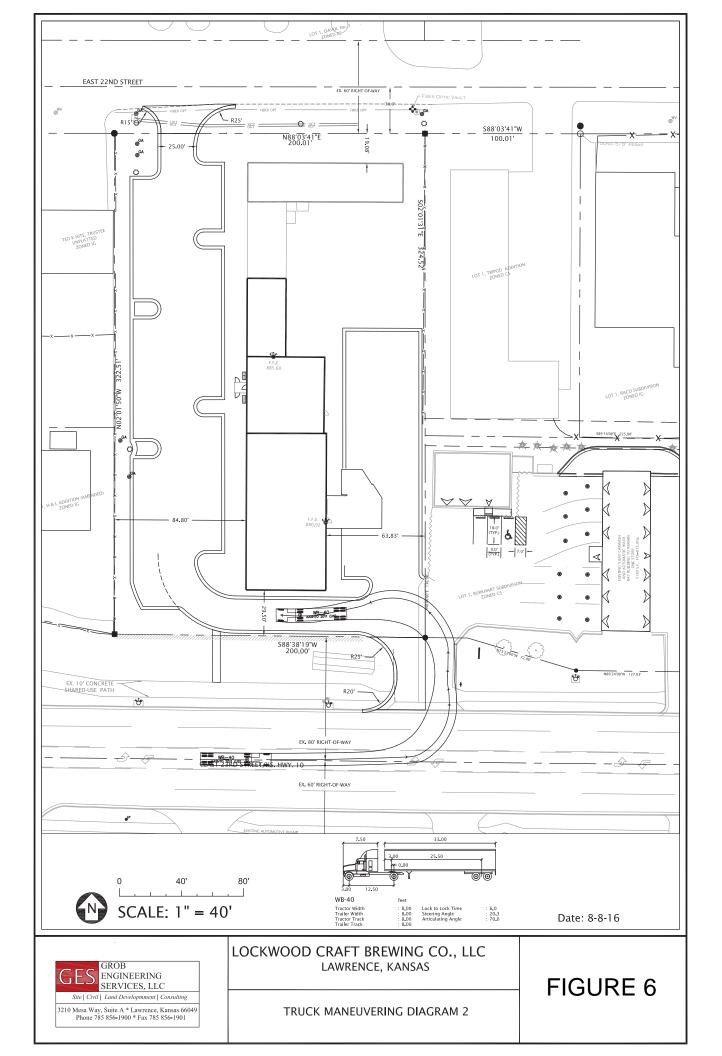


FIGURE 4







APPENDIX II

Summary of Traffic Counts

PEAK AM Count

Sig	gnal	Count AM	Begin	Peak	S	outh Boun	ld	V	Vest Boun	d	N	lorth Boun	d	E	East Bound	b
Loc	ation	Date	Peak	Volume	Right Thru Left		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
STREET1	STREET2			TOTAL	SBRT	<mark>SBTHRU</mark>	SBLT	WBRT	WBTHRU	WBLT	NBRT	<mark>NBTHRU</mark>	NBLT	EBRT	EBTHRU	EBLT
23 rd St.	Haskell Rd.	18-Feb-16	7:15	3259	56	167	231	117	884	83	131	256	281	69	903	81

PEAK PM Count

Sig	gnal	Count PM	Begin	Peak	S	outh Boun	d	V	Vest Boun	d	Ν	lorth Boun	d	I	East Bound	d
Loc	ation	Date	Peak	Volume	Right	Right Thru Left I		Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
STREET1	STREET2			TOTAL	SBRT	SBTHRU	SBLT	WBRT	WBTHRU	WBLT	NBRT	NBTHRU	NBLT	EBRT	EBTHRU	EBLT
23 rd St.	Haskell Rd.	18-Feb-16	16:45	3697	77	328	253	129	1093	142	124	206	177	153	923	92

Source: City Public Works Department, Traffic Division

Summary of Vehicular Turning Movement Counts

Project Access Afternoon Peak-Hours Sunny, Hot File Name : 706 E. 23rd Brewery-epm Site Code : 1 Start Date : 8/4/2016 Page No : 1

									Grou	ps Printed	- Unshift	ed									
			oject Aco					23rd Str										23rd Stro			
			rom Nor					rom Eas					om Sou				F	rom Wes			
Start Time	R-out	Thru	L-out	Peds	App. Total	R-in	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	L-in	Peds	App. Total	Int. Total
04:00 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2	0	2	4
04:15 PM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	4	0	4	7
04:30 PM	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	4
04:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	2	0	3	6	0	0	0	6	0	0	0	0	0	0	0	7	0	7	16
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
05:30 PM	1	0	0	0	1	2	0	0	0	2	0	0	0	0	0	0	0	2	0	2	5
05:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	1	3
Total	1	0	1	0	2	4	0	0	0	4	0	0	0	0	0	0	0	7	0	7	13
Grand Total	2	0	3	0	5	10	0	0	0	10	0	0	0	0	0	0	0	14	0	14	29
Apprch %	40	0	60	0	5	100	0	0	0	10	0	0	0	0	0	0	0	14	0	14	27
Total %	6.9	0	10.3	0	17.2	34.5	0	0	0	34.5	0	0	0	0	0	0	0	48.3	0	48.3	

Summary of Vehicular Turning Movement Counts

Project Access Afternoon Peak-Hours Sunny, Hot File Name : 706 E. 23rd Brewery-epm Site Code : 1 Start Date : 8/4/2016 Page No : 2

		Pr	oject Ac	cess			E.	23rd St	reet								E	. 23rd St	reet]
		I	rom No	rth				From Ea	st			F	From So	uth				From We	est		
Start Time						Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	L-in	Peds	App. Total	Int.	
ak Hour Analysis Fr	alysis From 04:00 PM to 05:45 PM - Peak 1 of 1					I															
eak Hour for Ea	ch Appro	ach Beg	jins at:																		
	04:00 PI	М				04:00 P	M				04:00 P	М				04:00 P	М]
+0 mins.	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	2	0	2	
+15 mins.	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	4	0	4	
20 minc		٥	1	٥		1	0	٥	0	1	0	٥	٥	٥	0	0	٥	1	0	1	

	+15 mins.	U	U	U	U	U	3	0	0	0	3	0	0	0	0	0	0	0	4	0	4
	+30 mins.	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
	+45 mins.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
_	Total Volume	1	0	2	0	3	6	0	0	0	6	0	0	0	0	0	0	0	7	0	7
	% App. Total	33.3	0	66.7	0		100	0	0	0		0	0	0	0		0	0	100	0	
	PHF	.250	.000	.500	.000	.375	.500	.000	.000	.000	.500	.000	.000	.000	.000	.000	.000	.000	.438	.000	.438

APPENDIX III

Results of Trip Generation Analysis Using ITE Trip Generation Manual, 9th Edition

Detailed Land Use Data For 3.68 Gross Floor Area 1000 SF of RESTAURANTHT 1 (932) High-Turnover (Sit-Down) Restaurant

Project: Microbrewery and Tap Room

Phase: Restaurant

Description: 706 E. 23rd Street, Lawrence, KS

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	468	0	127.15	73.51	246	41.77	7	50	50	False		
Weekday AM Peak Hour of Generator	49	0	13.33	3	54.09	9.44	7	53	47	False		
Weekday AM Peak Hour of Adjacent Street Traffic	40	0	10.81	2.32	25.6	6.59	6	55	45	False		
Weekday PM Peak Hour of Generator	68	0	18.49	5.6	69.2	13.32	5	54	46	False		
Weekday PM Peak Hour of Adjacent Street Traffic	36	0	9.85	0.92	62	8.54	6	60	40	False		
Saturday Average Daily Trips	583	0	158.37	144.6	172.71		5	50	50	False		
Saturday Peak Hour of Generator	52	0	14.07	4.44	50.4	12.19	4	53	47	False		
Sunday Average Daily Trips	485	0	131.84	119.38	143.8		5	50	50	False		
Sunday Peak Hour of Generator	68	0	18.46	9.79	43.2	13.74	4	55	45	False		

Detailed Land Use Data For 5 Gross Floor Area 1000 SF of MANUFACTURING 1 (140) Manufacturing

Project: Microbrewery and Tap Room

Phase: Manufacturing

Description: 706 E. 23rd Street, Lawrence, KS

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% _Enter	% Exit	Use Eq.	Equation	R2
Weekday Average Daily Trips	19	0	3.82	0.5	52.05	3.07	349	50	50	False	T = 3.88(X) - 20.70	0.87
Weekday AM Peak Hour of Generator	4	0	0.79	0.1	8.75	1.02	363	68	32	False	T = 0.83(X) - 14.26	0.81
Weekday AM Peak Hour of Adjacent Street Traffic	4	0	0.73	0.1	8.75	1.04	293	78	22	False	T = 0.83(X) - 29.52	0.67
Weekday PM Peak Hour of Generator	4	0	0.75	0.09	7.85	0.98	370	52	48	False	T = 0.76(X) - 5.15	0.83
Weekday PM Peak Hour of Adjacent Street Traffic	4	0	0.73	0.07	7.85	1.01	318	36	64	False	T = 0.78(X) - 15.97	0.75
Saturday Average Daily Trips	7	0	1.49	0.88	6.42		483	50	50	False		
Saturday Peak Hour of Generator	1	0	0.28	0.2	0.94		483	50	50	False		
Sunday Average Daily Trips	3	0	0.62	0.07	5.09		483	50	50	False		
Sunday Peak Hour of Generator	0	0	0.09	0.01	0.75		483	50	50	False		

Detailed Land Use Data For 5 Gross Floor Area 1000 SF of GINDUSTRIAL 1 (110) General Light Industrial

Project: Microbrewery and Tap Room

Phase: General Light Industry

Description: 706 E. 23rd Street, Lawrence, KS

Day / Period	Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% Enter	% Exit	Use Eq	Equation	R2
Weekday Average Daily Trips	35	0	6.97	1.58	16.88	4.24	203	50	50	False	T = 7.47(X) - 101.92	0.81
Weekday AM Peak Hour of Generator	5	0	1.01	0.27	4	1.1	358	90	10	False	T = 1.18(X) - 60.80	0.92
Weekday AM Peak Hour of Adjacent Street Traffic	5	0	0.92	0.17	4	1.07	336	88	12	False	T = 1.18(X) - 89.28	0.92
Weekday PM Peak Hour of Generator	5	0	1.08	0.36	4.5	1.18	364	14	86	False	T = 1.42(X) - 125.20	0.89
Weekday PM Peak Hour of Adjacent Street Traffic	5	0	0.97	0.08	4.5	1.16	345	12	88	False	T = 1.43(X) - 157.36	0.88
Saturday Average Daily Trips	7	0	1.32	0.69	5.78	1.48	351	50	50	False	T = 0.85(X) + 163.06	0.6
Saturday Peak Hour of Generator	1	0	0.14	0.08	0.94	0.41	410	47	53	False		
Sunday Average Daily Trips	3	0	0.68	0.28	5	1.14	486	50	50	False		
Sunday Peak Hour of Generator	1	0	0.1	0.05	0.69	0.33	486	48	52	False		

Detailed Land Use Data For 3.68 Gross Floor Area 1000 SF of BAR 1 (925) Drinking Place

Phase:	Microbrewery and Tap Roc Drinking Place 706 E. 23rd Street, Lawren											•	/18/2016 /18/2016	
Day / Period		Total Trips	Pass-By Trips	Avg Rate	Min Rate	Max Rate	Std Dev	Avg Size	% _Enter_	% Xit	Use Eq.	Equation		2
Weekday PM Peak	Hour of Generator	57	0	15.49	3.73	29.98	8.63	3	68	32	False			
Weekday PM Peak	Hour of Adjacent Street Traffic	42	0	11.34	3.73	29.98	8.04	4	66	34	False			