

# CITY OF VALLEY CENTER

## PROPOSED & FINAL AGENDA

NOVEMBER 27, 2013

*THE CITY COUNCIL SHALL HOLD ITS REGULAR MEETINGS IN THE COUNCIL CHAMBER IN  
THE CITY HALL, LOCATED AT 121 S. MERIDIAN, BEGINNING AT 7:00 P.M.*

## DECEMBER 3, 2013

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **INVOCATION: MINISTERIAL ALLIANCE**
4. **PLEDGE OF ALLEGIANCE**
5. **APPROVAL OF AGENDA** p 3
6. **CLERK'S AGENDA** p 4
  - A. Minutes p 4
    - November 19, 2013 Regular Council Meeting p 5
  - B. Appropriation Ordinance p 10
7. **PRESENTATIONS / PROCLAMATIONS** p 16
  - A. Service Award Presentations p 16
8. **PUBLIC FORUM** (*Citizen input and requests*) p 17
9. **APPOINTMENTS** p 17
10. **COMMITTEES, COMMISSIONS** p 17
11. **OLD BUSINESS** p 17
12. **NEW BUSINESS** p 18
  - A. Presentation from P.E.C. re: South Meridian & Ford Street Project p 18
  - B. Resolution 621-13; Authorizing the Offering for Sale of Temporary Note, 2014-1 p 52
13. **CONSENT AGENDA** p 65
14. **STAFF REPORTS** p 65
15. **GOVERNING BODY REPORTS** p 66
16. **ADJOURN**

*All items listed on this agenda are potential action items unless otherwise noted. The agenda may be modified or changed at the meeting without prior notice.*

*At anytime during the regular City Council meeting, the City Council may meet in executive session for consultation concerning several matters (real estate, litigation, non-elected personnel and security).*

*This is an open meeting, open to the public, subject to the Kansas Open Meetings Act (KOMA). The City of Valley Center is committed to providing reasonable accommodations for persons with disabilities upon request of the individual. Individuals with disabilities requiring an accommodation to attend the meeting should contact the City Clerk in a timely manner, at [cityclerk@valleycenter-ks.gov](mailto:cityclerk@valleycenter-ks.gov) or by phone at (316)755-7310.*

*For additional information on any item on the agenda, please visit [www.valleycenter-ks.gov](http://www.valleycenter-ks.gov) or call (316) 755-7310.*

## **APPROVAL OF AGENDA**

### **RECOMMENDED ACTION:**

Staff recommends motion to approve the agenda as presented / amended.

## **CLERK'S AGENDA**

### **A. MINUTES:**

Attached are the Minutes from the November 19, 2013 Regular City Council Meeting as prepared by the Assistant City Clerk.

### **RECOMMENDED ACTION:**

Staff recommends motion to approve the minutes of the November 19, 2013 Regular Council Meeting Minutes as presented / amended

REGULAR COUNCIL MEETING  
NOVEMBER 19, 2013  
CITY HALL  
121 S. MERIDIAN

Mayor McNown called the meeting to order at 7:00 p.m. with the following members present: Judith Leftoff, Lou Cicirello, Terry Ishman, Laurie Dove, Marci Maschino, Lionel Jackson, Benjamin Anderson, and Al Hobson.

Members Absent:

Staff Present: Joel Pile, City Administrator  
Kristine Polian, City Clerk  
Jose Santiago, Assistant City Clerk  
Mark Hephner, Chief of Police  
Robert Tormey, Fire Captain  
Warren Utecht, Community Development Director  
Richard Dunn, City Superintendent  
Neal Owings, Parks and Public Buildings Superintendent  
Mike Kelsey, City Engineer  
Barry Arbuckle, City Attorney

Press present: The Ark Valley News

### APPROVAL OF THE AGENDA

Agenda amended as follows: Under **NEW BUSINESS p. 22**, added item:

- B) RESOLUTION 620-13; URGING THE U.S. AIR FORCE TO SELECT MCCONNELL AIR FORCE BASE IN WICHITA, KANSAS AS THE FORMAL TRAINING UNIT AND FIRST MAIN OPERATING BASE FOR THE KC-46A TANKER BEDDOWN.

Jackson moved, seconded by Maschino, to approve the Agenda as amended. Vote yea: Unanimous. Motion carried.

### CLERK'S AGENDA

#### A. MINUTES – NOVEMBER 05, 2013 REGULAR CITY COUNCIL MEETING

Minutes are amended as follows:

- 1) Under **CLERK'S AGENDA**, Item **A. Minutes**; replace the word "Agenda" with "Minutes".
- 2) Under **NEW BUSINESS**, Item **C. ORDINANCE 1267-13; AMENDING WATER CONNECTION FEES, 1<sup>ST</sup> READING:**
  - a. Remove: Ishman moved, seconded by Hobson, to not adopt Ordinance 1267-13 amending Title 12 of The Valley Center, Kansas Municipal Code by amending section 12.20.010 "connection fees", for 2<sup>nd</sup> reading. Vote Yea:

**CLERK'S AGENDA (CONTINUED)**

Ishman and Hobson. Opposed: Leftoff, Dove, Maschino, Jackson, and Anderson. Motion defeated.

- b. Replace with the following: Ishman moved, seconded by Hobson, to not adopt Ordinance 1267-13. Vote Yea: Ishman and Hobson. Opposed: Leftoff, Dove, Maschino, Jackson, and Anderson. Motion defeated.

Jackson moved, seconded by Ishman, to approve the Minutes as amended. Vote yea: Unanimous. Motion carried.

**B. APPROPRIATION ORDINANCE – 11/19/2013**

Cicirello moved, seconded by Anderson, to approve the November 19, 2013 Appropriation Ordinance as presented. Vote yea: Unanimous. Motion carried.

**C. TREASURER'S REPORT – OCTOBER 2013**

Maschino moved, seconded by Ishman, to receive and file the October 2013 Treasurer's Report. Vote yea: Unanimous. Motion carried.

**PRESENTATIONS/PROCLAMATIONS****A. South-Central Kansas Prosperity Plan Presentation**

Corinne Bannon, Wichita State University, talked about a 2-year process to develop the South Central Kansas Prosperity Plan. Ms. Bannon provided the Governing Body with written information about making Valley Center a more prosperous one. Ms. Bannon explained the plan will build on the accomplishments in our region considering each community's needs, priorities, and goals. A form also was provided for the Governing Body to rank from several different areas the # 1 priority for the community to make the City a more prosperous one. This form is available on their website [www.thinktomorrows.org](http://www.thinktomorrows.org), along with other surveys.

**PUBLIC FORUM – None****APPOINTMENTS****A. PLANNING COMMISSION APPOINTMENT**

- City Planning Commission. Three Year Appointment:
  - ❖ Scot Phillips

Cicirello moved, seconded by Maschino, to approve recommended appointment to the Valley Center Planning Commission. Vote yea: Unanimous. Motion carried.

**COMMITTEES, COMMISSIONS – No Questions/Comments.****OLD BUSINESS****A. ORDINANCE 1267-13; AMENDING WATER CONNECTION FEES, 2<sup>ND</sup> READING.**

An Ordinance of The Valley Center City Council amending Title 12 of The Valley Center, Kansas Municipal Code by amending section 12.20.010 “connection fees”.

Mahlon Alexander, 1417 W. 125<sup>th</sup> N, addressed the Council regarding new water service. Mr. Alexander asked to allow them to contract to do just the directional boring, or through a bid process to do this job; while still allowing the City to install meter box and the rest. Mr. Alexander stated he would like to work with the City to fund the least expensive, approved contractor to do the directional boring.

Pile stated Mr. Alexander’s request was reasonable and the City could work with him on a case by case basis.

Cicirello moved, seconded by Hobson, to adopt Ordinance 1267-13, amending Title 12 of the Valley Center, Kansas Municipal Code by amending section 12.20.010 “connection fees”, for 2<sup>nd</sup> reading. Vote yea: Cicirello, Ishman, Dove, Maschino, Jackson, Anderson, and Hobson. Opposed: Leftoff. Motion carried.

**NEW BUSINESS****A. CONSIDERATION OF S.R.O. AGREEMENT**

- USD 262 approved the proposed School Resource Officer (SRO) Agreement of November 11, 2013.

Cicirello moved, seconded by Hobson, to approve the School Resource Officer Agreement and authorize Mayor to sign. Vote yea: Unanimous. Motion carried.

**B. RESOLUTION 620-13; URGING THE U.S. AIR FORCE TO SELECT MCCONNELL AFB IN WICHITA, KANSAS AS THE FORMAL TRAINING UNIT AND FIRST MAIN OPERATING BASE FOR THE KC-46A TANKER BEDDOWN**

Maschino moved, seconded by Hobson, to adopt Resolution 620-13; urging the U.S. Air Force to select McConnell Air Force Base in Wichita, Kansas as the formal training unit and a first main operating base for the KC-46A tanker beddown. Vote yea: Unanimous. Motion carried.

**CONSENT AGENDA**

- A. REVENUE EXPENSE SUMMARIES - OCTOBER 2013**
- B. BAD DEBT REPORT - OCTOBER 2013**
- C. CHECK RECONCILIATION – OCTOBER 2013**

Cicirello moved, seconded by Hobson, to approve the Consent Agenda as presented. Vote yea: Unanimous. Motion carried.

## STAFF REPORTS

### CITY ADMINISTRATOR PILE

Pile presented information about a super patch seal process for the Governing Body to consider the proposed 81<sup>st</sup> Street paving project by Sedgwick County. The new patch sealing (Super Sealing) material to be used on 81<sup>st</sup> Street by the County is a better durable material. The original costs will be paid by the County. In the Summer of year 2019 after the second application done by Sedgwick County, the City will take over its maintenance. Pile is seeking direction about this project. Cicirello and Maschino stated to let Sedgwick County do as they wish, but they did not want City to get involved. No motion made to partner with Sedgwick County on 81<sup>st</sup> Street.

## GOVERNING BODY REPORTS

### MAYOR MCNOWN

McNown stated the City did a good job on achieving 2013 KMIT Safety Gold Star Award, and by obtaining this award the City is getting discounted \$2,700.00 on the approximately \$55,000 this year's premium dues; and would like the Council to give the employees December 24, 2013 as an extra holiday, in conjunction with the Christmas observed holiday.

**Cicirello motioned, seconded by Jackson, to authorize City employees December 24, 2013 as a holiday, in recognition of the Kansas Municipal Insurance Trust Gold Star Safety Award. Vote Yea: Unanimous. Motion carried.**

The Mayor stated, since 2001 the City of Valley Center's employees have received end-of-year bonuses: \$100.00 for full-time employees and \$50.00 for part-time employees after taxes. The Mayor asked the Council to extend this tradition.

**Ishman motioned, seconded by Cicirello to authorize an end-of-year bonuses: \$100.00 after taxes for full-time employees and \$50.00 after taxes for part-time employees who have worked over 100 hours. Vote Yea: Unanimous. Motion carried.**

### COUNCILMEMBER LEFTOFF

Leftoff asked Staff to not hassle applicants of City permits and to process the permits in a timely manner.

### COUNCILMEMBER CICIRELLO

Cicirello asked Dunn about excess sand in his neighborhood after recent road work; asked if it could be swept up. Dunn stated they would sweep the road as soon as possible; should be within about a week, as sweeper was being repaired.

**GOVERNING BODY REPORTS (CONTINUED)**

COUNCILMEMBER DOVE

Dove attended the WAMPO (Wichita Area Metropolitan Planning Organization) meeting. They took a closer look at Move 2040 which is a strategic plan for public transportation. The plan is moving into public input phase.

COUNCILMEMBER HOBSON

Hobson would like to wish everyone a Happy Thanksgiving.

Hobson moved, seconded by Maschino, to adjourn the meeting. Vote yea: Unanimous. Motion carried.

**Meeting adjourned at 8:12 PM.**

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**Jose A. Santiago, Assistant City Clerk**

**CLERK'S AGENDA****B. APPROPRIATION ORDINANCE:**

Below is the proposed Appropriation Ordinance for December 3, 2013 as prepared by City Staff.

[December 3, 2013 Appropriation](#)

Total **\$ 164,514.25**

**RECOMMENDED ACTION:**

Staff recommends motion to approve the December 3, 2013 Appropriation Ordinance as presented / amended.

11/26/2013 12:40 PM

## A/P HISTORY CHECK REPORT

PAGE: 1

VENDOR SET: 02 City of Valley Center

BANK: APBK INTRUST CHECKING

DATE RANGE: 0/00/0000 THRU 99/99/9999

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
0085	LAURIE B WILLIAMS							
I-BJE201311145290	CASE # 09-14039	R	11/15/2013	55.00		044113		55.00
0210	SECURITY BENEFIT							
I-SCB201311145290	DEFERRED COMPENSATION	R	11/15/2013	63.00		044114		63.00
0313	VANTAGEPOINT TRANS AGENTS							
I-ICM201311145290	RETIREMENT 457 DEFERRED COMP	R	11/15/2013	15.00		044115		15.00
0372	U S DEPT OF EDUCATION							
I-JED201311145290	ACCT # 1002461211	R	11/15/2013	175.37		044116		175.37
0421	FAMILY SUPPORT PAYMENT CENTER							
I-JHC201311145290	CASE # 11LWAD00059	R	11/15/2013	67.00		044117		67.00
0153	THE ARK VALLEY NEWS							
I-06-1124 OCT 2013	OCT'13 PAPER PUBLICATIONS	R	11/15/2013	680.64		044118		680.64
0390	T & J STUDIOS, INC							
I-2498	L DOVE 8X10 STUDIO PRINT	R	11/15/2013	90.00		044119		90.00
0404	SECURITY 1ST TITLE							
I-100178	OWNERSHIP LIST	R	11/15/2013	270.00		044120		270.00
1	WILSON, BECKIE							
I-000201311205300	US REFUND	R	11/22/2013	16.88		044121		16.88
0025	MIKE JOHNSON SALES, INC.							
I-3522	WKLY POCKET PLANNERS	R	11/22/2013	46.29		044122		46.29
0061	EDNA BUSCHOW							
I-REMAINING 2013	REMAINING AMT FOR 2013	R	11/22/2013	3,411.78		044123		3,411.78
0079	KDHE-DIV OF H & E LABORATORIES							
I-X1500 -JULY-SEP'13	JULY-SEPT'13 SCREENSAMPLE	R	11/22/2013	639.00		044124		639.00
0114	ANDALE FARMERS CO-OP							
I-52646-001	TICKET # 52646	R	11/22/2013	843.39		044125		843.39
0133	MAYER SPECIALTY SERVICES							
I-2013508	528 & 446 N COLBY -BYPASS	R	11/22/2013	750.00		044126		
I-2013510	HIGHPRESSUREJET TRUCK	R	11/22/2013	525.00		044126		1,275.00

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A/P HISTORY CHECK REPORT

PAGE: 2

VENDOR SET: 02 City of Valley Center

BANK: APBK INTRUST CHECKING

DATE RANGE: 0/00/0000 THRU 99/99/9999

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I-22	SLURRY SEAL '13 STREETS	R	11/22/2013	36,382.39		044127		36,382.39
0147	TRAFFIC CONTROL SERVICES, INC.							
I-3628	STRIPING: 2012 ST PROGRAM	R	11/22/2013	18,729.62		044128		18,729.62
0179	INTERLINGUAL SERVICE							
I-B LEDESMA 10/23/13	SPANISH INTERPRETER	R	11/22/2013	30.00		044129		30.00
0204	PITNEY BOWES							
I-ID # 00447643008	JUL-AUGPOSTAGEREPLENISHED	R	11/22/2013	600.00		044130		600.00
0239	A T & T KANSAS							
I-316 7553504 922 7	NOV '13 DESSUBSTATION	R	11/22/2013	63.37		044131		
I-316 7552075 0409	VALLEY CK PUMP STATION	R	11/22/2013	58.37		044131		
I-316 7557339 720 7	NOVEMBER 2013 SERVICES	R	11/22/2013	1,150.82		044131		1,272.56
0249	APAC - KANSAS INC							
I-8000120343	2012 STREET PROGRAM	R	11/22/2013	790.79		044132		790.79
0270	INTRUST CARD CENTER							
I-5472292182602723	OCT'13 PCARD TRANSACTIONS	R	11/22/2013	45,944.23		044133		45,944.23
0511	COVENTRY HEALTH CARE, INC.							
I-52778904	DEC'13HEALTH INS PREMIUM	R	11/22/2013	40,224.26		044134		40,224.26
0528	THE SALINA SUPPLY COMPANY							
I-1159540	ITRON/UPGRADE/ERTS	R	11/22/2013	12,024.00		044135		12,024.00
0530	GALLAGHER BENEFIT SERVICES, IN							
I-41793	NOV'13 COBRA/FSA ADMINFEE	R	11/22/2013	167.50		044136		167.50
0564	JESSE T. PAINE							
I-2234	PUBLIC DEFENDER-K.HEADGEP	R	11/22/2013	150.00		044137		150.00
0085	LAURIE B WILLIAMS							
I-REB201311265316	CASE # 13-12943	R	11/29/2013	200.00		044203		200.00
0210	SECURITY BENEFIT							
I-SCB201311265316	DEFERRED COMPENSATION	R	11/29/2013	63.00		044204		63.00
0313	VANTAGEPOINT TRANS AGENTS							
I-ICM201311265316	RETIREMENT 457 DEFERRED COMP	R	11/29/2013	15.00		044205		15.00

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A/P HISTORY CHECK REPORT

PAGE: 3

VENDOR SET: 02 City of Valley Center

BANK: APBK INTRUST CHECKING

DATE RANGE: 0/00/0000 THRU 99/99/9999

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0372	U S DEPT OF EDUCATION							
I-JED201311265316	ACCT # 1002461211	R	11/29/2013	175.37		044206		175.37

\* \* T O T A L S \* \*

	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
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HAND CHECKS:	0	0.00	0.00	0.00
DRAFTS:	0	0.00	0.00	0.00
EFT:	0	0.00	0.00	0.00
NON CHECKS:	0	0.00	0.00	0.00
VOID CHECKS:	0	VOID DEBITS 0.00		
		VOID CREDITS 0.00	0.00	0.00
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A/P HISTORY CHECK REPORT

PAGE: 4

VENDOR SET: 03 City of Valley Center

BANK: APBK INTRUST CHECKING

DATE RANGE: 0/00/0000 THRU 99/99/9999

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
0014	JOEL D PILE							
	I-OCT'13 MILEAGEREIM							
	OCT'13 MILEAGE REIMBURSED	R	11/22/2013	97.18		044202		97.18

* * T O T A L S * *	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
REGULAR CHECKS:	1	97.18	0.00	97.18
HAND CHECKS:	0	0.00	0.00	0.00
DRAFTS:	0	0.00	0.00	0.00
EFT:	0	0.00	0.00	0.00
NON CHECKS:	0	0.00	0.00	0.00
VOID CHECKS:	0	VOID DEBITS 0.00		
		VOID CREDITS 0.00	0.00	0.00

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REPORT TOTALS:			30	164,514.25	0.00	164,514.25

11/26/2013 12:40 PM

A/P HISTORY CHECK REPORT

PAGE: 5

SELECTION CRITERIA

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VENDOR SET: \* - All  
 VENDOR: ALL  
 BANK CODES: All  
 FUNDS: All

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CHECK SELECTION

CHECK RANGE: 044113 THRU 044206  
 DATE RANGE: 0/00/0000 THRU 99/99/9999  
 CHECK AMOUNT RANGE: 0.00 THRU 999,999,999.99  
 INCLUDE ALL VOIDS: YES

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PRINT OPTIONS

SEQUENCE: CHECK NUMBER

PRINT TRANSACTIONS: YES  
 PRINT G/L: NO  
 UNPOSTED ONLY: NO  
 EXCLUDE UNPOSTED: NO  
 MANUAL ONLY: NO  
 STUB COMMENTS: NO  
 REPORT FOOTER: NO  
 CHECK STATUS: NO  
 PRINT STATUS: \* - All

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## **PRESENTATIONS / PROCLAMATIONS**

### **A. SERVICE AWARD PRESENTATIONS:**

The following employees will be recognized for their dedication to  
The City of Valley Center.

Darrell Rogers	Utility Worker	25 Years
Terry Alderson	Volunteer Fireman	20 Years
Greg Keith	Judge	15 Years
Neal Owings	Parks & Public Building Superintendent	15 Years
Jeremiah Kirk	Patrol Officer II	15 Years
Kristine Polian	City Clerk	10 Years
Rosemary Jackson	Administrative Assistant	10 Years
Michael Gordon	Patrol Officer II	10 Years

**PUBLIC FORUM**

**APPOINTMENTS**

**COMMITTEES, COMMISSIONS**

**NO ITEMS FOR COUNCIL REVIEW**

**OLD BUSINESS**

**NONE**

**NEW BUSINESS****A. PRESENTATION FROM P.E.C. RE: SOUTH MERIDIAN & FORD STREET PROJECT :**

- Traffic Study Report from P.E.C. (Attached)
- Representative from P.E.C. will present Traffic Study and Preliminary Design Proposals for South Meridian & Ford Street

Should Council choose to proceed,

**RECOMMENDED ACTION:**

Receive P.E.C. Proposal and provide comment on Design Proposals.

## TRAFFIC STUDY

NOVEMBER 2013

# MERIDIAN AVENUE

From Main St. to Ford St.  
Valley Center, Kansas

### Prepared by:

Professional Engineering Consultants, P.A.  
303 South Topeka  
Wichita, KS 67202  
316-262-2691

PEC Project No.:  
12486

## INTRODUCTION

Professional Engineering Consultants, P.A. conducted a traffic study along the North Meridian Avenue corridor, including the intersections of Meridian Avenue and Main Street; Meridian Avenue and Ramsey Drive; Meridian Avenue and Ford Street; and, Ramsey Drive and Ford Street in Valley Center, Kansas. The main focus of this study was to evaluate the traffic conditions at the intersections and determine any traffic or geometric enhancements necessary to improve the safety and operational efficiency of the intersections. In addition, the segment of Meridian Avenue from Main Street to Clay Street was evaluated for a “road diet” by converting the existing four-lane roadway into a three-lane roadway made up of two thru lanes and a continuous two-way left-turn lane (TWLTL).

## ROADWAY AND AREA CONDITIONS

Within Valley Center, Meridian Avenue serves as an arterial roadway that runs north-south and is approximately 1/2-mile in length from Main Street to Ford Street. The roadway is approximately 48 feet in width (back-to-back) and marked to provide two lanes in both the northbound and southbound directions. The posted speed limit on this section of Meridian Avenue is 30 miles per hour (mph).

At the signalized intersection with Main Street, northbound Meridian Avenue is marked to provide for a left-turn lane and a combined thru/right-turn lane. Southbound Meridian Avenue is marked to provide for a combined left-turn/thru lane and a combined thru/right-turn lane. Eastbound Main Street is marked to provide for a combined left-turn/thru lane and a right-turn lane. Westbound Main Street is marked to provide for a combined left-turn/thru lane and a combined thru/right-turn lane.

North of the Main Street intersection, Meridian Avenue narrows from 48 feet to approximately 40 feet in width (back-to-back) to provide for one lane in each direction.

Ford Street, also known as 77th Street N within Sedgwick County, serves as a minor arterial roadway that connects to Interstate I-135, approximately 2.5 miles east of Meridian Avenue. Currently, Ford Street does not continue west of Meridian Avenue. The intersection of Ford Street with Meridian Avenue is currently a stop-controlled T-intersection with traffic movements on Ford Street stopping for Meridian Avenue. The roadway is approximately 25 feet in width with open ditches and provides for one lane in both the eastbound and westbound directions. The posted speed limit on this section of Ford Street is 30 mph.

Industrial Street serves as a local collector roadway that is approximately 1500 feet long and provides access to several businesses. Industrial Street intersects Meridian Avenue approximately 235 feet north of Ford Street, and it does not continue east of Meridian Avenue. The intersection of Industrial Street with Meridian Avenue is currently a stop-controlled T-intersection with traffic movements on Industrial Street stopping for Meridian Avenue. The roadway is approximately 40 feet in width (back-to-back) and provides for one lane in both the eastbound and westbound directions.

The property in the southwest corner of the intersection of Meridian Avenue with Ford Street is currently occupied by the Leeker’s Family Foods grocery store. The only access to this site from Meridian Avenue is from two driveways. The north drive to the site is approximately 40 feet south of the Ford Street intersection, and the south drive is approximately 325 feet south of the north drive. The close

proximity of the north driveway to the Ford Street intersection creates an undesirable “left turn-then-quick-right turn” maneuver for eastbound-westbound vehicles on Ford Street entering or leaving the site.

Ramsey Drive is a local collector roadway that runs roughly northwest-southeast and runs parallel and adjacent to the BNSF railroad. This roadway is approximately 1000 feet in length, approximately 25 feet in width with open ditches, and provides access to several businesses along the east side. Ramsey Drive intersects Meridian Avenue approximately 935 feet north of Ford Street and intersects Ford Street approximately 440 feet east of Meridian Avenue. Both of these skewed T-intersections are stop controlled, with traffic movements on Ramsey Drive stopping for Meridian Avenue and Ford Street. The speed limit on Ramsey Drive is not posted and by state statute, the speed limit on an unposted roadway is 30 miles per hour (mph) within any urban district <sup>[1]</sup>.

### **INTERSECTION SIGHT DISTANCE ANALYSIS**

The American Association of State Highway and Transportation Officials’ (AASHTO) “*A Policy on Geometric Design of Highways and Streets*” <sup>[2]</sup>, commonly referred to as the “Green Book,” recommends that intersecting legs of an intersection meet at or nearly at right angles. The intersections of Meridian Avenue with Main Street and Ford Street are at right angles.

The intersections of Ramsey Drive with Meridian Avenue and Ford Street are at skewed angles. The intersection of Ramsey Drive with Meridian Avenue is approximately 65 degrees from perpendicular and the intersection of Ramsey Drive with Ford Street is approximately 25 degrees from perpendicular. Drivers can have difficulty at skewed-angle intersections because their view of traffic is reduced by parts of the vehicle or by their inability to turn their heads. It is desirable to realign one or both roadways to reduce the skew angle of the intersection.

Furthermore, a driver crossing or turning onto a roadway from a side access needs a proper sight distance, referred to as the intersection sight distance (ISD), to determine if a gap in mainline traffic is sufficient for them to access the main roadway. The Green Book provides the standards for determining the ISD. When determining the ISD, the driver’s eye height and the object height is considered to be 3.50 feet above the road surface, and the driver’s eye is assumed to be 15 feet from the edge of the major road’s traveled way.

When the approach speed is 30 mph, the ISD should be 335 feet to the right (Table 9-6 of the Green Book) for making a left turn from a stop, and 290 feet (Table 9-8 of the Green Book) to the left for making a right turn from a stop.

Each of the stop-controlled intersections was reviewed to measure the existing ISD under the stop controlled configuration. At each intersection, the ISD for the side road was measured in excess of 400 feet in both directions, which clearly exceeds the Green Book’s recommended distances.

## UN SIGNALIZED INTERSECTION ANALYSIS

The traffic operations at each of the stop controlled intersections were evaluated for traffic conditions during the peak hours. These analyses were based on the existing lane configurations, existing two-way stop traffic control, and the recorded peak hour traffic volumes.

The Level-of-Service (LOS) is a term used to describe the operating conditions of traffic flow during peak periods. The LOS is designated by a letter ranging from A to F. **LOS A** represents the best operating and most desirable condition when little or no vehicle delays occur and vehicles can maneuver freely. **LOS F** identifies the worst operating and least desirable condition when traffic queues are extensive and vehicle delay is high. The Highway Capacity Manual <sup>[3]</sup> (HCM) outlines the LOS criteria for unsignalized and signalized intersections, and is summarized in *Table 1*.

Level of Service (LOS)	Unsignalized Intersection Average Delay per Vehicle	Signalized Intersection Average Delay per Vehicle
A	<= 10 seconds	<= 10 seconds
B	10 – 15 seconds	10 – 20 seconds
C	15 – 25 seconds	20 – 35 seconds
D	25 – 35 seconds	35 – 55 seconds
E	35 – 50 seconds	55 – 80 seconds
F	≥ 50 seconds	≥ 80 seconds

*Table 1 – HCM Level of Service criteria*

LOS Capacity Analysis for the unsignalized intersections was completed utilizing *HCS2010* <sup>[4]</sup> software using the existing lane configurations and the existing traffic volumes during the AM and PM Peak Hours. See **Appendix A** for the existing turning movement counts.

Within this report, the T-intersections will be referred to as a two-way stop controlled intersection even though only one approach is stopped. At these locations, the traffic on the minor approach stops for traffic on the major approaches.

Operating as a two-way stop controlled intersection, all of the traffic movements at the intersection of Meridian Avenue with Ramsey Drive will operate at **LOS B** or better during the AM and PM peak hours.

Operating as a two-way stop controlled intersection, all of the traffic movements at the intersection of Ramsey Drive with Ford Street will operate at **LOS B** or better during the AM and PM peak hours.

The analysis for the intersection of Meridian Avenue with Ford Street treated the Leeker's driveway as an approach to the intersection. Operating as a two-way stop controlled intersection, all of the traffic movements at the intersection of Meridian Avenue with Ford Street will operate at **LOS C** or better during the AM and PM peak hours with the exception of the PM eastbound traffic (**LOS D**) leaving the Leeker's site. The westbound approach queue length (the distance that is occupied by vehicles stopped at the stop sign) would be 50 feet.

One area of concern at the intersection of Meridian Avenue with Ford Street would be the queue length for westbound traffic. If this westbound queue length exceeds 200 feet, vehicles could be backed up to the railroad tracks. With or without the lane widening, the analysis shows that the queue lengths for westbound traffic do not exceed 200 feet.

Further analysis was conducted at the intersection assuming Ford Street was widened to allow for separate westbound left-turn and right-turn lanes. All of the traffic movements at the intersection of Meridian Avenue with Ford Street will continue operate at **LOS C** or better during the AM and PM peak hours with the exception of the PM eastbound traffic (**LOS D**) leaving the Leeker's site. Although the westbound approach remained at **LOS C**, the westbound right-turn movement improved to a **LOS A**, and the overall approach delay was reduced from 21.7 seconds/vehicle to 20.4 seconds/vehicle. The queue length would be less than 50 feet for each lane.

Additional analysis was conducted at the intersection assuming the widening of Ford Street for a left-turn and a right-turn lane along with the closing of the Leeker's north drive. The westbound approach will continue operate at **LOS C** or better during the AM and PM peak hours, and the overall approach delay was further reduced to 17.7 seconds/vehicle.

See **Appendix B** for the LOS reports for the two-way stop controlled intersections.

From January 2011 through June 2013 (2.5 years), a total of eight vehicle crashes were reported at the intersection of Meridian Avenue with Ford Street or that would be considered intersection-related. It is not completely clear from all of the reports the exact number of the crashes that were the result of the roadway-driveway offset, but it was a factor in at least two. During the four hours of field observations, there were several "near collision" events with vehicles trying to make the offset thru movement from Ford Street into Leeker's or vice versa.

Within the Green Book, the recommended spacing of a driveway downstream from an intersection (assuming a 30 mph approach speed) is 200 feet. Under the same conditions, the Kansas Department of Transportation's "*KDOT Access Management Policy*"<sup>[5]</sup> recommends a spacing distance of 125 feet. By limiting the driveways within the functional area of an intersection, safety can be improved by reducing the number of decisions a driver must make while travelling through the intersection.

Finally, the *Manual on Uniform Traffic Control Devices (MUTCD)*<sup>[6]</sup> is the federally-accepted document that specifies the conditions necessary to justify the installation of a traffic signal. These conditions, called warrants, are based on a number of factors including: the traffic volumes and speeds, accident history, roadway geometrics and pedestrian activity. These warrants are contained within Chapter 4C, "Traffic Control Signal Needs Studies" and determine whether installation of a traffic control signal is justified at a particular location.

The MUTCD directs that a traffic signal should not be installed unless one or more of the warrants are met, and that the satisfaction of any warrant or warrants shall not in itself require the installation of a traffic control signal. The traffic signal should only be installed if its operation improves the overall safety and/or operation of the intersection.

Analysis was performed to determine which, if any, of the signal warrants would be met at the intersection of Meridian Avenue with Ford Street based on the proposed roadway geometrics and the existing traffic volumes. The intersection did not meet any of the warrants for signalization and therefore is not recommended for signalization.

## **SIGNALIZED INTERSECTION ANALYSIS**

The traffic operations at the existing signalized intersection of Meridian Avenue with Main Street were evaluated for traffic conditions during the peak hours. The analysis was based on the existing lane configurations, existing traffic signal operations, and the recorded peak hour traffic volumes.

LOS Capacity Analysis for the signalized intersections was completed utilizing *Synchro*<sup>[6]</sup> software using the existing lane configurations and the existing traffic volumes during the AM and PM Peak Hours. Additional analysis was conducted changing the lane configuration of the south approach to a three-lane cross-section.

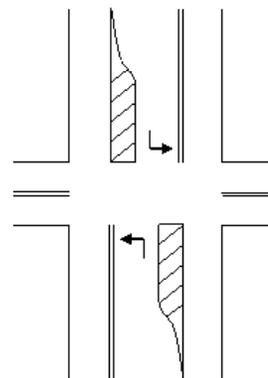
Based on the existing turning movement counts, existing traffic signal phasing and current lane configuration, the signalized intersection of Meridian Avenue with Main Street currently operates at **LOS B** or better during the AM and PM peak hours.

Changing the lane configuration of the south approach to a three-lane cross-section, the signalized intersection of Meridian Avenue with Main Street would be expected to continue to operate at **LOS B** or better during the AM and PM peak hours. This change in configuration would not significantly change the queue length for northbound traffic when compared to existing conditions.

See **Appendix C** for the LOS reports for the signalized intersections.

From January 2011 through June 2013 (2.5 years), a total of fourteen vehicle crashes were reported at the intersection of Meridian Avenue with Main Street or that would be considered intersection-related. Several of these crashes involved northbound or southbound left-turning vehicles.

To improve intersection safety and efficiency, the northbound and southbound left-turn lanes should be aligned to be directly across from one another, or with a slight positive offset by shifting the left-turn lane to the left (See *Figure 1*). This would require the southbound lanes on the north approach to be reconfigured and the inside lane changed from a combined left-turn/thru lane to a left-turn only lane. The positive offset enhances sight distance so a left-turning vehicle is not obstructing the view of the opposite left-turn lane. To provide the appropriate taper for southbound thru traffic, modifications may be required to the west-side curblines north of the intersection.



**Figure 1 - Positive Left-Turn Lane Alignment**

## **ROAD RECONFIGURATION**

The classic roadway reconfiguration, commonly referred to as a “road diet”, involves converting the existing four-lane roadway into a three-lane roadway made up of two thru lanes and a continuous two-way left-turn lane (TWLTL). Typically, the reduction of lanes can allow the roadway to be reallocated for other uses such as bike lanes, pedestrian crossing islands and/or on-street parking, but this is not a requirement.

Several national studies have shown that roads with Average Daily Traffic (ADT) of 15,000 vehicles or less have had good results in areas of safety and operations. Other factors to consider include driveway density, intersection design, percentage of turning traffic, and bus transit routes.

Meridian Avenue from Main Street to Clay Street is approximately ¼-mile in length and has an ADT less than 10,000 vehicles.

Although there are no national standards, many agencies recommend that the driveway density along the corridor is less than 10-to-12 driveways per side per mile for the TWLTL to be considered. Currently along this ¼-mile segment of Meridian Avenue, there are seven driveways on the west side of the roadway and twelve driveways and three residential streets along the east side of the roadway. Although the number of driveways exceeds those recommended values, not all of the driveways are for commercial use and will have lower usage. Careful consideration will need to be given to driveway alignment to prevent interlocking left turns at high usage locations. To reduce the number of driveways, consideration should be given to joint-use driveways between neighboring properties.

As previously mentioned, analysis of the intersection of Meridian Avenue with Main Street shows no significant decrease in Level-of-Service with a change to a three lane cross section on the south approach.

With the existing and proposed commercial development along this segment of Meridian Avenue, the percentage of turning traffic is sufficient enough to create some traffic congestion for thru movement traffic. By providing a TWLTL, the left-turn traffic is removed from the thru lane which reduces delay and improves safety.

Finally, Meridian Avenue is not on a bus transit route so there is not a concern with stopped buses impeding thru traffic.

Although national standards allow a TWLTL to be 12 feet in width, many agencies recommend TWLTLs to be a minimum of 14-to-16 feet in width. The additional lane width allows for improved visibility by allowing drivers to get a positive offset from oncoming vehicles also within the TWLTL.

## **SUMMARY/RECOMMENDATIONS**

Based on the recommended national standards, Meridian Avenue between Main Street and Clay Street should be considered for a “road diet”, converting the existing four-lane roadway into a three-lane roadway made up of two thru lanes and a continuous two-way left-turn lane (TWLTL). The TWLTL should be a minimum of 14 feet in width with the proper pavement marking and signing as required by the *MUTCD*. With the south approach reconfigured to a three-lane roadway, traffic capacity analysis indicates that the signalized intersection of Meridian Avenue with Main Street will operate at acceptable levels-of-service during the peak hours. As this ¼-mile segment of Meridian Avenue is reconstructed, consideration should be given to reduce the number of driveways within the corridor, or to relocate driveways to prevent interlocking left turns at high usage locations.

It is recommended that Ramsey Drive be realigned to reduce the skew angle at the intersections with Meridian Avenue and Ford Street. The traffic capacity analysis indicates that the intersections of Meridian Avenue with Ramsey Drive and Ramsey Drive with Ford Street will operate at acceptable levels-of-service and should be maintained as stop controlled intersections with traffic movements on Ramsey Drive stopping for Meridian Avenue and Ford Street.

It is recommended that the east approach of Ford Street be widened at the intersection with Meridian Avenue to provide for separate westbound left-turn and right-turn lanes. The traffic capacity analysis indicates that the intersection will operate at acceptable levels-of-service and should be maintained as a stop controlled intersection with traffic movements on Ford Street stopping for Meridian Avenue. The additional lane will provide additional storage capacity and will improve the operational efficiency for right-turning traffic. The intersection did not meet any of the *MUTCD*’s warrants for signalization.

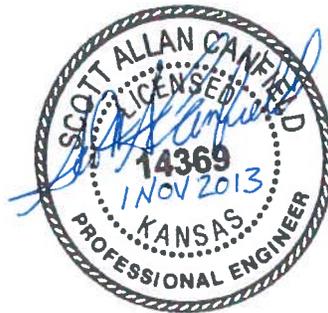
Finally, it is recommended that the north driveway into the Leeker’s Family Foods grocery store onto Meridian Avenue should be relocated south a minimum of 125 feet south of the intersection with Ford Street. By relocating the driveway outside of the functional area of the intersection, intersection safety and operational efficiency should be improved.

## REFERENCES

- [1] Kansas Statutes Annotated (K.S.A.), *Automobiles and Other Vehicles* § 8-1558 (2011).
- [2] American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, 6th Edition, 2011.
- [3] Transportation Research Board, *Highway Capacity Manual*, TRB Publications, 2010.
- [4] McTrans Center, University of Florida, *Highway Capacity Software TM - HCS2010*, 2010.
- [5] Kansas Department of Transportation, "KDOT Access Management Policy", [http://www.ksdot.org/accessmanagement/Access\\_Management\\_Policy\\_Jan2013.pdf](http://www.ksdot.org/accessmanagement/Access_Management_Policy_Jan2013.pdf), adopted January 2013.
- [6] U.S. Department of Transportation – Federal Highway Administration, *Manual on Uniform Traffic Control Devices for Streets and Highways*, 2009 Edition, 2010.
- [7] Trafficware Ltd., *Synchro plus Sim Traffic 8 Traffic Signal Coordination Software Version 8.0*, build 801, Revision 563 (8.0.801.563). 1993-2011.

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# MERIDIAN AVENUE

## From Main St. to Ford St.

### Valley Center, Kansas

## APPENDIX A

### TURNING MOVEMENT COUNTS

- A.1 Meridian Ave. and Main St.
- A.2 Meridian Ave. and Ramsey Dr.
- A.3 Meridian Ave. and Ford St.
- A.4 Ramsey Dr. and Ford St.

TURNING MOVEMENT COUNTS

SITE CODE: \_\_\_\_\_  
 LOCATION: Meridian & Main  
 DATE: Wednesday, September 18, 2013

DATA FIELD: ALL VEHICLES  
 WEATHER: Sunny / 80s  
 COLLECTED BY: M. Coffman

START TIME	SOUTHBOUND					WESTBOUND					NORTHBOUND					EASTBOUND					INT TOTAL
	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	
6:45 AM																					
7:00 AM	1	45	0	0	46	4	0	7	0	11	10	46	1	0	57	9	3	18	0	30	144
7:15 AM	2	66	2	0	70	4	4	9	0	17	8	80	4	0	92	4	2	21	0	27	206
7:30 AM	2	71	2	0	75	8	2	1	0	11	9	40	4	0	53	6	3	24	0	33	172
7:45 AM	1	59	5	0	65	13	5	5	0	23	33	34	5	0	72	4	1	20	1	25	185
8:00 AM	2	46	4	0	52	9	4	3	0	16	36	49	3	0	88	4	2	32	0	38	194
8:15 AM	6	81	6	0	93	4	3	4	0	11	33	41	5	0	79	4	4	35	1	43	226
8:30 AM	4	47	2	0	53	10	2	3	0	15	17	34	5	1	56	6	2	25	0	33	157
8:45 AM	2	40	4	0	46	4	3	3	0	10	16	26	8	0	50	3	2	13	0	18	124
9:00 AM																					
3:45 PM																					
4:00 PM	4	95	15	1	114	9	5	6	0	20	27	62	15	0	104	4	6	27	0	37	275
4:15 PM	3	57	8	4	68	12	5	9	2	26	30	59	13	0	102	5	8	29	0	42	238
4:30 PM	6	63	8	1	77	8	6	5	1	19	39	66	17	0	122	6	5	13	1	24	242
4:45 PM	8	76	6	0	90	14	6	8	0	28	26	69	16	0	111	3	8	17	3	28	257
5:00 PM	5	71	8	0	84	12	5	6	0	23	48	81	13	0	142	8	8	32	0	48	297
5:15 PM	6	53	5	0	64	10	3	6	0	19	46	88	20	0	154	10	6	32	0	48	285
5:30 PM	5	74	9	2	88	8	4	8	0	20	29	93	16	0	138	6	2	21	2	29	275
5:45 PM	4	62	3	0	69	10	5	8	0	23	42	76	15	0	133	6	5	30	1	41	266
6:00 PM																					

GRAND TOTAL	61	1006	87	8	1154	139	62	91	3	292	449	944	160	1	1553	88	67	389	9	544	3543
APPR %	5.3	87.2	7.5			47.6	21.2	31.2			28.9	60.8	10.3			16.2	12.3	71.5			
TOTAL %	1.7	28.4	2.5			3.9	1.7	2.6			12.7	26.6	4.5			2.5	1.9	11.0			

AM PK HR	7:30 AM	to		8:30 AM																	
TOTAL	11	257	17	0	285	34	14	13	0	61	111	164	17	0	292	18	10	111	2	139	777
PHF					0.766					0.663					0.830					0.808	0.860
APPR %	3.9	90.2	6.0			55.7	23.0	21.3			38.0	56.2	5.8			12.9	7.2	79.9			
TOTAL %	1.4	33.1	2.2			4.4	1.8	1.7			14.3	21.1	2.2			2.3	1.3	14.3			

PM PK HR	5:00 PM	to		6:00 PM																	
TOTAL	20	260	25	2	305	40	17	28	0	85	165	338	64	0	567	30	21	115	3	166	1123
PHF					0.866					0.924					0.920					0.865	0.945
APPR %	6.6	85.2	8.2			47.1	20.0	32.9			29.1	59.6	11.3			18.1	12.7	69.3			
TOTAL %	1.8	23.2	2.2			3.6	1.5	2.5			14.7	30.1	5.7			2.7	1.9	10.2			

TURNING MOVEMENT COUNTS

SITE CODE: \_\_\_\_\_  
 LOCATION: Meridian & Ramsey  
 DATE: Wednesday, September 18, 2013

DATA FIELD: ALL VEHICLES  
 WEATHER: Sunny / 80s  
 COLLECTED BY: D. Bosken

START TIME	SOUTHBOUND					WESTBOUND					NORTHBOUND					EASTBOUND					INT TOTAL
	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	
6:45 AM																					
7:00 AM	7	62	0	0	69	0	0	14	0	14	0	49	0	0	49	0	0	0	0	0	132
7:15 AM	13	88	0	0	101	0	0	12	0	12	0	81	0	0	81	0	0	0	0	0	194
7:30 AM	12	88	0	0	100	0	0	10	0	10	0	47	0	0	47	0	0	0	0	0	157
7:45 AM	20	73	0	0	93	0	0	10	0	10	0	68	2	0	70	0	0	0	0	0	173
8:00 AM	21	60	0	0	81	0	0	23	0	23	0	64	1	0	65	0	0	0	0	0	169
8:15 AM	25	85	0	0	110	1	0	14	0	15	0	66	0	0	66	0	0	0	0	0	191
8:30 AM	15	75	0	0	90	2	0	13	0	15	0	46	0	0	46	0	0	0	0	0	151
8:45 AM	14	37	0	0	51	1	0	14	0	15	0	39	0	0	39	0	0	0	0	0	105
9:00 AM																					
3:45 PM																					
4:00 PM	18	111	0	0	129	0	0	19	0	19	0	101	1	0	102	0	0	0	0	0	250
4:15 PM	15	79	0	0	94	0	0	12	0	12	0	103	2	0	105	0	0	0	0	0	211
4:30 PM	16	76	0	0	92	0	0	26	0	26	0	107	0	0	107	0	0	0	0	0	225
4:45 PM	12	84	0	0	96	0	0	26	0	26	0	104	1	0	105	0	0	0	0	0	227
5:00 PM	25	93	0	0	118	0	0	30	0	30	0	128	0	0	128	0	0	0	0	0	276
5:15 PM	22	68	0	0	90	0	0	37	0	37	0	108	0	0	108	0	0	0	0	0	235
5:30 PM	17	86	0	0	103	0	0	31	0	31	0	121	0	0	121	0	0	0	0	0	255
5:45 PM	14	79	0	0	93	1	0	22	0	23	0	110	1	0	111	0	0	0	0	0	227
6:00 PM																					

GRAND TOTAL	266	1244	0	0	1510	5	0	313	0	318	0	1342	8	0	1350	0	0	0	0	0	3178
APPR %	17.6	82.4	0.0			1.6	0.0	98.4			0.0	99.4	0.6								
TOTAL %	8.4	39.1	0.0			0.2	0.0	9.8			0.0	42.2	0.3			0.0	0.0	0.0			

AM PK HR	7:15 AM	to	8:15 AM																		
TOTAL	66	309	0	0	375	0	0	55	0	55	0	260	3	0	263	0	0	0	0	0	693
PHF					0.928					0.598					0.812						0.893
APPR %	17.6	82.4	0.0			0.0	0.0	100.0			0.0	98.9	1.1								
TOTAL %	9.5	44.6	0.0			0.0	0.0	7.9			0.0	37.5	0.4			0.0	0.0	0.0			

PM PK HR	4:45 PM	to	5:45 PM																		
TOTAL	76	331	0	0	407	0	0	124	0	124	0	461	1	0	462	0	0	0	0	0	993
PHF					0.862					0.838					0.902						0.899
APPR %	18.7	81.3	0.0			0.0	0.0	100.0			0.0	99.8	0.2								
TOTAL %	7.7	33.3	0.0			0.0	0.0	12.5			0.0	46.4	0.1			0.0	0.0	0.0			

TURNING MOVEMENT COUNTS

SITE CODE: \_\_\_\_\_  
 LOCATION: Meridian & Ford  
 DATE: Wednesday, September 18, 2013

DATA FIELD: ALL VEHICLES  
 WEATHER: Sunny / 80s  
 COLLECTED BY: T. Kaufman/S. Canfield

START TIME	SOUTHBOUND					WESTBOUND					NORTHBOUND					EASTBOUND					INT TOTAL
	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	
6:45 AM																					
7:00 AM	5	62	3	0	70	9	3	4	0	16	1	47	3	0	51	2	2	1	0	5	142
7:15 AM	4	88	7	0	99	11	0	7	0	18	0	78	3	0	81	1	0	0	0	1	199
7:30 AM	3	90	5	0	98	10	1	2	0	13	0	42	5	0	47	1	0	0	0	1	159
7:45 AM	4	60	6	0	70	4	1	13	0	18	1	74	11	0	86	2	2	1	0	5	179
8:00 AM	8	59	5	0	72	14	2	7	0	23	0	64	2	0	66	5	1	1	0	7	168
8:15 AM	3	93	6	0	102	7	3	10	0	20	0	53	8	0	61	2	1	0	0	3	186
8:30 AM	2	62	14	0	78	12	1	4	0	17	0	38	6	0	44	3	1	0	0	4	143
8:45 AM	4	32	8	0	44	5	0	9	0	14	1	37	8	0	46	2	0	1	0	3	107
9:00 AM																					
3:45 PM																					
4:00 PM	5	102	14	0	121	8	4	5	0	17	0	83	10	0	93	9	7	0	0	16	247
4:15 PM	6	72	10	0	88	8	2	8	0	18	0	85	9	0	94	5	2	0	0	7	207
4:30 PM	13	70	8	0	91	12	2	5	0	19	0	91	13	0	104	9	1	0	0	10	224
4:45 PM	9	81	7	0	97	5	7	7	0	19	0	96	24	0	120	7	0	0	0	7	243
5:00 PM	24	100	17	0	141	6	4	12	0	22	1	104	11	0	116	8	4	1	0	13	292
5:15 PM	10	58	15	0	83	7	8	6	0	21	0	97	19	0	116	9	2	0	0	11	231
5:30 PM	8	72	10	0	90	7	4	2	0	13	0	103	19	0	122	13	3	1	0	17	242
5:45 PM	1	68	13	0	82	9	0	5	0	14	0	92	10	0	102	8	3	1	0	12	210
6:00 PM																					

GRAND TOTAL	109	1169	148	0	1426	134	42	106	0	282	4	1184	161	0	1349	86	29	7	0	122	3179
APPR %	7.6	82.0	10.4			47.5	14.9	37.6			0.3	87.8	11.9			70.5	23.8	5.7			
TOTAL %	3.4	36.8	4.7			4.2	1.3	3.3			0.1	37.2	5.1			2.7	0.9	0.2			

AM PK HR	7:15 AM	to		8:15 AM																	
TOTAL	19	297	23	0	339	39	4	29	0	72	1	258	21	0	280	9	3	2	0	14	705
PHF					0.856					0.783					0.814					0.500	0.886
APPR %	5.6	87.6	6.8			54.2	5.6	40.3			0.4	92.1	7.5			64.3	21.4	14.3			
TOTAL %	2.7	42.1	3.3			5.5	0.6	4.1			0.1	36.6	3.0			1.3	0.4	0.3			

PM PK HR	4:45 PM	to		5:45 PM																	
TOTAL	51	311	49	0	411	25	23	27	0	75	1	400	73	0	474	37	9	2	0	48	1008
PHF					0.729					0.852					0.971					0.706	0.863
APPR %	12.4	75.7	11.9			33.3	30.7	36.0			0.2	84.4	15.4			77.1	18.8	4.2			
TOTAL %	5.1	30.9	4.9			2.5	2.3	2.7			0.1	39.7	7.2			3.7	0.9	0.2			

TURNING MOVEMENT COUNTS

SITE CODE: \_\_\_\_\_  
 LOCATION: Rasme y & Ford  
 DATE: Wednesday, September 18, 2013

DATA FIELD: ALL VEHICLES  
 WEATHER: Sunny / 80s  
 COLLECTED BY: C. Perez

START TIME	SOUTHBOUND					WESTBOUND					NORTHBOUND					EASTBOUND					INT TOTAL
	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	LT	TH	RT	PED	TOTAL	
6:45 AM																					
7:00 AM	6	0	0	1	6	0	16	14	0	30	0	0	0	0	0	0	10	0	0	10	46
7:15 AM	12	0	0	0	12	0	18	12	0	30	0	0	0	0	0	0	7	0	0	7	49
7:30 AM	8	0	0	0	8	0	12	9	0	21	0	0	0	0	0	0	10	0	0	10	39
7:45 AM	15	0	0	0	15	0	19	9	0	28	0	0	0	0	0	4	13	0	0	17	60
8:00 AM	20	0	1	0	21	0	26	17	0	43	0	0	0	0	0	0	11	0	0	11	75
8:15 AM	20	0	1	0	21	0	16	13	0	29	0	0	0	0	0	1	10	0	0	11	61
8:30 AM	14	0	1	0	15	0	14	6	0	20	0	0	0	0	0	0	10	0	0	10	45
8:45 AM	8	0	0	0	8	0	14	14	0	28	0	0	0	0	0	0	10	0	0	10	46
9:00 AM																					
3:45 PM																					
4:00 PM	17	0	0	0	17	0	19	12	0	31	0	0	0	0	0	0	22	0	0	22	70
4:15 PM	8	0	0	0	8	0	19	5	0	24	0	0	0	0	0	1	18	0	0	19	51
4:30 PM	13	0	2	0	15	0	15	18	0	33	0	0	0	0	0	1	26	0	0	27	75
4:45 PM	10	0	0	0	10	0	20	16	0	36	0	0	0	0	0	0	34	0	0	34	80
5:00 PM	17	0	2	0	19	0	23	25	0	48	0	0	0	0	0	0	37	0	0	37	104
5:15 PM	17	0	1	0	18	0	17	26	0	43	0	0	0	0	0	0	32	0	0	32	93
5:30 PM	13	0	1	0	14	0	15	19	0	34	0	0	0	0	0	2	27	0	0	29	77
5:45 PM	10	0	0	0	10	0	14	11	1	25	0	0	0	0	0	0	16	0	0	16	51
6:00 PM																					

GRAND TOTAL	208	0	9	1	217	0	277	226	1	503	0	0	0	0	0	9	293	0	0	302	1022
APPR %	95.9	0.0	4.1			0.0	55.1	44.9								3.0	97.0	0.0			
TOTAL %	20.4	0.0	0.9			0.0	27.1	22.1			0.0	0.0	0.0			0.9	28.7	0.0			

AM PK HR	7:45 AM	to	8:45 AM																		
TOTAL	69	0	3	0	72	0	75	45	0	120	0	0	0	0	0	5	44	0	0	49	241
PHF					0.857					0.698									0.721	0.803	
APPR %	95.8	0.0	4.2			0.0	62.5	37.5								10.2	89.8	0.0			
TOTAL %	28.6	0.0	1.2			0.0	31.1	18.7			0.0	0.0	0.0			2.1	18.3	0.0			

PM PK HR	4:45 PM	to	5:45 PM																		
TOTAL	57	0	4	0	61	0	75	86	0	161	0	0	0	0	0	2	130	0	0	132	354
PHF					0.803					0.839									0.892	0.851	
APPR %	93.4	0.0	6.6			0.0	46.6	53.4								1.5	98.5	0.0			
TOTAL %	16.1	0.0	1.1			0.0	21.2	24.3			0.0	0.0	0.0			0.6	36.7	0.0			

# MERIDIAN AVENUE

## From Main St. to Ford St.

### Valley Center, Kansas

## APPENDIX B

### HCS REPORTS – INTERSECTION ANALYSIS

- B.1 Meridian Ave. and Ramsey Dr. – Existing (Unsignalized)
  - B.1.1 AM Peak Hour Analysis
  - B.1.2 PM Peak Hour Analysis
  
- B.2 Ramsey Dr. and Ford St. – Existing (Unsignalized)
  - B.2.1 AM Peak Hour Analysis
  - B.2.2 PM Peak Hour Analysis
  
- B.3 Meridian Ave. and Ford St. (Unsignalized)
  - Existing Conditions
    - B.3.1 AM Peak Hour Analysis
    - B.3.2 PM Peak Hour Analysis
  - Widening Ford St.
    - B.3.3 AM Peak Hour Analysis
    - B.3.4 PM Peak Hour Analysis
  - Widening Ford St. and Relocating Driveway
    - B.3.5 AM Peak Hour Analysis
    - B.3.6 PM Peak Hour Analysis
  
- B.4 Meridian Ave. and Main St. (Signalized)
  - B.4.1 AM Peak Hour Analysis – Existing
  - B.4.2 PM Peak Hour Analysis – Existing
  - B.4.3 AM Peak Hour Analysis – Proposed
  - B.4.4 PM Peak Hour Analysis – Proposed

TWO-WAY STOP CONTROL SUMMARY							
<b>General Information</b>				<b>Site Information</b>			
Analyst	S. Canfield			Intersection	Meridian/Ramsey		
Agency/Co.	PEC			Jurisdiction	City of Valley Center		
Date Performed	9/18/2013			Analysis Year	2013		
Analysis Time Period	AM Peak Hour						
Project Description 12468							
East/West Street: Ramsey Dr				North/South Street: Meridian Ave			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
<b>Vehicle Volumes and Adjustments</b>							
<b>Major Street</b>	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	0	260	3	66	309	0	
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.93	0.93	0.93	
Hourly Flow Rate, HFR (veh/h)	0	320	3	70	332	0	
Percent Heavy Vehicles	4	--	--	4	--	--	
Median Type	Undivided						
RT Channelized			0				0
Lanes	0	2	0	0	2	0	
Configuration	LT		TR	LT		TR	
Upstream Signal		0			0		
<b>Minor Street</b>	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)				0	0	55	
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.60	0.60	0.60	
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	91	
Percent Heavy Vehicles	0	0	0	4	4	4	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	0	1	0	
Configuration					LTR		
<b>Delay, Queue Length, and Level of Service</b>							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11 12
Lane Configuration	LT	LT	LTR				
v (veh/h)	0	70	91				
C (m) (veh/h)	1210	1219	875				
v/c	0.00	0.06	0.10				
95% queue length	0.00	0.18	0.35				
Control Delay (s/veh)	8.0	8.1	9.6				
LOS	A	A	A				
Approach Delay (s/veh)	--	--	9.6				
Approach LOS	--	--	A				

TWO-WAY STOP CONTROL SUMMARY							
<b>General Information</b>				<b>Site Information</b>			
Analyst	S. Canfield			Intersection	Meridian/Ramsey		
Agency/Co.	PEC			Jurisdiction	City of Valley Center		
Date Performed	9/18/2013			Analysis Year	2013		
Analysis Time Period	PM Peak Hour						
Project Description 12468							
East/West Street: Ramsey Dr				North/South Street: Meridian Ave			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
<b>Vehicle Volumes and Adjustments</b>							
<b>Major Street</b>	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	0	461	1	76	331	0	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	
Hourly Flow Rate, HFR (veh/h)	0	512	1	88	384	0	
Percent Heavy Vehicles	3	--	--	3	--	--	
Median Type	Undivided						
RT Channelized			0				0
Lanes	0	2	0	0	2	0	
Configuration	LT		TR	LT		TR	
Upstream Signal		0			0		
<b>Minor Street</b>	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)				0	0	124	
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.84	0.84	0.84	
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	147	
Percent Heavy Vehicles	0	0	0	3	3	3	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	0	1	0	
Configuration					LTR		
<b>Delay, Queue Length, and Level of Service</b>							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LT	LT	LTR				
v (veh/h)	0	88	147				
C (m) (veh/h)	1164	1042	778				
v/c	0.00	0.08	0.19				
95% queue length	0.00	0.28	0.70				
Control Delay (s/veh)	8.1	8.8	10.7				
LOS	A	A	B				
Approach Delay (s/veh)	--	--	10.7				
Approach LOS	--	--	B				

TWO-WAY STOP CONTROL SUMMARY							
<b>General Information</b>				<b>Site Information</b>			
Analyst	S. Canfield			Intersection	Ramsey/Ford		
Agency/Co.	PEC			Jurisdiction	City of Valley Center		
Date Performed	9/18/2013			Analysis Year	2013		
Analysis Time Period	AM Peak Hour						
Project Description 12468							
East/West Street: Ford St				North/South Street: Ramsey Dr			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
<b>Vehicle Volumes and Adjustments</b>							
<b>Major Street</b>	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	0		0	69	0	3	
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.86	0.86	0.86	
Hourly Flow Rate, HFR (veh/h)	0	0	0	80	0	3	
Percent Heavy Vehicles	8	--	--	8	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	0	0	0	1	0	
Configuration	LTR	LR		LTR			
Upstream Signal		0			0		
<b>Minor Street</b>	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	5	44			75	45	
Peak-Hour Factor, PHF	0.72	0.72	1.00	0.60	0.70	0.70	
Hourly Flow Rate, HFR (veh/h)	6	61	0	0	107	64	
Percent Heavy Vehicles	8	8	0	4	8	8	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LT					TR	
<b>Delay, Queue Length, and Level of Service</b>							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR			TR	LT	
v (veh/h)	0	80			171	67	
C (m) (veh/h)	1580	1585			790	670	
v/c	0.00	0.05			0.22	0.10	
95% queue length	0.00	0.16			0.83	0.33	
Control Delay (s/veh)	7.3	7.4			10.8	11.0	
LOS	A	A			B	B	
Approach Delay (s/veh)	--	--	10.8			11.0	
Approach LOS	--	--	B			B	

TWO-WAY STOP CONTROL SUMMARY							
<b>General Information</b>				<b>Site Information</b>			
Analyst	S. Canfield			Intersection	Ramsey/Ford		
Agency/Co.	PEC			Jurisdiction	City of Valley Center		
Date Performed	9/18/2013			Analysis Year	2013		
Analysis Time Period	PM Peak Hour						
Project Description 12468							
East/West Street: Ford St				North/South Street: Ramsey Dr			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
<b>Vehicle Volumes and Adjustments</b>							
<b>Major Street</b>	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	0		0	57	0	4	
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.80	0.80	0.80	
Hourly Flow Rate, HFR (veh/h)	0	0	0	71	0	4	
Percent Heavy Vehicles	8	--	--	8	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	0	0	0	1	0	
Configuration	LTR	LR		LTR			
Upstream Signal		0			0		
<b>Minor Street</b>	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	2	130			75	86	
Peak-Hour Factor, PHF	0.89	0.89	1.00	0.60	0.84	0.84	
Hourly Flow Rate, HFR (veh/h)	2	146	0	0	89	102	
Percent Heavy Vehicles	8	8	0	4	8	8	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LT					TR	
<b>Delay, Queue Length, and Level of Service</b>							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR			TR	LT	
v (veh/h)	0	71			191	148	
C (m) (veh/h)	1579	1585			859	700	
v/c	0.00	0.04			0.22	0.21	
95% queue length	0.00	0.14			0.86	0.80	
Control Delay (s/veh)	7.3	7.4			10.4	11.5	
LOS	A	A			B	B	
Approach Delay (s/veh)	--	--	10.4			11.5	
Approach LOS	--	--	B			B	

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst		Intersection	Meridian/Ford				
Agency/Co.	PEC	Jurisdiction	City of Valley Center				
Date Performed	9/18/2013	Analysis Year	2013				
Analysis Time Period	AM Peak Hour						
Project Description 12468							
East/West Street: Ford St				North/South Street: Meridian Ave			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	1	258	21	19	297	23	
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.86	0.86	0.86	
Hourly Flow Rate, HFR (veh/h)	1	318	25	22	345	26	
Percent Heavy Vehicles	4	--	--	4	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	2	0	0	2	0	
Configuration	LT		TR	LT		TR	
Upstream Signal		0			0		
Minor Street	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	9	3	2	39	4	29	
Peak-Hour Factor, PHF	0.50	0.50	0.50	0.78	0.78	0.78	
Hourly Flow Rate, HFR (veh/h)	18	6	4	50	5	37	
Percent Heavy Vehicles	0	0	0	4	4	4	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LT	LT	LTR			LTR	
v (veh/h)	1	22	92			28	
C (m) (veh/h)	1170	1198	503			403	
v/c	0.00	0.02	0.18			0.07	
95% queue length	0.00	0.06	0.67			0.22	
Control Delay (s/veh)	8.1	8.1	13.8			14.6	
LOS	A	A	B			B	
Approach Delay (s/veh)	--	--	13.8			14.6	
Approach LOS	--	--	B			B	

TWO-WAY STOP CONTROL SUMMARY							
<b>General Information</b>				<b>Site Information</b>			
Analyst	S. Canfield			Intersection	Meridian/77th		
Agency/Co.	PEC			Jurisdiction	City of Valley Center		
Date Performed	9/18/2013			Analysis Year	2013		
Analysis Time Period	PM Peak Hour						
Project Description 12468							
East/West Street: Ford St				North/South Street: Meridian Ave			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
<b>Vehicle Volumes and Adjustments</b>							
<b>Major Street</b>	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	1	400	43	51	311	49	
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.73	0.73	0.73	
Hourly Flow Rate, HFR (veh/h)	1	412	44	69	426	67	
Percent Heavy Vehicles	4	--	--	4	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	2	0	0	2	0	
Configuration	LT		TR	LT		TR	
Upstream Signal		0			0		
<b>Minor Street</b>	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	37	9	2	25	23	27	
Peak-Hour Factor, PHF	0.71	0.71	0.71	0.85	0.85	0.85	
Hourly Flow Rate, HFR (veh/h)	52	12	2	29	27	31	
Percent Heavy Vehicles	4	4	4	4	4	4	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
<b>Delay, Queue Length, and Level of Service</b>							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LT	LT	LTR			LTR	
v (veh/h)	1	69	87			66	
C (m) (veh/h)	1053	1087	302			220	
v/c	0.00	0.06	0.29			0.30	
95% queue length	0.00	0.20	1.20			1.26	
Control Delay (s/veh)	8.4	8.5	21.7			28.3	
LOS	A	A	C			D	
Approach Delay (s/veh)	--	--	21.7			28.3	
Approach LOS	--	--	C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst				Intersection	Meridian/Ford			
Agency/Co.	PEC			Jurisdiction	City of Valley Center			
Date Performed	9/18/2013			Analysis Year	2013			
Analysis Time Period	AM Peak Hour							
Project Description 12468 - Widening WB Ford St								
East/West Street: Ford St				North/South Street: Meridian Ave				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	1	258	21	19	297	23		
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.86	0.86	0.86		
Hourly Flow Rate, HFR (veh/h)	1	318	25	22	345	26		
Percent Heavy Vehicles	4	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	2	0	0	2	0		
Configuration	LT		TR	LT		TR		
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	9	3	2	39	4	29		
Peak-Hour Factor, PHF	0.50	0.50	0.50	0.78	0.78	0.78		
Hourly Flow Rate, HFR (veh/h)	18	6	4	50	5	37		
Percent Heavy Vehicles	0	0	0	4	4	4		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration		LTR		LT		R		
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (veh/h)	1	22	55		37		28	
C (m) (veh/h)	1170	1198	392		864		403	
v/c	0.00	0.02	0.14		0.04		0.07	
95% queue length	0.00	0.06	0.49		0.13		0.22	
Control Delay (s/veh)	8.1	8.1	15.7		9.4		14.6	
LOS	A	A	C		A		B	
Approach Delay (s/veh)	--	--	13.1			14.6		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY								
<b>General Information</b>					<b>Site Information</b>			
Analyst	S. Canfield				Intersection	Meridian/77th		
Agency/Co.	PEC				Jurisdiction	City of Valley Center		
Date Performed	9/18/2013				Analysis Year	2013		
Analysis Time Period	PM Peak Hour							
Project Description 12468 - Widening WB Ford St								
East/West Street: Ford St					North/South Street: Meridian Ave			
Intersection Orientation: North-South					Study Period (hrs): 1.00			
<b>Vehicle Volumes and Adjustments</b>								
<b>Major Street</b>		Northbound			Southbound			
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	1	400	43	51	311	49		
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.73	0.73	0.73		
Hourly Flow Rate, HFR (veh/h)	1	412	44	69	426	67		
Percent Heavy Vehicles	4	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0					0
Lanes	0	2	0	0	2	0		
Configuration	LT		TR	LT		TR		
Upstream Signal		0			0			
<b>Minor Street</b>		Eastbound			Westbound			
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	37	9	2	25	23	27		
Peak-Hour Factor, PHF	0.71	0.71	0.71	0.85	0.85	0.85		
Hourly Flow Rate, HFR (veh/h)	52	12	2	29	27	31		
Percent Heavy Vehicles	4	4	4	4	4	4		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration		LTR		LT		R		
<b>Delay, Queue Length, and Level of Service</b>								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	LT		R		LTR	
v (veh/h)	1	69	56		31		66	
C (m) (veh/h)	1053	1087	225		803		220	
v/c	0.00	0.06	0.25		0.04		0.30	
95% queue length	0.00	0.20	0.98		0.12		1.26	
Control Delay (s/veh)	8.4	8.5	26.3		9.7		28.3	
LOS	A	A	D		A		D	
Approach Delay (s/veh)	--	--	20.4			28.3		
Approach LOS	--	--	C			D		

TWO-WAY STOP CONTROL SUMMARY							
<b>General Information</b>				<b>Site Information</b>			
Analyst				Intersection	Meridian/Ford		
Agency/Co.	PEC			Jurisdiction	City of Valley Center		
Date Performed	9/18/2013			Analysis Year	2013		
Analysis Time Period	AM Peak Hour						
Project Description 12468 - Widening WB Ford St/Relocating(Closing) Driveway							
East/West Street: Ford St				North/South Street: Meridian Ave			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
<b>Vehicle Volumes and Adjustments</b>							
<b>Major Street</b>	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	1	258	21	19	297	23	
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.86	0.86	0.86	
Hourly Flow Rate, HFR (veh/h)	1	318	25	22	345	26	
Percent Heavy Vehicles	4	--	--	4	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	2	0	0	2	0	
Configuration	LT		TR	LT		TR	
Upstream Signal		0			0		
<b>Minor Street</b>	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	0		0	43		29	
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.78	0.78	0.78	
Hourly Flow Rate, HFR (veh/h)	0	0	0	55	0	37	
Percent Heavy Vehicles	0	0	0	4	4	4	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	1	0	1	
Configuration		LR		L		R	
<b>Delay, Queue Length, and Level of Service</b>							
Approach	Northbound	Southbound	Westbound		Eastbound		
Movement	1	4	7	8	9	10	11
Lane Configuration	LT	LT	L		R		LR
v (veh/h)	1	22	55		37		0
C (m) (veh/h)	1170	1198	409		864		
v/c	0.00	0.02	0.13		0.04		
95% queue length	0.00	0.06	0.46		0.13		
Control Delay (s/veh)	8.1	8.1	15.2		9.4		
LOS	A	A	C		A		
Approach Delay (s/veh)	--	--	12.8				
Approach LOS	--	--	B				

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	S. Canfield			Intersection	Meridian/77th			
Agency/Co.	PEC			Jurisdiction	City of Valley Center			
Date Performed	9/18/2013			Analysis Year	2013			
Analysis Time Period	PM Peak Hour							
Project Description 12468 - Widening WB Ford St/Relocating(Closing) Driveway								
East/West Street: Ford St				North/South Street: Meridian Ave				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	1	400	43	51	311	49		
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.73	0.73	0.73		
Hourly Flow Rate, HFR (veh/h)	1	412	44	69	426	67		
Percent Heavy Vehicles	4	--	--	4	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	2	0	0	2	0		
Configuration	LT		TR	LT		TR		
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0		0	48		27		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.85	0.85	0.85		
Hourly Flow Rate, HFR (veh/h)	0	0	0	56	0	31		
Percent Heavy Vehicles	4	4	4	4	4	4		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	1		
Configuration		LR		L		R		
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound		Eastbound			
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LT	L		R		LR	
v (veh/h)	1	69	56		31		0	
C (m) (veh/h)	1053	1087	265		803			
v/c	0.00	0.06	0.21		0.04			
95% queue length	0.00	0.20	0.80		0.12			
Control Delay (s/veh)	8.4	8.5	22.2		9.7			
LOS	A	A	C		A			
Approach Delay (s/veh)	--	--	17.7					
Approach LOS	--	--	C					

Lanes, Volumes, Timings  
3: Meridian Ave & Main St

10/16/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔↔		↔	↔			↔↔	
Volume (vph)	18	10	111	34	14	13	111	164	17	11	257	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	90		0	0		0	150		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt			0.850		0.968			0.986			0.991	
Flt Protected		0.969			0.973		0.950				0.998	
Satd. Flow (prot)	0	1805	1583	0	3333	0	1770	1837	0	0	3500	0
Flt Permitted		0.781			0.801		0.404				0.940	
Satd. Flow (perm)	0	1455	1583	0	2744	0	753	1837	0	0	3297	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		15			9			9	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		641			523			564			714	
Travel Time (s)		14.6			11.9			12.8			16.2	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Parking (#/hr)				0								
Adj. Flow (vph)	21	12	129	40	16	15	129	191	20	13	299	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	129	0	71	0	129	211	0	0	332	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		6.0	8.0		8.0	8.0	
Minimum Split (s)	36.0	36.0	36.0	36.0	36.0		11.5	26.0		26.0	26.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0		12.0	39.0		27.0	27.0	
Total Split (%)	48.0%	48.0%	48.0%	48.0%	48.0%		16.0%	52.0%		36.0%	36.0%	
Maximum Green (s)	30.5	30.5	30.5	30.5	30.5		6.5	33.5		21.5	21.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0			0.0	
Total Lost Time (s)		5.5	5.5		5.5		5.5	5.5			5.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	None	None	None		None	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	

Lanes, Volumes, Timings  
3: Meridian Ave & Main St

10/16/2013

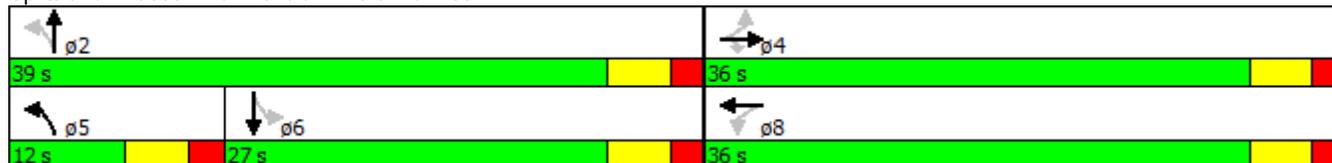


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	23.0	23.0	23.0	23.0	23.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	6	6	6	7	7			4		8	8	
Act Effct Green (s)		11.4	11.4		11.4		24.4	26.1			16.7	
Actuated g/C Ratio		0.26	0.26		0.26		0.56	0.60			0.38	
v/c Ratio		0.09	0.25		0.10		0.22	0.19			0.26	
Control Delay		13.7	4.7		11.2		8.9	8.2			15.6	
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0	
Total Delay		13.7	4.7		11.2		8.9	8.2			15.6	
LOS		B	A		B		A	A			B	
Approach Delay		6.5			11.2			8.5			15.6	
Approach LOS		A			B			A			B	
Queue Length 50th (ft)		6	0		5		13	21			32	
Queue Length 95th (ft)		23	26		18		62	93			91	
Internal Link Dist (ft)		561			443			484			634	
Turn Bay Length (ft)												
Base Capacity (vph)		1091	1220		2063		586	1479			1942	
Starvation Cap Reductn		0	0		0		0	0			0	
Spillback Cap Reductn		0	0		0		0	0			0	
Storage Cap Reductn		0	0		0		0	0			0	
Reduced v/c Ratio		0.03	0.11		0.03		0.22	0.14			0.17	

Intersection Summary

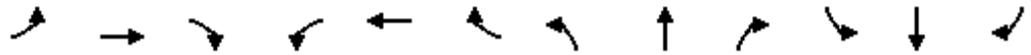
Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 43.8  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.26  
 Intersection Signal Delay: 10.9  
 Intersection Capacity Utilization 39.9%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service A

Splits and Phases: 3: Meridian Ave & Main St



Lanes, Volumes, Timings  
3: Meridian Ave & Main St

10/16/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖↗		↖	↗			↖↗	
Volume (vph)	30	21	115	40	17	28	165	338	64	20	260	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt			0.850		0.951			0.976			0.988	
Flt Protected		0.971			0.977		0.950				0.997	
Satd. Flow (prot)	0	1809	1583	0	3288	0	1770	1818	0	0	3486	0
Flt Permitted		0.765			0.812		0.409				0.911	
Satd. Flow (perm)	0	1425	1583	0	2733	0	762	1818	0	0	3186	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			121		29			16			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		641			523			564			714	
Travel Time (s)		14.6			11.9			12.8			16.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)				0								
Adj. Flow (vph)	32	22	121	42	18	29	174	356	67	21	274	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	54	121	0	89	0	174	423	0	0	321	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		6.0	8.0		8.0	8.0	
Minimum Split (s)	36.0	36.0	36.0	36.0	36.0		11.5	26.0		26.0	26.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0		12.6	39.0		26.4	26.4	
Total Split (%)	48.0%	48.0%	48.0%	48.0%	48.0%		16.8%	52.0%		35.2%	35.2%	
Maximum Green (s)	30.5	30.5	30.5	30.5	30.5		7.1	33.5		20.9	20.9	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0			0.0	
Total Lost Time (s)		5.5	5.5		5.5		5.5	5.5			5.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	None	None	None		None	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	23.0	23.0	23.0	23.0	23.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	6	6	6	7	7			4		8	8	
Act Efect Green (s)		11.5	11.5		11.5		25.1	26.8			16.9	

Lanes, Volumes, Timings  
3: Meridian Ave & Main St

10/16/2013

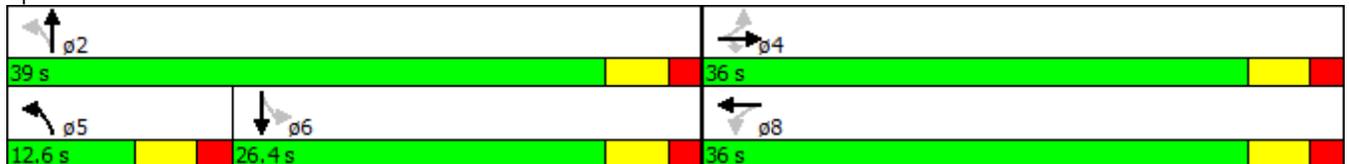


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.26	0.26		0.26		0.57	0.60				0.38
v/c Ratio		0.15	0.24		0.12		0.29	0.38				0.26
Control Delay		14.6	4.8		10.3		9.3	9.4				15.8
Queue Delay		0.0	0.0		0.0		0.0	0.0				0.0
Total Delay		14.6	4.8		10.3		9.3	9.4				15.8
LOS		B	A		B		A	A				B
Approach Delay		7.8			10.3			9.4				15.8
Approach LOS		A			B			A				B
Queue Length 50th (ft)		10	0		5		18	47				32
Queue Length 95th (ft)		36	28		21		86	208				94
Internal Link Dist (ft)		561			443			484				634
Turn Bay Length (ft)												
Base Capacity (vph)		1056	1205		2034		607	1448				1824
Starvation Cap Reductn		0	0		0		0	0				0
Spillback Cap Reductn		0	0		0		0	0				0
Storage Cap Reductn		0	0		0		0	0				0
Reduced v/c Ratio		0.05	0.10		0.04		0.29	0.29				0.18

Intersection Summary

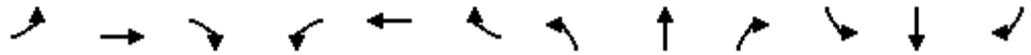
Area Type:	Other
Cycle Length:	75
Actuated Cycle Length:	44.4
Natural Cycle:	75
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.38
Intersection Signal Delay:	11.0
Intersection LOS:	B
Intersection Capacity Utilization:	53.4%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 3: Meridian Ave & Main St



Lanes, Volumes, Timings  
3: Meridian Ave & Main St

10/16/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖↗		↖	↗		↖	↗	
Volume (vph)	18	10	111	34	14	13	111	164	17	11	257	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		0	90		0	0		0	0		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.968			0.986			0.991	
Flt Protected		0.969			0.973		0.950			0.950		
Satd. Flow (prot)	0	1805	1583	0	3333	0	1770	1837	0	1770	1846	0
Flt Permitted		0.778			0.802		0.406			0.626		
Satd. Flow (perm)	0	1449	1583	0	2748	0	756	1837	0	1166	1846	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		15			8				4
Link Speed (mph)		30			30			30				30
Link Distance (ft)		641			523			564				714
Travel Time (s)		14.6			11.9			12.8				16.2
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Parking (#/hr)				0								
Adj. Flow (vph)	21	12	129	40	16	15	129	191	20	13	299	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	129	0	71	0	129	211	0	13	319	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2				6
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		6.0	8.0		8.0	8.0	
Minimum Split (s)	36.0	36.0	36.0	42.0	42.0		11.5	26.0		26.0	26.0	
Total Split (s)	42.0	42.0	42.0	42.0	42.0		11.6	38.0		26.4	26.4	
Total Split (%)	52.5%	52.5%	52.5%	52.5%	52.5%		14.5%	47.5%		33.0%	33.0%	
Maximum Green (s)	36.5	36.5	36.5	36.5	36.5		6.1	32.5		20.9	20.9	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.5		5.5	5.5		5.5	5.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	None	None	None		None	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	

Lanes, Volumes, Timings  
3: Meridian Ave & Main St

10/16/2013

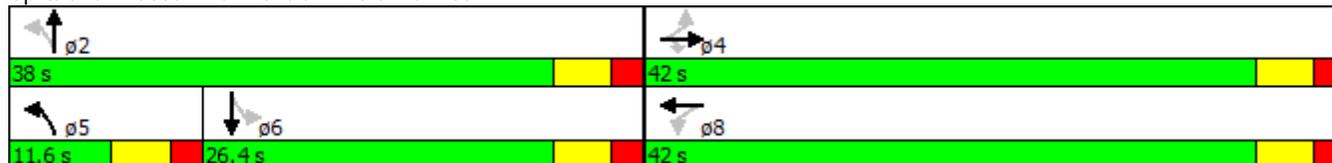


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	23.0	23.0	23.0	23.0	23.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	6	6	6	7	7			4		8	8	
Act Effct Green (s)		11.5	11.5		11.5		26.3	28.1		19.1	19.1	
Actuated g/C Ratio		0.25	0.25		0.25		0.58	0.62		0.42	0.42	
v/c Ratio		0.09	0.26		0.10		0.22	0.19		0.03	0.41	
Control Delay		14.7	4.9		12.0		8.7	7.9		15.5	17.7	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		14.7	4.9		12.0		8.7	7.9		15.5	17.7	
LOS		B	A		B		A	A		B	B	
Approach Delay		6.9			12.0			8.2			17.7	
Approach LOS		A			B			A			B	
Queue Length 50th (ft)		7	0		5		13	21		2	65	
Queue Length 95th (ft)		24	26		18		62	93		16	192	
Internal Link Dist (ft)		561			443			484			634	
Turn Bay Length (ft)												
Base Capacity (vph)		1191	1324		2261		585	1387		648	1028	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.03	0.10		0.03		0.22	0.15		0.02	0.31	

Intersection Summary

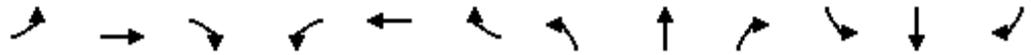
Area Type: Other  
 Cycle Length: 80  
 Actuated Cycle Length: 45.6  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.41  
 Intersection Signal Delay: 11.7  
 Intersection LOS: B  
 Intersection Capacity Utilization 43.0%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 3: Meridian Ave & Main St



Lanes, Volumes, Timings  
3: Meridian Ave & Main St

10/16/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖↗		↖	↗		↖	↗	
Volume (vph)	30	21	115	40	17	28	165	338	64	20	260	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.951			0.976			0.987	
Fl <sub>t</sub> Protected		0.971			0.977		0.950			0.950		
Satd. Flow (prot)	0	1809	1583	0	3288	0	1770	1818	0	1770	1839	0
Fl <sub>t</sub> Permitted		0.765			0.812		0.419			0.515		
Satd. Flow (perm)	0	1425	1583	0	2733	0	780	1818	0	959	1839	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			121		29			16			6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		641			523			564			714	
Travel Time (s)		14.6			11.9			12.8			16.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)				0								
Adj. Flow (vph)	32	22	121	42	18	29	174	356	67	21	274	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	54	121	0	89	0	174	423	0	21	300	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		6.0	8.0		8.0	8.0	
Minimum Split (s)	36.0	36.0	36.0	36.0	36.0		11.5	26.0		26.0	26.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0		13.0	39.0		26.0	26.0	
Total Split (%)	48.0%	48.0%	48.0%	48.0%	48.0%		17.3%	52.0%		34.7%	34.7%	
Maximum Green (s)	30.5	30.5	30.5	30.5	30.5		7.5	33.5		20.5	20.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.5		5.5	5.5		5.5	5.5	
Lead/Lag							Lead			Lag	Lag	
Lead-Lag Optimize?							Yes			Yes	Yes	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None	None	None	None		None	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0		7.0	7.0	
Flash Dont Walk (s)	23.0	23.0	23.0	23.0	23.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	6	6	6	7	7			4		8	8	
Act Effct Green (s)		11.5	11.5		11.5		27.2	29.0		19.0	19.0	

Lanes, Volumes, Timings  
3: Meridian Ave & Main St

10/16/2013

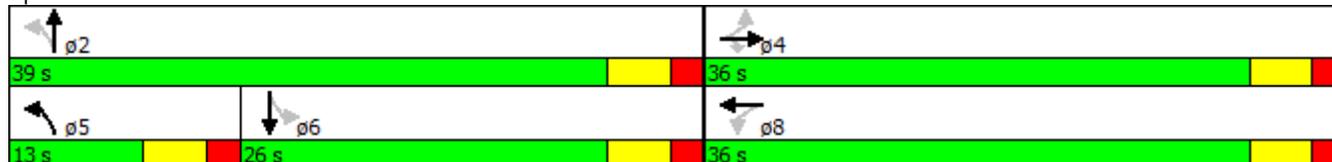


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.25	0.25		0.25		0.59	0.62		0.41	0.41	
v/c Ratio		0.15	0.25		0.13		0.28	0.37		0.05	0.40	
Control Delay		15.9	5.0		11.1		8.8	9.0		16.6	18.3	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		15.9	5.0		11.1		8.8	9.0		16.6	18.3	
LOS		B	A		B		A	A		B	B	
Approach Delay		8.4			11.1			9.0			18.1	
Approach LOS		A			B			A			B	
Queue Length 50th (ft)		11	0		6		18	47		4	63	
Queue Length 95th (ft)		36	29		22		86	207		24	195	
Internal Link Dist (ft)		561			443			484			634	
Turn Bay Length (ft)												
Base Capacity (vph)		1009	1156		1944		632	1382		519	998	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.05	0.10		0.05		0.28	0.31		0.04	0.30	

Intersection Summary

Area Type:	Other
Cycle Length:	75
Actuated Cycle Length:	46.4
Natural Cycle:	75
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.40
Intersection Signal Delay:	11.5
Intersection LOS:	B
Intersection Capacity Utilization:	51.5%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 3: Meridian Ave & Main St



**NEW BUSINESS****B. RESOLUTION 621-13; AUTHORIZING THE OFFERING FOR SALE OF TEMPORARY NOTE SERIES 2014-1:**

A Resolution authorizing the Offering for Sale of General Obligation Temporary Notes, Series 2014-1 of The City of Valley Center, Kansas.

➤ Resolution 621-13

Should Council choose to proceed,

**RECOMMENDED ACTION:**

Staff recommends motion to approve Resolution 621-13; Authorizing the Offering for Sale of Temporary Note Series 2014-1 and Authorize the Mayor to sign executing documents.

Gilmore & Bell, P.C.  
11/21/2013

**RESOLUTION NO. 621-13**

**RESOLUTION AUTHORIZING THE OFFERING FOR SALE OF GENERAL OBLIGATION TEMPORARY NOTES, SERIES 2014-1, OF THE CITY OF VALLEY CENTER, KANSAS.**

**WHEREAS**, the City of Valley Center, Kansas (the “Issuer”), has heretofore authorized certain internal improvements described as follows (collectively, the “Improvements”):

<u>Project Description</u>	<u>Res. No.</u>	<u>Authority (K.S.A.)</u>	<u>Project Amount</u>
Replat of Valley Creek Estates 2 <sup>nd</sup> Addition – Paving Improvements	614-13	12-6a01 <i>et seq.</i>	\$ 140,000
Replat of Valley Creek Estates 2 <sup>nd</sup> Addition - Waterline Improvements	615-13	12-6a01 <i>et seq.</i>	34,000
Clay Street – Paving Improvements	618-13	12-6a01 <i>et seq.</i>	891,480
McLaughlin Street – Sidewalk improvements from 5th to 7th	619-13	14-570 <i>et seq.</i> / Ch. Ord. 27-2009	160,400*
Goff, Fieldstone and Clover Streets – Sidewalk improvements from Meridian to Meadow	619-13	14-570 <i>et seq.</i> / Ch. Ord. 27-2009	315,600*
Emporia Street – Sidewalk improvements from Main to 5th	619-13	14-570 <i>et seq.</i> / Ch. Ord. 27-2009	230,320*
Public Building Improvements – City Hall, Library, Public Safety Building, Community Building and Waste Treatment Plant	619-13	14-570 <i>et seq.</i> / Ch. Ord. 27-2009	108,500*
Park Improvements – Arrowhead and McLaughlin Parks	619-13	14-570 <i>et seq.</i> / Ch. Ord. 27-2009	68,000*
Sewer Rehabilitation	619-13	14-570 <i>et seq.</i> / Ch. Ord. 27-2009	<u>50,000*</u>
<b>Total</b>			<b><i>\$1,998,300</i></b>

\*Plus interest on interim financing and associated financing costs

; and

**WHEREAS**, the governing body of the Issuer is authorized by law to issue general obligation bonds to pay the costs of the Improvements; and

**WHEREAS**, it is necessary for the Issuer to provide cash funds (from time to time) to meet its obligations incurred in constructing the Improvements prior to the completion thereof and the issuance of the Issuer's general obligation bonds, and it is desirable and in the interest of the Issuer that such funds be raised by the issuance of temporary notes of the Issue; and

**WHEREAS**, none of such general obligation bonds or temporary notes heretofore authorized have been issued and the Issuer proposes to issue its temporary notes to pay a portion of the costs of the Improvements; and

**WHEREAS**, the Issuer hereby selects the firm of Piper Jaffray & Co., Leawood, Kansas (“Financial Advisor”), as financial advisor for one or more series of temporary notes of the Issuer in order to provide funds to temporarily finance the Improvements; and

**WHEREAS**, the Issuer desires to authorize the Financial Advisor to proceed with the offering for sale of said temporary notes and related activities; and

**WHEREAS**, one of the duties and responsibilities of the Issuer is to prepare and distribute a preliminary official statement relating to said temporary notes; and

**WHEREAS**, the Issuer desires to authorize the Financial Advisor, in conjunction with the Clerk and Gilmore & Bell, P.C., Wichita, Kansas (“Bond Counsel”), to proceed with the preparation and distribution of a preliminary official statement and notice of note sale and to authorize the distribution thereof and all other preliminary action necessary to sell said temporary notes.

**BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF VALLEY CENTER, KANSAS, AS FOLLOWS:**

**Section 1.** The Issuer is hereby authorized to offer at competitive public sale the Issuer’s General Obligation Temporary Notes, Series 2014-1 (the “Notes”) as described in the Notice of Note Sale, which is hereby approved in substantially the form presented to the governing body this date.

**Section 2.** The Preliminary Official Statement, dated December 3, 2013, is hereby approved in substantially the form presented to the governing body this date, with such changes or additions as the Mayor and Clerk shall deem necessary and appropriate, and such officials and other representatives of the Issuer are hereby authorized to use such document in connection with the public sale of the Notes.

**Section 3.** The Clerk, in conjunction with the Financial Advisor and Bond Counsel, is hereby authorized and directed to give notice of said note sale by distributing copies of the Notice of Note Sale and Preliminary Official Statement to prospective purchasers of the Notes. Proposals for the purchase of the Notes shall be submitted upon the terms and conditions set forth in said Notice of Note Sale, and shall be delivered to the governing body at its meeting to be held on such date, at which meeting the governing body shall review such bids and shall award the sale of the Notes or reject all proposals.

**Section 4.** For the purpose of enabling the purchaser of the Notes (the “Purchaser”) to comply with the requirements of Rule 15c2-12 of the Securities Exchange Commission (the “Rule”), the Mayor and Clerk or appropriate officers of the Issuer are hereby authorized: (a) to approve the form of said Preliminary Official Statement, and to execute the “Certificate Deeming Preliminary Official Statement Final” in substantially the form attached hereto as *Exhibit A* as approval of the Preliminary Official Statement, such official's signature thereon being conclusive evidence of such official's and the Issuer's approval thereof; and (b) covenant to provide continuous secondary market disclosure by annually transmitting certain financial information and operating data and other information necessary to comply with the Rule to certain national repositories and the Municipal Securities Rulemaking Board, as applicable; and (c) take such other actions or execute such other documents as such officers in their reasonable judgment deem necessary; to enable the Purchaser to comply with the requirement of the Rule.

**Section 5.** The Issuer agrees to provide to the Purchaser within seven business days of the date of the sale of Notes or within sufficient time to accompany any confirmation that requests payment from any customer of the Purchaser, whichever is earlier, sufficient copies of the final Official Statement to enable the Purchaser to comply with the requirements of the Rule and with the requirements of Rule G-32 of the Municipal Securities Rulemaking Board.

**Section 6.** The Mayor, City Administrator, Clerk and the other officers and representatives of the Issuer, the Financial Advisor and Bond Counsel are hereby authorized and directed to take such other action as may be necessary to carry out the sale of the Notes.

**Section 7.** This Resolution shall be in full force and effect from and after its adoption.

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**ADOPTED** by the governing body on December 3, 2013.

(SEAL)

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
Clerk

Gilmore & Bell, P.C.  
11/21/2013

**EXHIBIT A**  
**CERTIFICATE DEEMING**  
**PRELIMINARY OFFICIAL STATEMENT FINAL**

December 3, 2013

To:

Re: City of Valley Center, Kansas, General Obligation Temporary Notes, Series 2014-1

The undersigned are the duly acting Mayor and Clerk of the City of Valley Center, Kansas (the "Issuer"), and are authorized to deliver this Certificate to the addressee (the "Purchaser") on behalf of the Issuer. The Issuer has heretofore caused to be delivered to the Purchaser copies of the Preliminary Official Statement (the "Preliminary Official Statement") relating to the above-referenced notes (the "Notes").

For the purpose of enabling the Purchaser to comply with the requirements of Rule 15c2-12(b)(1) of the Securities and Exchange Commission (the "Rule"), the Issuer hereby deems the information regarding the Issuer contained in the Preliminary Official Statement to be final as of its date, except for the omission of such information as is permitted by the Rule, such as offering prices, interest rates, selling compensation, aggregate principal amount, principal per maturity, delivery dates, ratings, identity of the underwriters and other terms of the Notes depending on such matters.

**CITY OF VALLEY CENTER, KANSAS**

By: \_\_\_\_\_  
Title: Mayor

By: \_\_\_\_\_  
Title: Clerk

Gilmore & Bell, P.C.  
11/21/2013

## NOTICE OF NOTE SALE

**\$1,565,000\***

**CITY OF VALLEY CENTER, KANSAS**

### **GENERAL OBLIGATION TEMPORARY NOTES SERIES 2014-1**

(GENERAL OBLIGATION NOTES PAYABLE  
FROM UNLIMITED AD VALOREM TAXES)

**Bids.** Written Facsimile and electronic (as explained below) bids for the purchase of the above-referenced notes (the “Notes”) of the City of Valley Center, Kansas (the “Issuer”) herein described will be received on behalf of the undersigned Clerk of the Issuer, in the case of written bids, at the address hereinafter set forth, and in the case of electronic bids, via **PARITY**<sup>®</sup> until 11:00 A.M., C.S.T. (the “Submittal Hour”), on

**DECEMBER 17, 2013**

(the “Sale Date”). All bids will be publicly evaluated at said time and place and the award of the Notes to the successful bidder (the “Successful Bidder”) will be acted upon by the governing body at its meeting to be held at 7:00 P.M. on the Sale Date. No oral or auction bids will be considered. Capitalized terms not otherwise defined herein shall have the meanings set forth in the hereinafter referenced Preliminary Official Statement relating to the Notes.

**Terms of the Notes.** The Notes will consist of fully registered notes in the denomination of \$5,000 or any integral multiple thereof (the “Authorized Denomination”). The Notes will be dated January 8, 2014 (the “Dated Date”), and will become due on December 1, 2016.

The Notes will bear interest from the Dated Date at rates to be determined when the Notes are sold as hereinafter provided, which interest will be payable semiannually on June 1 and December 1 in each year, beginning on June 1, 2014 (the “Interest Payment Dates”).

**\*Adjustment of Issue Size.** The Issuer reserves the right to increase or decrease the total principal amount of the Notes, depending on the purchase price and interest rates bid and the offering prices specified by the Successful Bidder. The principal amount may be adjusted by the Issuer in order to properly size the Note issue based on the offering price and interest rates bid on the Notes. The Successful Bidder may not withdraw its bid or change the interest rates bid as a result of any changes made to the principal amount of the Notes or principal of any maturity as described herein. If there is an increase or decrease in the final aggregate principal amount of the Notes or the schedule of principal payments as described above, the Issuer will notify the Successful Bidder by means of telephone or facsimile transmission, subsequently confirmed in writing, no later than 2:00 P.M., C.S.T. on the Sale Date. The actual purchase price for the Notes shall be calculated by applying the percentage of par value bid by the Successful Bidder against the final aggregate principal amount of the Notes, as adjusted, plus accrued interest from the date of the Notes to the date of delivery.

**Place of Payment.** The principal of and interest on the Notes will be payable in lawful money of the United States of America by check or draft of the Treasurer of the State of Kansas, Topeka, Kansas (the “Paying Agent” and “Note Registrar”). The principal of each Note will be payable at maturity or earlier redemption to the owners thereof whose names are on the registration books (the “Note Register”) of the Note Registrar (the “Registered Owner”) upon presentation and surrender at the principal office of the Paying Agent. Interest on each Note will be payable to the Registered Owner of such Note as of the fifteenth day (whether or not a business day) of the calendar month next preceding each Interest Payment Date (the “Record Date”): (a) mailed by the Paying Agent to the address of such Registered Owner as shown on the Note Register or at such other address as is furnished to the Paying Agent in writing by such Registered Owner; or (b) in the case of an interest payment to Cede & Co. or any Registered Owner of \$500,000 or more in aggregate principal amount of Notes, by wire transfer to such Registered Owner upon written notice given to the Paying Agent by such Registered Owner, not less than 15 days prior to the Record Date for such interest, containing the wire transfer address to which such Registered Owner wishes to have such wire directed.

**Note Registration.** The Notes will be registered pursuant to a plan of registration approved by the Issuer and the Attorney General of the State of Kansas. The Issuer will pay for the fees of the Note Registrar for registration and transfer of the Notes and will also pay for printing a reasonable supply of registered note blanks. Any additional costs or fees that might be incurred in the secondary market, other than fees of the Note Registrar, will be the responsibility of the Registered Owners.

**Book-Entry-Only System.** The Notes shall be initially registered in the name of Cede & Co., as the nominee of DTC and no beneficial owner will receive certificates representing their interests in the Notes. During the term of the Notes, so long as the book-entry-only system is continued, the Issuer will make payments of principal of, premium, if any, and interest on the Notes to DTC or its nominee as the Registered Owner of the Notes, DTC will make book-entry-only transfers among its participants and receive and transmit payment of principal of, premium, if any, and interest on the Notes to its participants who shall be responsible for transmitting payments to beneficial owners of the Notes in accordance with agreements between such participants and the beneficial owners. The Issuer will not be responsible for maintaining, supervising or reviewing the records maintained by DTC, its participants or persons acting through such participants. In the event that: (a) DTC determines not to continue to act as securities depository for the Notes, or (b) the Issuer determines that continuation of the book-entry-only form of evidence and transfer of ownership of the Notes would adversely affect the interests of the beneficial owners of the Notes, the Issuer will discontinue the book-entry-only form of registration with DTC. If the Issuer fails to identify another qualified securities depository to replace DTC, the Issuer will cause to be authenticated and delivered to the beneficial owners replacement Notes in the form of fully registered certificates. Reference is made to the Preliminary Official Statement for further information regarding the book-entry-only system of registration of the Notes and DTC.

#### **Redemption of Notes Prior to Maturity.**

**General.** Whenever the Issuer is to select Notes for the purpose of redemption, it will, in the case of Notes in denominations greater than the minimum Authorized Denomination, if less than all of the Notes then outstanding are to be called for redemption, treat each minimum Authorized Denomination of face value of each such fully registered Note as though it were a separate Note in the minimum Authorized Denomination.

**Optional Redemption.** At the option of the Issuer, the Notes will be subject to redemption and payment prior to maturity on June 1, 2014, and thereafter, as a whole or in part (selection of the amount of Notes to be redeemed to be determined by the Issuer in such equitable manner as it may determine) at any

time, at the redemption price of 100% (expressed as a percentage of the principal amount), plus accrued interest to the date of redemption.

**Notice and Effect of Call for Redemption.** Unless waived by any owner of Notes to be redeemed, if the Issuer shall call any Notes for redemption and payment prior to the maturity thereof, the Issuer shall give written notice of its intention to call and pay said Notes to the Note Registrar and the Successful Bidder. In addition, the Issuer shall cause the Note Registrar to give written notice of redemption to the registered owners of said Notes. Each of said written notices shall be deposited in United States first class mail not less than 30 days prior to the date fixed for redemption. All notices of redemption shall state the date of redemption, the redemption price, the Notes to be redeemed, the place of surrender of Notes so called for redemption and a statement of the effect of the redemption. The Issuer shall also give such additional notice as may be required by Kansas law or regulation of the Securities and Exchange Commission in effect as of the date of such notice. If any Note be called for redemption and payment as aforesaid, all interest on such Note shall cease from and after the date for which such call is made, provided funds are available for its payment at the price hereinbefore specified.

**Authority, Purpose and Security.** The Notes are being issued pursuant to K.S.A. 10-123, K.S.A. 12-6a01 *et seq.* and K.S.A. 14-570 *et seq.*, as amended by Charter Ordinance No. 27-2009, all as amended, and a resolution adopted by the governing body of the Issuer (the "Note Resolution") for the purpose of paying a portion of the cost of certain public improvements (the "Improvements"). The Notes shall be general obligations of the Issuer payable as to both principal and interest in part from special assessments levied upon the property benefited by the construction of said Improvements or from the proceeds of general obligation bonds of the Issuer, and if not so paid, from ad valorem taxes which may be levied without limitation as to rate or amount upon all the taxable tangible property, real and personal, within the territorial limits of the Issuer. The full faith, credit and resources of the Issuer are irrevocably pledged for the prompt payment of the principal and interest on the Notes as the same become due.

**Submission of Bids.** Written bids must be made on forms which may be procured from the Financial Advisor and shall be addressed to the undersigned, and marked "Proposal for General Obligation Temporary Notes, Series 2014-1." Written bids submitted by facsimile should not be preceded by a cover sheet and should be sent only once to (913) 345-3323. Confirmation of receipt of facsimile bids may be made by contacting the undersigned at the number listed below. Electronic bids via PARITY<sup>®</sup> must be submitted in accordance with its Rules of Participation, as well as the provisions of this Notice of Note Sale. If provisions of this Notice of Note Sale conflict with those of PARITY<sup>®</sup>, this Notice of Note Sale shall control. Bids must be received prior to the Submittal Hour on the Sale Date. The Issuer shall not be responsible for any failure, misdirection or error in the means of transmission selected by any bidder.

**PARITY<sup>®</sup>.** Information about the electronic bidding services of PARITY<sup>®</sup> may be obtained from i-Deal LLC at 1359 Broadway, 2nd Floor, New York, New York 10018, Phone No. (212) 849-5023.

**Conditions of Bids.** Proposals will be received on the Notes bearing such rate or rates of interest as may be specified by the bidders, subject to the following conditions: (a) the same rate shall apply to all Notes; (b) no interest rate may exceed a rate equal to the daily yield for the 10-year Treasury Bond published by **THE BOND BUYER**, in New York, New York, on the Monday next preceding the day on which the Notes are sold, plus 6%; and (c) no supplemental interest payments will be considered. No bid shall be for less than 99% of the principal amount of the Notes and accrued interest thereon to the date of delivery will be considered. Each bid shall specify the total interest cost (expressed in dollars) during the term of the Notes on the basis of such bid, and an estimate of the TIC (as hereinafter defined) on the basis of such bid. Each bidder shall certify to the Issuer the correctness of the information contained on the Official Bid Form; the Issuer will be entitled to rely on such certification. Each bidder agrees that, if it is

awarded the Notes, it will provide the certification as to initial offering prices described under the caption "Certification as to Offering Price" in this Notice.

**Basis of Award.** The award of the Notes will be made on the basis of the lowest true interest cost ("TIC"), which will be determined as follows: the TIC is the discount rate (expressed as a per annum percentage rate) which, when used in computing the present value of all payments of principal and interest to be paid on the Notes, from the payment dates to the Dated Date, produces an amount equal to the price bid, including any adjustments for premium or discount, if any. Present value will be computed on the basis of semiannual compounding and a 360-day year of twelve 30-day months. Bidders are requested to provide a calculation of the TIC for the Notes on the Official Bid Form, computed as specified herein on the basis of their respective bids, which shall be considered as informative only and not binding on either the bidder or the Issuer. The Financial Advisor will verify the TIC based on such bids. If there is any discrepancy between the TIC specified and the bid price and interest rates specified, the specified bid price and interest rates shall govern and the TIC specified in the bid shall be adjusted accordingly. If two or more proper bids providing for identical amounts for the lowest TIC are received, the governing body of the Issuer will determine which bid, if any, will be accepted, and its determination is final.

The Issuer reserves the right to reject any and/or all bids and to waive any irregularities in a submitted bid. Any disputes arising hereunder shall be governed by the laws of Kansas, and any party submitting a bid agrees to be subject to jurisdiction and venue of the federal and state courts within Kansas with regard to such dispute. Any bid received after the Submittal Hour on the Sale Date will be returned to the bidder.

**Optional Bond Insurance.** The Issuer has **not** applied for any policy of municipal bond insurance with respect to the Notes, and will not pay the premium in connection with any policy of municipal bond insurance desired by the Successful Bidder. In the event a bidder desires to purchase and pay all costs associated with the issuance of a policy of municipal bond insurance in connection with the Notes, such indication and the name of the desired insurer must be set forth on the bidder's Official Bid Form, and shall specify all terms and conditions to which the Issuer will be required to agree in connection with the issuance of such insurance policy. The Issuer specifically reserves the right to reject any bid specifying municipal bond insurance, even though such bid may result in the lowest net interest cost to the Issuer.

**Ratings.** The Issuer has applied to Standard & Poor's Ratings Services, a division of the McGraw-Hill Companies, Inc. for a rating on the Notes herein offered for sale. Such application and ratings are further described in the Preliminary Official Statement, hereinafter described.

**CUSIP Numbers.** CUSIP identification numbers will be assigned and printed on the Notes, but neither the failure to print such number on any Note nor any error with respect thereto shall constitute cause for failure or refusal by the purchaser thereof to accept delivery of and pay for the Notes in accordance with the terms of this Notice. All expenses in relation to the assignment and printing of CUSIP numbers on the Notes will be paid by the Issuer.

**Delivery and Payment.** The Issuer will pay for printing the Notes and will deliver the Notes properly prepared, executed and registered without cost on or about **JANUARY 8, 2014**, at DTC for the account of the Successful Bidder. The Successful Bidder will be furnished with a certified transcript of the proceedings evidencing the authorization and issuance of the Notes and the usual closing documents, including a certificate that there is no litigation pending or threatened at the time of delivery of the Notes affecting their validity and a certificate regarding the completeness and accuracy of the Official

Statement. Payment for the Notes shall be made in federal reserve funds, immediately available for use by the Issuer. The Issuer will deliver one Note of each maturity registered in the nominee name of DTC.

**Reoffering Prices.** To provide the Issuer with information necessary for compliance with Section 148 of the Internal Revenue Code of 1986, as amended (the “Code”), the Successful Bidder will be required to complete, execute and deliver to the Issuer prior to the delivery of the Notes, a written certification (the “Issue Price Certificate”) containing the following: (a) the initial offering price and interest rate for the Notes; (b) that all of the Notes were offered to the public in a bona fide public offering at the initial offering prices on the Sale Date; and (c) on the Sale Date the Successful Bidder reasonably expected that at least 10% of the Notes would be sold to the “public” at prices not higher than the initial offering prices. For purposes of the preceding sentence “public” means persons other than bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters or wholesalers. However, such Issue Price Certificate may indicate that the Successful Bidder has purchased the Notes for its own account in a capacity other than as an underwriter or wholesaler, and currently has no intent to reoffer the Notes for sale the public.

***Subsequent to the Submittal Hour, such initial offering prices to the public shall be provided to the Issuer or the Financial Advisor not more than 20 minutes after requested by the Issuer or the Financial Advisor.***

At the request of the Issuer, the Successful Bidder will provide information explaining the factual basis for the Successful Bidder’s Issue Price Certificate. This agreement by the Successful Bidder to provide such information will continue to apply after the Closing Time if: (a) the Issuer requests the information in connection with an audit or inquiry by the Internal Revenue Service (the “IRS”) or the Securities and Exchange Commission (the “SEC”); or (b) the information is required to be retained by the Issuer pursuant to future regulation or similar guidance from the IRS, the SEC or other federal or state regulatory authority.

**Preliminary Official Statement and Official Statement.** The Issuer has prepared a Preliminary Official Statement dated December 3, 2013, “deemed final” by the Issuer except for the omission of certain information as provided in Securities and Exchange Commission Rule 15c2-12, copies of which may be obtained from the Financial Advisor. Upon the sale of the Notes, the Issuer will adopt the final Official Statement and will furnish the Successful Bidder, without cost, within seven business days of the acceptance of the Successful Bidder’s proposal, with a sufficient number of copies thereof, which may be in electronic format, in order to comply with the requirements of Rule 15c2-12(3) and (4) of the Securities and Exchange Commission and Rule G-32 of the Municipal Securities Rulemaking Board (collectively the “Rules”). Additional copies may be ordered by the Successful Bidder at its expense. The Issuer’s acceptance, including electronic acceptance through PARITY<sup>®</sup>, of the Successful Bidder’s proposal for the purchase of the Notes in accordance with this Notice of Note Sale shall constitute a contract between the Issuer and the Successful Bidder for purposes of the Rules.

**Continuing Disclosure.** The Securities and Exchange Commission (the “SEC”) has promulgated amendments to its Rule 15c2-12 (the “Rule”) requiring continuous secondary market disclosure for certain issues. In the Note Resolution, the Issuer has covenanted to provide annually certain financial information and operating data and other information necessary to comply with the Rule, and to transmit the same to the Municipal Securities Rulemaking Board. This covenant is for the benefit of and is enforceable by any Registered Owner of the Notes. For further information, reference is made to the caption “CONTINUING DISCLOSURE” in the Preliminary Official Statement.

**Assessed Valuation and Indebtedness.** The total assessed valuation of the taxable tangible property within the Issuer for the year 2013 is as follows:

Equalized Assessed Valuation of	
Taxable Tangible Property .....	\$44,135,675
Tangible Valuation of Motor Vehicles (2012).....	<u>7,390,489</u>
Equalized Assessed Tangible Valuation	
for Computation of Bonded Debt Limitations .....	<b>\$51,526,164</b>

The total general obligation indebtedness of the Issuer as of the date of delivery of the Notes, including the Notes being sold, is \$20,200,000.

**Legal Opinion.** The Notes will be sold subject to the approving legal opinion of GILMORE & BELL, P.C., WICHITA, KANSAS, Bond Counsel, which opinion will be furnished and paid for by the Issuer, will be printed on the Notes, if the Notes are printed, and will be delivered to the Successful Bidder when the Notes are delivered. Said opinion will also include the opinion of Bond Counsel relating to the interest on the Notes being excluded from gross income for federal income tax purposes and exempt from income taxation by the State of Kansas. Reference is made to the Preliminary Official Statement for further discussion of federal and Kansas income tax matters relating to the interest on the Notes.

**Additional Information.** Additional information regarding the Notes may be obtained from the undersigned, or from the Financial Advisor, at the addresses set forth below:

**DATED: December 3, 2013.**

**CITY OF VALLEY CENTER, KANSAS**  
 By Kristine A. Polian, Clerk

***Written Bid Delivery Address:***

City Hall  
 121 S. Meridian  
 Valley Center, Kansas 67147  
 Phone No.: (316) 755-7310  
 Fax No.: (316) 755-7319  
 Email: [kpolian@valleycenterks.org](mailto:kpolian@valleycenterks.org)

***Financial Advisor - Facsimile Bid Delivery Address:***

Piper Jaffray & Co.  
 11150 Overbrook Road, Suite 310  
 Leawood, Kansas 66211-2298  
 Attn: Mr. Dustin Avey  
 Phone No.: (913) 345-3375  
 Fax No.: (913) 345-3323  
 Email: [dustin.j.avey@pjc.com](mailto:dustin.j.avey@pjc.com)

**OFFICIAL BID FORM**

**PROPOSAL FOR THE PURCHASE OF CITY OF VALLEY CENTER, KANSAS  
GENERAL OBLIGATION TEMPORARY NOTES**

TO: Kristine A. Polian, Clerk  
City of Valley Center, Kansas

December 17, 2013

For \$1,565,000\* principal amount of General Obligation Temporary Notes, Series 2014-1, of the City of Valley Center, Kansas, to be dated January 8, 2014, as described in your Notice of Note Sale dated December 3, 2013, said Notes to bear interest as follows:

<u>Maturity</u> <u>December 1</u> 2016	<u>Principal</u> <u>Amount</u> \$1,565,000*	<u>Interest</u> <u>Rate</u> _____ %
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\*subject to change; see Notice of Note Sale

the undersigned will pay the purchase price for the Notes set forth below, plus accrued interest to the date of delivery.

Principal Amount .....	\$1,565,000*
Less Discount (not to exceed \$15,650).....	- _____
Plus Premium (if any) .....	_____
Total Purchase Price .....	\$ _____
Total interest cost to maturity at the rate(s) specified .....	\$ _____
Net interest cost .....	\$ _____
True Interest Cost .....	_____ %

This proposal is subject to all terms and conditions contained in said Notice of Note Sale, and if the undersigned is the Successful Bidder, the undersigned will comply with all of the provisions contained in said Notice. The acceptance of this proposal by the Issuer shall constitute a contract between the Issuer and the Successful Bidder for purposes of complying with Rule 15c2-12 of the Securities and Exchange Commission.

Submitted by: \_\_\_\_\_

(LIST ACCOUNT MEMBERS ON REVERSE)

By: \_\_\_\_\_

Telephone No. (\_\_\_\_) \_\_\_\_\_

**ACCEPTANCE**

Pursuant to action duly taken by the Governing Body of the City of Valley Center, Kansas, the above proposal is hereby accepted on December 17, 2013.

Attest:

\_\_\_\_\_  
Clerk

\_\_\_\_\_  
Mayor

**NOTE:** No additions or alterations in the above proposal form shall be made, and any erasures may cause rejection of any bid. Sealed bids may be filed with the Clerk, Kristine A. Polian, City Hall, 121 S. Meridian, Valley Center, Kansas 67147, facsimile bids may be filed with Piper Jaffray & Co., Fax No. (913) 345-3323 or electronic bids may be submitted via **PARITY**®, at or prior to 11:00 A.M., C.S.T., on December 17, 2013. Any bid received after such time will not be accepted or shall be returned to the bidder.

## **CONSENT AGENDA**

**NONE**

## **STAFF REPORTS**

**A. City Clerk Polian**

**B. Chief of Police Hephner**

**C. Fire Chief Tormey**

**D. Community Development Director Utecht**

**E. City Superintendent Dunn**

**F. Parks & Public Buildings Superintendent Owings**

**G. City Engineer Kelsey**

**H. City Attorney Arbuckle**

**I. City Administrator Pile**

## **GOVERNING BODY REPORTS**

**A. Mayor McNown**

**B. Councilmember Leftoff**

**C. Councilmember Cicirello**

**D. Councilmember Ishman**

**E. Councilmember Dove**

**F. Councilmember Maschino**

**G. Councilmember L. Jackson**

**H. Councilmember Anderson**

**I. Councilmember Hobson**

**ADJOURN**