



## **AGENDA**

### **REGULAR MEETING OF THE WINDSOR HEIGHTS CITY COUNCIL**

**Monday, July 6, 2020 - 6:00 PM**

**VIA ZOOM - Meeting Information: Meeting ID: 882 5126 3290**

**Password: 084772 Phone: 312 626 6799**

Notice to the Public: If you would like the supporting documents and information, please call City Hall by noon the day of the meeting. Copies of City Council Agendas are free to the public. In consideration of all, if you have a cell phone, please turn it off or put it on silent ring. The use of obscene and vulgar language, hate speech, racial slurs, slanderous comments, and any other disruptive behavior during the Council meeting will not be tolerated and the offender may be barred by the presiding officer from further comment before the Council during the meeting and/or removed from the meeting.

1. **Call to Order/Roll Call/Pledge of Allegiance**
2. **Approval of the Agenda**
3. **Public Hearing:**
  - A. Public Hearing on Ordinance No. 20-05 - Adding Section 30.11 - Unbiased Policing Policy to the Windsor Heights Code of Ordinances
  - B. Consideration of the First Reading of Ordinance No. 20-05 - Adding Chapter 30.11 - Unbiased Policing Policy to the Windsor Heights Code of Ordinances
4. **Public Forum:** This is time set aside for comments from the public on topics of City business other than those listed on the agenda. No action may be taken. Please come to the podium, state your name and address for the record and keep your comments to no more than 5 minutes.
5. **Consent Agenda:** Any item on the Consent Agenda may be removed for separate consideration.
  - A. Approve Minutes of the Regular Council Meeting on June 15, 2020
  - B. Approve Payment of Claims
  - C. Approve Liquor Licenses - Hy-vee Market Cafe, RI Restaurant, and Super Quick Mart
6. **Old Business:**
  - A. Consideration of Resolution No. 2020-88 - Setting a Public Hearing on Ordinance No. 20-06 - Relating to Amendment to City Code 60.10.07 to Remove Subsection 21 Related to Unimproved Surfaces and Removing Private Property Language from Subsection 22
  - B. Consideration of Resolution No. 2020 89- Setting a Public Hearing on Ordinance No. 2020-07 Relating to Amendment to City Code 174.08 to Further Define Surfaces Allowed for Parking on Private Property and to Add Parking Prohibitions for Vehicles Parked on Private Property for the Purpose of Sale

The agenda was posted on the official bulletin boards, posted to [www.windsorheights.org](http://www.windsorheights.org), and city social media platforms in compliance with the requirements of city ordinances the open meetings law.

7. **New Business:**

- A. Consideration of Resolution No. 2020-90 - A Resolution Receiving and Filing 73rd Street Corridor Traffic Study
- B. Consideration of Pay Request No. 2 - University Avenue Project
- C. Consideration of Revisions to 28E Agreement for Salt Storage (1 of 2)
- D. Consideration of Revisions to 28E Agreement for Salt Storage (2 of 2)
- E. Consideration of 28E Agreement on Crossing Guards at 73rd and Hickman
- F. Consideration of Resolution No. 2020-91 - A Resolution Approving Community Center Individual Refund Requests

8. **Reports:**

- A. Mayor and Council Reports and Committee Updates
- B. Interim City Administrator Report
- C. City Clerk Report

9. **Closed Session** Closed Session pursuant to Iowa Code Section 21.5 (1)(c) To discuss strategy with counsel in matters that are presently in litigation or where litigation is imminent where its disclosure would be likely to prejudice or disadvantage the position of the government body in that litigation.

- A. Convene into Closed Session
- B. Convene into Open Session

10. **Adjourn**

The agenda was posted on the official bulletin boards, posted to [www.windsorheights.org](http://www.windsorheights.org), and city social media platforms in compliance with the requirements of city ordinances the open meetings law.



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM:

SUBJECT: Public Hearing on Ordinance No. 20-05 - Adding Section 30.11 - Unbiased  
Policing Policy to the Windsor Heights Code of Ordinances

**GENERAL INFORMATION**

Public Hearing

**SUMMARY**

**ATTACHMENTS**

None



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM:

SUBJECT: Consideration of the First Reading of Ordinance No. 20-05 - Adding Chapter 30.11 - Unbiased Policing Policy to the Windsor Heights Code of Ordinances

**GENERAL INFORMATION**

**SUMMARY**

**ATTACHMENTS**

1. Ordinance No. 20-05 - Unbiased Police Policy Ordinance Amendment

## **ORDINANCE NO. 20-05**

### **AN ORDINANCE AMENDING THE CODE OF ORDINANCES FOR THE CITY OF WINDSOR HEIGHTS, IOWA, BY ADDING CHAPTER 30.11 – UNBIASED POLICING POLICY**

**WHEREAS**, the City of Windsor Heights seeks to promote the public health, safety, general welfare and aesthetics of the community through consistent, content- neutral and nondiscriminatory code requirements within its city limits; and

**WHEREAS**, the City Council of the City of Windsor Heights do hereby find and declare that the addition of Chapter 30.11 is necessary and will promote the safety and general welfare of the community.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WINDSOR HEIGHTS, POLK COUNTY, IOWA:**

**SECTION 1.** Purpose. The purpose of this ordinance is to amend Chapter 30.11 of the Windsor Heights Code of Ordinances to add Chapter 30.11 – Unbiased Policing Policy

**SECTION 2.** Chapter 30.11 is hereby added to read as follows:

#### **30.11. UNBIASED POLICING POLICY**

##### **30.11(A) POLICY STATEMENT**

##### **30.11(B) DEFINITIONS**

##### **30.11(C) PROCEDURES**

##### **30.11(D) COMPLAINTS & COMPLIANCE**

##### **30.11(E) TRAINING**

##### **30.11(F) ANNUAL REVIEW**

#### **SEC. 30.11(A) POLICY STATEMENT**

The Windsor Heights Police Department shall be committed to the unbiased, equitable treatment of all. Department employees shall treat all in a fair, impartial and objective manner, in accordance with law, and without consideration of their individual demographics as defined in this policy.

#### **SEC. 30.11(B) DEFINITIONS**

**Definitions.** The following words, terms and phrases, when used in this Section, shall have the meanings ascribed to them in this Section, except where the context clearly indicates a different meaning:

1. **Biased Policing** means differential treatment in the performance of law enforcement duties or delivery of police services towards a person or classes of persons when one or more individual demographics was a motivating factor in the action taken. If a person's individual demographics

played a motivating factor in the city employee's decision, then that personal characteristic was a motivating factor of the action taken.

2. **Fair and Impartial Treatment** means the belief that persons, irrespective of individual demographics, shall be treated in the same basic manner under the same or similar circumstances. Reasonable concessions and accommodations may be made, when dealing with individuals with physical or mental disabilities, injury, illness, or similar conditions, or when information about them necessitates different treatment.
3. **Individual Demographics** means personal characteristics to include, but not limited to: race, ethnicity, national origin, religion, age, gender, gender identity/ expression, sexual orientation, socioeconomic status, disability, immigration status, housing status, occupation, language fluency, cultural group, political status or any other identifiable characteristics.
4. **Police Services** means actions and activities that contribute to the overall well-being and safety of the public. These tasks include but are not limited to: crime prevention and investigation, preventive patrol, traffic control, traffic accidents, medical emergencies and lifesaving services, assistance at fire scenes, public information and education.
5. **Racial Profiling** means a law enforcement action where a motivating factor of the action taken is based on an individual's race, color, ethnicity, religion or national origin rather than on the individual's behavior or on information of the type and kind customarily and reasonably relied upon in identifying the individual as having engaged in prohibited activity. Racial profiling pertains to persons who are viewed as suspects or potential suspects of prohibited activity. Racial profiling includes but is not limited to vehicle, pedestrian, and bicycle stops where race, color, ethnicity, religion or national origin was a motivating factor for the stop or enforcement action taken during the stop. Illegal discriminatory pretextual stops under state or federal law are prohibited by this ordinance.

## **SEC. 30.11(C) PROCEDURES**

### **FAIR & IMPARTIAL TREATMENT**

1. Biased policing is prohibited both in enforcement of the law and the delivery of police services by any employee.
2. Racial Profiling is prohibited both in enforcement of the law and the delivery of police services by any employee.
3. Employees shall exercise their authority, take equivalent enforcement actions and provide equal services to all persons in the same or similar circumstances.
4. Employees shall not consider individual demographics when performing law enforcement duties or delivering police services except when such characteristics are part of a specific subject description.
5. Employees shall not intentionally use any terms, language or remarks that are commonly viewed by society as derogatory, tend to belittle, show contempt for or defame any individual demographic, except when necessary for the preparation of official reports or testimony.
6. Employees must be able to articulate reasonable suspicion or probable cause supporting any police action.

## **DEPARTMENT POLICIES AND PROCEDURES ACCESSIBLE TO THE PUBLIC**

All department policies and procedures shall be made available to the public through readily accessible publication. Publication shall occur on the department webpage; hard copies shall be available at the department headquarters and available for reading there. Hard copies will be provided when requested, however copies are subject to current city of Windsor Heights fee schedule costs and such costs must be paid prior to the hard copies being provided.

### **SEC. 30.11(D) COMPLAINTS & COMPLIANCE**

1. Anyone may file a complaint if they feel they had an encounter of biased policing or racial profiling. No person shall be discouraged, intimidated or coerced from filing such a complaint, nor shall they be discriminated against because they have filed a complaint of this nature.
  - a. Employees who witness or who are aware of instances of biased policing or racial profiling shall report the incident to a supervisor and shall provide all information known to them before the end of the shift during which they make the observation or become aware of the incident or as soon thereafter as practicable under the circumstances.. Furthermore, employees shall intercede anytime they witness or suspect biased policing or racial profiling incidents occurring. Where use of force occurs, officers have a duty to intervene to prevent or stop the use of unreasonable force by another officer when it is safe and a reasonable opportunity exists.
2. Supervisors will ensure the working environment is free of bias and free of racial profiling. This may include periodic inspections of body and in-car audio/video systems, reports and field inspections during police/citizen interactions. Supervisors will:
  - i. Take the appropriate action when a violation of this policy occurs.
  - ii. Ensure that there is no retaliation for individuals reporting such violations.
3. All complaints of biased policing or racial profiling shall be directed to the Support Services Division Commander for investigation. The Support Services Commander will immediately notify the Chief of Police of any such complaint and shall regularly update the Chief of Police on the status of the investigation.
  - a. The Support Services Division Commander will ensure a thorough investigation is completed, consistent with the established complaint process, for review by the Chief of Police.
  - b. If the complaint is substantiated, the department will take appropriate measures commensurate to the severity of the substantiated complaint.
  - c. The Support Services Division Commander shall maintain data relating specifically to complaints of biased policing and racial profiling. Information shall be provided to the Chief of Police or designated authority in a manner most suitable for administrative review, problem identification, and development of appropriate corrective actions to prevent biased policing and racial profiling.

### **SEC. 30.11(E) TRAINING**

All employees will receive training and guidance in regard to unbiased policing and prohibited racial profiling while conducting law enforcement activities. At least annually all sworn officers shall receive said training, which shall include de-escalation and implicit bias and may include, but is not limited to:

training on subjects related to police ethics, cultural diversity, police-citizen interaction, standards of conduct, conducting motor vehicle stops, implicit bias, and related topics suitable for preventing incidents of biased policing and racial profiling.

#### **SEC. 30.11(F) ANNUAL REVIEW**

This topic and policy under this Article will be reviewed annually and the City Administrator shall certify such review to the City Council no later than the first day of the fiscal year.

**SECTION 3.** Repealer. All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

**SECTION 4.** Severability. If any section, provision or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any section, provision or part thereof not adjudged invalid or unconstitutional.

**SECTION 5.** Effective Date. This ordinance shall be effective after the final passage, approval and publication as provided by law.

Passed and Approved this \_\_\_\_ day of \_\_\_\_\_, 2020.

1st Reading: \_\_\_\_\_

2nd Reading: \_\_\_\_\_

3rd Reading: \_\_\_\_\_

Publish Date: \_\_\_\_\_

\_\_\_\_\_  
Dave Burgess, Mayor

(SEAL)

ATTEST:

\_\_\_\_\_  
Travis Cooke, City Clerk

**City of Windsor Heights Regular Business Meeting Minutes**  
**Monday, June 15, 2020 – 6:00 P.M. via ZOOM**

1. **Call to Order:** Mayor Burgess called the meeting to order via Zoom at 6:00 PM. Council members present: Susan Skeries, Joseph Jones, Mike Loffredo, Mike Jones, and Threase Harms. Staff present: Interim Administrator Mark Arentsen, City Clerk Travis Cooke, Finance Director Rachelle Swisher, Public Safety Director Chad McCluskey, Public Works Director Dalton Jacobus, Communications/Recreation Coordinator Whitney Tucker, City Engineer Justin Ernst, and City Attorney Matt Brick.
2. **Approval of the Agenda:** Motion by Harms to approve the agenda with the removal of Item #6A (Job Descriptions) and Item # 7G (Wage Resolution). Seconded by Skeries. Roll call vote: Harms – aye, Skeries – aye, Joseph Jones – aye, Loffredo – nay, and Mike Jones – nay. Motion passed 3-2.
3. **Public Hearings:**
  - A. Public Hearing on Proposed Amendment to the Windsor Heights Urban Revitalization Area: Motion by Harms to open the public hearing at 6:05 PM. Seconded by Loffredo. Motion passed 5-0. No public comments written or oral. Motion by Mike Jones to close the hearing at 6:07 PM. Seconded by Harms. Motion passed 5-0.
  - B. Consideration of Resolution No. 2020-83 - A Resolution Adopting Amendment to the Plan for the Windsor Heights Urban Revitalization Area: Motion by Harms to approve Resolution No. 2020-83. Seconded by Loffredo. Motion passed 5-0.
  - C. Public Hearing on Ordinance No. 20-03 - An Ordinance Amending Chapter 101 of the Windsor Heights Code of Ordinances Relating to the Storm Water Drainage Utility: Motion by Mike Jones to open the public hearing at 6:09. Seconded by Harms. Motion passed 5-0. No public comments written or oral. Motion by Mike Jones to close the hearing at 6:10 PM. Seconded by Harms. Motion passed 5-0.
  - D. Consideration of the First Reading of Ordinance No. 20-03: Motion by Harms to approve the first reading of Ordinance No. 20-03. Seconded by Mike Jones. Motion passed 5-0.
  - E. Public Hearing on Ordinance No. 20-04 - An Ordinance Amending Chapter 60.10.07 of the Windsor Heights Code of Ordinances Relating to the Definition of "Unimproved Surface" with Regards to Parking Prohibitions: Motion by Loffredo to open the public hearing at 6:11 PM. Seconded by Harms. Motion passed 5-0. Public comment: Darren Skeries, 1441 64<sup>th</sup> Street – offered suggestions to improve the ordinance regarding improved surfaces and contiguous paving requirements. Revisions to Chapter 60.10.07 and Chapter 174.08 will be considered at a future meeting. Motion Harms to close the public hearing at 6:27 PM. Seconded by Skeries. Motion passed 5-0.
  - F. Consideration of the First Reading of Ordinance No. 20-04: Motion by Loffredo to table the first reading of Ordinance No. 20-04. Seconded by Mike Jones. Motion passed 5-0.
4. **Public Forum:** None.
5. **Consent Agenda:**
  - A. Approve Minutes of the Regular Council Meeting on June 1, 2020

- B. Approve Minutes of the June 8, 2020 Special Council Meeting
- C. Approve Payment of Claims
- D. Approve May 2020 Financial Reports :

Motion by Mike Jones to approve the consent agenda. Seconded by Joseph Jones.  
Motion passed 5-0.

**6. Old Business:**

- A. Consideration of Job Descriptions – Item removed from agenda.

**7. New Business:**

A. Consideration of Tobacco Permits: Motion by Mike Jones to approve tobacco permits. Seconded by Joseph Jones. Motion passed 4-1. (Harms voting nay)

B. Consideration of Reopening City Hall to the Public: Motion by Harms to reopen City Hall to the public. Seconded by Joseph Jones. Motion passed 5-0.

C. Consideration of Pay Request No. 2 - 2020 Street Improvement Projects: Motion by Harms to approve Pay Request No. 2 – 2020 Street Improvement Projects (69<sup>th</sup> and Allison). Seconded by Mike Jones. Motion passed 5-0.

D. Consideration of Pay Request No. 2 - College Drive Improvements: Motion by Loffredo to approve Pay Request no. 2 – College Drive Improvements. Seconded by Skeries. Motion passed 5-0.

E. Consideration of Resolution No. 2020-84 - A Resolution Setting Time and Place for a Public Hearing for Ordinance No. 20-05 - An Ordinance Amending Chapter 30 of the Windsor Heights Code of Ordinances Adding New Section 30.11 - Unbiased Policing Policy: Motion by Harms to approve Resolution No. 2020-84. Seconded by Skeries. Motion passed 5-0.

F. Consideration of Resolution No. 2020-85 - A Resolution Approving City of Windsor Heights Participation in the Greater Des Moines Partnership Small Business Recovery Grant Program: Motion by Loffredo to approve Resolution No. 2020-85. Seconded by Mike Jones. Motion passed 5-0.

G. Consideration of Resolution No. 2020-86 - A Resolution Establishing Wages – Item removed from agenda.

**7. Reports:**

- A. Mayor and Council Reports and Committee Updates: Skeries: Economic Development Committee updates on DSM Partnership grants and city grants for WH businesses. Joseph Jones: Volunteer meeting for Movies in the Park for later in the summer. MPO meeting upcoming. Mike Loffredo: Nuisance abatement code review needs to happen. Thank you to Whitney for the quality and content

of the last newsletter. Mike Jones: Asked for clarification on what was needed to get the job descriptions approved. Council had a discussion on job descriptions, the Key Elements wage study, and employee compensation for FY 20-21. Harms: MetroWaste meeting upcoming. Timing of RI Restaurant installing the parklet. Offered assistance to the PW Committee on Colby Park flood planning.

- B. Interim City Administrator Report: Finalized plans for the second city administrator search with council.
- C. Staff Reports: Public Safety report, Public Works report, and Communications/Recreation Coordinator reports were reviewed.

8. **Adjourn:** Motion by Mike Jones to adjourn the meeting at 7:25 PM. Seconded by Loffredo. Motion passed 5-0.

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David Burgess, Mayor

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Attest: Travis Cooke, City Clerk



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM:

SUBJECT: Approve Payment of Claims

**GENERAL INFORMATION**

**SUMMARY**

**ATTACHMENTS**

1. CLAIMS REPORT

VENDOR NAME	REFERENCE	AMOUNT	VENDOR TOTAL	CHECK#	CHECK DATE
ABSOLUTE CONCRTE CONSTRUCTION	PAY REQUEST #2 2020 STREETS		276,302.91	50835	6/16/20
AFLAC WORLD WIDE HEADQUARTERS	AFLAC DIS-POSTX		801.74	50843	6/26/20
AMERITAS LIFE INS. CORP.	VISION INS	280.00		50841	6/26/20
AMERITAS LIFE INS. CORP.	DENTAL INS	2,958.64	3,238.64	50844	6/30/20
ARDICK EQUIP. CO. INC.	DEAD END SIGN		106.40	50845	6/30/20
ASPEN EQUIPMENT CO	VEHICLE REPAIRS		3,637.44	50846	6/30/20
AUREON IT	MANAGED SERVICES		744.00	50847	6/30/20
BANKERS TRUST COMPANY	See Vendor Activity Report		3,873.67	50850	6/30/20
BITUMINOUS MATERIALS	CSS-1 5 GALLON PAILS		175.00	50851	6/30/20
BOB BROWN CHEVROLET INC.	TRUCK 1 TAILGATE REPAIR		47.93	50852	6/30/20
BDLTON & MENK	PARK PLAN INVOICE #2		5,380.00	50853	6/30/20
BOMGAARS	CLOTHING ALLOWANCE		39.99	50854	6/30/20
BOOT BARN INC	CLOTHING ALLOWANCE		107.57	50855	6/30/20
BOUND TREE MEDICAL LLC	MEDICAL SUPPLIES		54.34	50856	6/30/20
CCP INDUSTRIES	EXAM GLOVES		86.45	50857	6/30/20
CENTRAL IOWA READY MIX	CONCRETE		384.00	50858	6/30/20
CENTURY LINK	TELEPHONE		215.53	50859	6/30/20
CITY WIDE HTG. & A/C	CONDENSING UNIT/EVAP COIL		3,496.00	50860	6/30/20
CLEARFLY	TELEPHONE		231.49	50861	6/30/20
CREW IOWA	CEC REFUND		185.00	50862	6/30/20
DES MOINES AREA MPO	FY21 ASSESSMENT DUES		2,449.00	50863	6/30/20
DES MOINES REGISTER	NEWSPAPER		28.00	50864	6/30/20
DONA BELA SHREDS	COVID19 GRANT		5,000.00	50836	6/16/20
DRAKE UNIVERSITY	TRAINING		2,500.00	50865	6/30/20
ELECTRICAL ENG. & EQ.	CITY HALL BREAK ROOM LIGHTS		107.94	50866	6/30/20
ELECTRONIC ENG. CO.	PAGER RENTAL		71.70	50867	6/30/20
ELLIOTT EQUIPMENT CO.	SEWER JET		70.90	50868	6/30/20
FEDERAL TAX DEPOSIT	FED/FICA TAX		18,269.02	2383	6/26/20
FENNER IRRIGATION	COLBY PARK REPAIRS		2,415.00	50869	6/30/20
FIT	COVID19 GRANT		5,000.00	50837	6/16/20
GRIMES ASPHALT & PAVING	ASPHALT		425.50	50870	6/30/20
O'DONNELL ACE HICKMAN	COVID19 FRONT DESK SCREEN		138.28	50871	6/30/20
HOTSY CLEANING SYSTEMS	VALVE		21.83	50872	6/30/20
HY-VEE ACCOUNTS RECEIVABLE	FLOWERS		472.82	50873	6/30/20
ICMA RETIREMENT TRUST	CITY CONTRIBUTION	851.05		2373	6/17/20
ICMA RETIREMENT TRUST	ICMA	702.88		2381	6/26/20
ICMA RETIREMENT TRUST	CITY CONTRIBUTION	1,826.05	3,379.98	2386	6/26/20
IOWA DEPT OF PUBLIC SAFETY	TERMINAL BILLING APRIL-JUNE		810.00	50874	6/30/20
IOWA LEAGUE OF CITIES	MEMBER DUES FY21		2,606.00	50875	6/30/20
IOWA ONE CALL	LINE LOCATES		100.80	50876	6/30/20
IOWA WORKFORCE DEV.	Q2 UNEMPLOYMENT		2,322.14	2385	6/24/20
IPERS	PROTECT IPERS		25,412.55	2380	6/26/20
JILL SIMPLOT	CEC REFUND		675.00	50877	6/30/20
KABEL BUSINESS SERVICES	HRA FUNDS	4,096.17		2379	6/19/20
KABEL BUSINESS SERVICES	FLEX CLD BENEFIT	1,019.99	5,116.16	2384	6/26/20
KAY HOLDEN	FERTILIZER FOR FLOWER BEDS		32.91	50878	6/30/20
KELTEK INCORPORATED	SERVICE CALL		129.50	50879	6/30/20
KEY ELEMENTS	NON REPRESENTED EE WAGE STUDY		2,230.00	50880	6/30/20
KOCH OFFICE GROUP	COPIER LEASE		165.56	50881	6/30/20
LEAF	COPIER LEASE		227.66	50882	6/30/20
LOCAL GOVERNMENT CONSULTING	WEEK OF 6/15 ADMINISTRATOR		11,360.00	50883	6/30/20
LOGAN CONTRACTORS SUPPLY	MARKING PAINT		80.99	50884	6/30/20
LOWE'S	PW SHOP DRINKING FOUNTAIN		1,196.93	50885	6/30/20
MARY SOVATH	CEC REFUND		2,750.00	50886	6/30/20

# CLAIMS REPORT

Vendor Checks: 6/16/2020- 6/30/2020

Page 2  
Payroll Checks: 6/16/2020- 6/30/2020

VENDOR NAME	REFERENCE	AMOUNT	VENDOR TOTAL	CHECK CHECK#	CHECK DATE
MEDIACOM	INTERNET		570.00	50887	6/30/20
MENARDS	BENCH REPAIR		3.49	50888	6/30/20
MERCY ONE CLIVE PHARMACY	MEDICAL SUPPLIES		373.01	50889	6/30/20
METRO WASTE AUTHORITY	GARBAGE FEES		16,831.24	50890	6/30/20
MID IOWA CONTRACTING	STONE REPAIR NW CORNER OF BLDG		1,350.00	50891	6/30/20
MID-IOWA ASSN LOCAL GOVT	FY21 DUES		614.69	50892	6/30/20
MIDWEST WHEEL COMPANIES	A553 A/C FAN REPLACEMENT		253.43	50893	6/30/20
MIRACLE REC. EQ. CO.	PLAYGROUND REPAIR PARTS		229.14	50894	6/30/20
NATIONWIDE OFFICE CLEANERS	CLEANING		649.50	50895	6/30/20
PREMIUM SOLUTIONS	COVID19 GRANT		5,000.00	50838	6/16/20
PUERTO RICO RESTAURANT	COVID19 GRANT		5,000.00	50839	6/16/20
RACOM CORPORATION	EDACS ACCESS		1,270.41	50896	6/30/20
RANGEMASTERS TRAINING CTR	CLOTHING		89.98	50897	6/30/20
DES MOINES REGISTER	PUBLICATIONS		1,597.51	50898	6/30/20
SAM'S CLUB DIRECT	SUPPLIES		153.70	50899	6/30/20
SAYLORCREEK SAND COMPANY	LIMESTONE		128.18	50900	6/30/20
SNAP-ON MARK STUCHEL	DRAWER		165.00	50901	6/30/20
STANDARD INSURANCE COMPANY	LIFE INS		998.80	50902	6/30/20
STIVERS FORD	'13 FORD EXPLORER		289.59	50903	6/30/20
Strauss Security Solutions	ACCESS HOSTING		605.52	50904	6/30/20
THE STUDIO IN WINDSOR HEIGHTS	COVID19 GRANT		2,000.00	50840	6/16/20
TREASURER STATE OF IOWA	STATE TAXES		6,604.00	2382	6/26/20
UMB BANK	1/2 BOND PAYMENT		1,250.00	50905	6/30/20
WAL-MART	BREAK ROOM PRINTER INK		190.16	50906	6/30/20
WALMART	OVERPAYMENT OF TOBACCO PERMITS		50.00	50907	6/30/20
WD DOOR	REPAIRS TO DOOR		250.00	50908	6/30/20
WELLMARK	HEALTH PREMIUM		33,252.94	2390	6/29/20
WEST DES MOINES TRUE VALUE	ESSI REPAIR		105.42	50909	6/30/20
ZIEGLER INC.	GENERATOR PREV MAINTENANCE		1,060.31	50910	6/30/20
ZWC CONDOMINIUM ASSOC	PEST CONTROL/BANK FEE		51.36	50911	6/30/20
			=====		
Accounts Payable Total			475,661.65		

## Payroll Checks

001	GENERAL	46,202.40
110	ROAD USE TAX	5,549.90
610	SEWER	534.49
740	STORM WATER	1,170.18

Total Paid On: 6/26/20 53,456.97

Total Payroll Paid 53,456.97

Report Total 529,118.62

**CLAIMS REPORT  
CLAIMS FUND SUMMARY**Page 3  
Payroll Checks: 6/16/2020- 6/30/2020

FUND	NAME	AMOUNT
001	GENERAL	144,858.46
110	ROAD USE TAX	17,847.07
112	EMPLOYEE BENEFITS	45,125.86
145	URBAN RENEWAL	22,000.00
200	DEBT SERVICE	1,250.00
319	2020 STREET PROJECTS	276,302.91
610	SEWER	1,945.23
670	LANDFILL/CARBAGE	16,831.24
740	STORM WATER	2,957.85
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	TOTAL FUNDS	529,118.62

# ACCOUNTS PAYABLE VENDOR ACTIVITY

INVOICE NO	LN	DATE	PO NO	REFERENCE	TRACK		1099	NET	CHECK	PD DATE
					CD	GL ACCOUNT				
58 BANKERS TRUST COMPANY										
06302020 3534	1	6/30/20		CONSTANT CONTACT		001-620-6373		70.00	50850	6/30/20
06302020 3534	2	6/30/20		BATTERIES FOR MIC		001-430-6507		12.24	50850	6/30/20
06302020 3534	3	6/30/20		FRONT DESK SUPPLIES		001-620-6506		6.99	50850	6/30/20
06302020 3534	4	6/30/20		ADOBE		001-620-6373		56.17	50850	6/30/20
06302020 3534	5	6/30/20		CLOROX WIPES		001-620-6506		5.34	50850	6/30/20
06302020 3534	6	6/30/20		ZOOM		001-610-6507		14.99	50850	6/30/20
06302020 3534	7	6/30/20		ADOBE STOCK		001-620-6373		31.79	50850	6/30/20
06302020 3534	8	6/30/20		CREDIT CARD TEST NEW WEBSITE		001-620-6499		100.00	50850	6/30/20
06302020 3534	9	6/30/20		NAME TAGS FOR COUNCIL/MAYOR		001-610-6507		67.35	50850	6/30/20
06302020 3534	10	6/30/20		CLOROX WIPES		001-620-6506		2.63	50850	6/30/20
06302020 3534	11	6/30/20		REFUND OF SALES TAX PAID		001-620-6373		22.26-	50850	6/30/20
06302020 5514	1	6/30/20		TRAINING		001-110-6230		885.00	50850	6/30/20
06302020 5514	2	6/30/20		CAR WASH BRUSH		001-150-6507		15.98	50850	6/30/20
06302020 5514	3	6/30/20		FLASH DRIVES		001-110-6506		33.49	50850	6/30/20
06302020 5514	4	6/30/20		IEMSA MEMBERSHIP		001-160-6210		130.00	50850	6/30/20
06302020 5514	5	6/30/20		GRANT WRITING SEMINAR		001-150-6230		227.50	50850	6/30/20
06302020 5514	6	6/30/20		GRANT WRITING SEMINAR		001-110-6230		227.50	50850	6/30/20
06302020 5514	7	6/30/20		OFFICE CHAIR		001-110-6721		587.53	50850	6/30/20
06302020 5514	8	6/30/20		WEBCAM		001-110-6506		44.99	50850	6/30/20
06302020 6462	1	6/30/20		CLOTHING		110-210-6180		89.50	50850	6/30/20
06302020 6462	2	6/30/20		SIGN STANDS		610-815-6507		219.20	50850	6/30/20
06302020 6462	3	6/30/20		SAFETY GLASSES		610-815-6507		149.93	50850	6/30/20
06302020 6462	4	6/30/20		GLOVES		610-815-6507		53.88	50850	6/30/20
06302020 6462	5	6/30/20		SIGNS		610-815-6507		237.43	50850	6/30/20
06302020 6462	6	6/30/20		SAFETY CONES		610-815-6507		139.99	50850	6/30/20
06302020 6462	7	6/30/20		67TH & SCHOOL INTAKE		740-865-6507		4.50	50850	6/30/20
06302020 6462	8	6/30/20		CLOTHING		110-210-6180		54.50	50850	6/30/20
06302020 6462	9	6/30/20		NEWSPAPER		001-620-6210		28.00	50850	6/30/20
06302020 6462	10	6/30/20		BUSHES FOR PARK		001-430-6511		97.40	50850	6/30/20
06302020 7388	1	6/30/20		SEMINAR		001-110-6230		150.00	50850	6/30/20
06302020 7388	2	6/30/20		POSTAGE		001-110-6508		47.12	50850	6/30/20
06302020 7388	3	6/30/20		NOTARY		001-110-6120		30.00	50850	6/30/20
06302020 7388	4	6/30/20		NOTARY		001-110-6120		30.00	50850	6/30/20
06302020 7388	5	6/30/20		NOTARY		001-110-6120		30.00	50850	6/30/20
06302020 7940	1	6/30/20		ADOBE ACROPRO		001-620-6373		14.99	50850	6/30/20
BANKERS TRUST COMPANY								3873.67		
***** REPORT TOTAL *****								3873.67		



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM:

SUBJECT: Approve Liquor Licenses - Hy-vee Market Cafe, RI Restaurant, and Super Quick Mart

**GENERAL INFORMATION**

**SUMMARY**

**ATTACHMENTS**

1. RI Restaurant Liquor License
2. Super Quick Mart Liquor License
3. Hy-Vee Market Cafe Liquor License

**Applicant License Application ( LC0045820 )**

<b>Name of Applicant:</b> <u>R I Restaurant, LLC</u>		
<b>Name of Business (DBA):</b> <u>R I Restaurant</u>		
<b>Address of Premises:</b> <u>6587 University Avenue</u>		
<b>City</b> <u>Windsor Heights</u>	<b>County:</b> <u>Polk</u>	<b>Zip:</b> <u>50324</u>
<b>Business</b>	<u>(515) 669-4861</u>	
<b>Mailing</b>	<u>637 40th Street</u>	
<b>City</b> <u>Des Moines</u>	<b>State</b> <u>IA</u>	<b>Zip:</b> <u>50312</u>

**Contact Person**

<b>Name</b>	<u>Jacob Demars</u>		
<b>Phone:</b>	<u>(515) 669-4861</u>	<b>Email</b>	<u>kathleen.l.mcguire@gmail.com</u>

**Classification** Class C Liquor License (LC) (Commercial)

**Term:**12 months

**Effective Date:** 09/01/2019

**Expiration Date:** 08/31/2020

**Privileges:**

Class C Liquor License (LC) (Commercial)

Outdoor Service

**Status of Business**

<b>BusinessType:</b>	<u>Limited Liability Company</u>		
<b>Corporate ID Number:</b>	<u>XXXXXXXXXX</u>	<b>Federal Employer ID</b>	<u>XXXXXXXXXX</u>

**Ownership**

**Jacob Demars**

<b>First Name:</b>	<u>Jacob</u>	<b>Last Name:</b>	<u>Demars</u>	
<b>City:</b>	<u>Des Moines</u>	<b>State:</b>	<u>Iowa</u>	<b>Zip:</b> <u>50312</u>
<b>Position:</b>	<u>Member</u>			
<b>% of Ownership:</b>	<u>50.00%</u>	<b>U.S. Citizen:</b>	<u>Yes</u>	

**Kathleen McGuire**

<b>First Name:</b>	<u>Kathleen</u>	<b>Last Name:</b>	<u>McGuire</u>	
<b>City:</b>	<u>Des Moines</u>	<b>State:</b>	<u>Iowa</u>	<b>Zip:</b> <u>50312</u>
<b>Position:</b>	<u>Member</u>			
<b>% of Ownership:</b>	<u>50.00%</u>	<b>U.S. Citizen:</b>	<u>Yes</u>	

**Insurance Company Information**

<b>Insurance Company:</b>	<u>Farmers Insurance Group</u>
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**Policy Effective Date:** 09/01/2019

**Policy Expiration** 08/31/2020

**Bond Effective**

**Dram Cancel Date:**

**Outdoor Service Effective**

**Outdoor Service Expiration**

**Temp Transfer Effective**

**Temp Transfer Expiration Date:**

**Applicant License Application ( LE0003118 )**

<b>Name of Applicant:</b> <u>UTRAJ LLC</u>		
<b>Name of Business (DBA):</b> <u>Super Quick Mart</u>		
<b>Address of Premises:</b> <u>7690 Hickman Rd.</u>		
<b>City</b> <u>Windsor Heights</u>	<b>County:</b> <u>Polk</u>	<b>Zip:</b> <u>50324</u>
<b>Business</b> <u>(925) 351-3354</u>		
<b>Mailing</b> <u>7690 Hickman Rd.</u>		
<b>City</b> <u>Windsor Heights</u>	<b>State</b> <u>IA</u>	<b>Zip:</b>

**Contact Person**

<b>Name</b> <u>Utkarsh Mahajan</u>	
<b>Phone:</b> <u>(925) 351-3354</u>	<b>Email</b> <u>Utkarsh177@gmail.com</u>

**Classification** Class E Liquor License (LE)

**Term:**12 months

**Effective Date:** 08/24/2020

**Expiration Date:** 08/23/2021

**Privileges:**

Class B Wine Permit

Class C Beer Permit (Carryout Beer)

Class E Liquor License (LE)

Sunday Sales

**Status of Business**

<b>BusinessType:</b> <u>Limited Liability Company</u>	
<b>Corporate ID Number:</b> <u>XXXXXXXXXX</u>	<b>Federal Employer ID</b> <u>XXXXXXXXXX</u>

**Ownership**

**Utkarsh Mahajan**

<b>First Name:</b> <u>Utkarsh</u>	<b>Last Name:</b> <u>Mahajan</u>	
<b>City:</b> <u>West Des Moines</u>	<b>State:</b> <u>Iowa</u>	<b>Zip:</b> <u>50266</u>
<b>Position:</b> <u>owner</u>		
<b>% of Ownership:</b> <u>25.00%</u>	<b>U.S. Citizen:</b> <u>No</u>	

**Rajbir Dhillon**

<b>First Name:</b> <u>Rajbir</u>	<b>Last Name:</b> <u>Dhillon</u>	
<b>City:</b> <u>West Des Moines</u>	<b>State:</b> <u>Iowa</u>	<b>Zip:</b> <u>50266</u>
<b>Position:</b> <u>owner</u>		
<b>% of Ownership:</b> <u>75.00%</u>	<b>U.S. Citizen:</b> <u>Yes</u>	

**Insurance Company Information**

**Insurance Company:** Old Republic Surety Company

**Policy Effective Date:** 08/24/2020

**Policy Expiration** 01/01/1900

**Bond Effective** 2

**Dram Cancel Date:**

**Outdoor Service Effective**

**Outdoor Service Expiration**

**Temp Transfer Effective**

**Temp Transfer Expiration Date:**

**Applicant License Application ( LC0041147 )**

<b>Name of Applicant:</b> <u>Hy-Vee, Inc.</u>		
<b>Name of Business (DBA):</b> <u>Hy-Vee Market Cafe</u>		
<b>Address of Premises:</b> <u>7101 University Ave</u>		
<b>City</b> <u>Windsor Heights</u>	<b>County:</b> <u>Polk</u>	<b>Zip:</b> <u>50324</u>
<b>Business</b> <u>(515) 279-4225</u>		
<b>Mailing</b> <u>5820 Westown Pkwy</u>		
<b>City</b> <u>West Des Moines</u>	<b>State</b> <u>IA</u>	<b>Zip:</b> <u>50266</u>

**Contact Person**

<b>Name</b> <u>Samantha McMahon - Licensing Dept</u>	
<b>Phone:</b> <u>(515) 267-2949</u>	<b>Email</b> <u>smcmahon@hy-vee.com</u>

**Classification** Class C Liquor License (LC) (Commercial)

**Term:**12 months

**Effective Date:** 09/01/2020

**Expiration Date:** 08/31/2021

**Privileges:**

Catering Privilege

Class C Liquor License (LC) (Commercial)

Outdoor Service

Sunday Sales

**Status of Business**

<b>BusinessType:</b> <u>Privately Held Corporation</u>	
<b>Corporate ID Number:</b> <u>XXXXXXXXXX</u>	<b>Federal Employer ID</b> <u>XXXXXXXXXX</u>

**Ownership**

**Randy Edeker**

<b>First Name:</b> <u>Randy</u>	<b>Last Name:</b> <u>Edeker</u>	
<b>City:</b> <u>Urbandale</u>	<b>State:</b> <u>Iowa</u>	<b>Zip:</b> <u>50322</u>
<b>Position:</b> <u>CEO, President</u>		
<b>% of Ownership:</b> <u>0.00%</u>	<b>U.S. Citizen:</b> <u>Yes</u>	

**Stephen Meyer**

<b>First Name:</b> <u>Stephen</u>	<b>Last Name:</b> <u>Meyer</u>	
<b>City:</b> <u>Des Moines</u>	<b>State:</b> <u>Iowa</u>	<b>Zip:</b> <u>50309</u>
<b>Position:</b> <u>Executive VP, Secretary</u>		
<b>% of Ownership:</b> <u>0.00%</u>	<b>U.S. Citizen:</b> <u>Yes</u>	

**Michael Skokan**

<b>First Name:</b> <u>Michael</u>	<b>Last Name:</b> <u>Skokan</u>
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**City:** Waukee **State:** Iowa **Zip:** 50263  
**Position:** CFO, Treasurer  
**% of Ownership:** 0.00% **U.S. Citizen:** Yes  
**Jeffrey Pierce**  
**First Name:** Jeffrey **Last Name:** Pierce  
**City:** Waukee **State:** Iowa **Zip:** 50263  
**Position:** Ass't Treasurer, Financial  
**% of Ownership:** 0.00% **U.S. Citizen:** Yes

#### Insurance Company Information

<b>Insurance Company:</b> <u>DAKOTA FIRE INSURANCE COMPANY</u>	
<b>Policy Effective Date:</b> <u>09/01/2020</u>	<b>Policy Expiration</b> <u>09/01/2021</u>
<b>Bond Effective</b>	<b>Dram Cancel Date:</b>
<b>Outdoor Service Effective</b>	<b>Outdoor Service Expiration</b>
<b>Temp Transfer Effective</b>	<b>Temp Transfer Expiration Date:</b>

**From:** [Mark Arentsen](#)  
**To:** [Travis Cooke](#)  
**Subject:** FW: July 6th Council Meeting Items  
**Date:** Monday, June 29, 2020 1:14:38 PM  
**Attachments:** [2020 06 23 Urbandale School Crossing Guard 28E-Windsor Heights\\_final.pdf](#)  
[image001.png](#)  
[2020 07 06 Urbandale WDMCS 28E Crossing Guards at 73 Hickman.docx](#)  
[2020 07 06 Council Action Form for amendment to 174.08 setting public hearing.docx](#)  
[2020 07 06 Council Action Form for amendment to 60.10.07 setting public hearing.docx](#)  
[image002.png](#)  
[image003.png](#)

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Travis, Please add this e-mail to the Council packet. Thank you.



**Mark Arentsen**  
**Interim City Administrator**  
**City of Windsor Heights**  
[1145 66<sup>th</sup> St Suite 1 Windsor Heights, IA 50324](#)  
Office: 515-645-6808  
Cell: 515-681-0606  
[marentsen@windsorheights.org](mailto:marentsen@windsorheights.org)

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**From:** Chad McCluskey <cmcccluskey@windsorheights.org>  
**Sent:** Monday, June 29, 2020 1:13 PM  
**To:** Dave Burgess <dburgess@windsorheights.org>; Susan Skeries <susan.skeries@windsorheights.org>; Joseph Jones <joseph.jones@windsorheights.org>; Mike Loffredo <mike.loffredo@windsorheights.org>; Mike Jones <mike.jones@windsorheights.org>; Threase Harms <Tharms@windsorheights.org>  
**Cc:** Mark Arentsen <marentsen@windsorheights.org>; 'Erin Clanton (erin.clanton@brickgentrylaw.com)' <erin.clanton@brickgentrylaw.com>; 'Matt Brick' <Matt.Brick@brickgentrylaw.com>  
**Subject:** July 6th Council Meeting Items

Good afternoon,

Just a quick heads up on a couple of items for the July 6<sup>th</sup> council meeting –

1. There is consideration of a 28E update with Urbandale and West Des Moines Community Schools for the 73<sup>rd</sup> and Hickman crossing guard related to Clive Learning Academy. The main change in the 28E is Urbandale is going to contract the crossing guard duties with All City Management Services (ACMS), the same company we currently have the 28E with for WDM and WDMCS to provide crossing guard services in front of Clive Learning Academy. As a result, the cost may go up a little, but it is not significant. We budgeted \$2,000 next year and the 28E has a maximum cost of \$2,705.50. We remain responsible for 25% of the costs, with 25% being funded by Urbandale, and 50% by WDMCS as the current 28E is written.
2. With regards to the unimproved surface discussion, it occurred to me language surrounding private property does not belong in Chapter 60 as law enforcement cannot enforce parking on

private property (aside of fire lane and disabled parking). So, my proposal is to strike the language from Chapter 60 and I updated the language in 174.08 to better clarify what is and is not an acceptable surface based on Council comments previously. I also propose moving wording related to parking of vehicles on private property for sale from Chapter 60 to Chapter 174, as they are nuisances and not something law enforcement has authority over as they are also on private property. Finally, I suggested removal of wording in 174.08 requiring a “zoning administrator” to make a determination with regards to allowed surfaces as the language is clear as to what is and is not allowed. The redlines are shown in the attached documents.

I wanted to get this out to you early as I know you have a busy week and wanted to make sure if you have questions, I have time to address them. Please let me know if you need further clarification. All attachments are included in this email.

Thanks!  
Chad

**Chad McCluskey, MBA / FBI NA Session 279**

Public Safety Director | Chief of Police and Fire Services  
Windsor Heights Police and Fire Department  
[1133 66th Street, Windsor Heights, Iowa 50324](#)  
Phone: 515.277.4453 | Dispatch: 515.286.3632  
Email: [cmcccluskey@windsorheights.org](mailto:cmcccluskey@windsorheights.org)  
Secure Email: [eric.mccluskey@leo.gov](mailto:eric.mccluskey@leo.gov)  
[Website](#) | [Facebook](#) | [Twitter](#) | [Nixel](#)

**COUNCIL ACTION FORM**

**AGENDA ITEM:     CONSIDER SETTING PUBLIC HEARING FOR AMENDMENT TO CITY CODE 60.10.07 TO REMOVE SUBSECTION 21 RELATED TO UNIMPROVED SURFACES AND REMOVING PRIVATE PROPERTY LANGUAGE FROM SUBSECTION 22.**

**HISTORY:**

Recently, while fielding questions related to parking on private property, Chief McCluskey found some ambiguity in City Code 60.10.07 regarding parking regulations. Subsection 21 of Code 60.10.07 prohibits parking on “unimproved surfaces,” however the Code does not clearly define improved or unimproved surfaces. The current code reads, “*Unimproved Surfaces – Private or Public. On grass, unpaved areas, or any unimproved portion of a yard or lawn. Parking is only permitted on improved surfaces, such as concrete or asphalt.*” The current language of the Code leaves some vagueness concerning what constitutes an unimproved surface, especially concerning the use of gravel, the use of paving stones, or the use of bricks, for example.

City Code 174.08 also addresses parking for personal and recreational vehicles on private property, and 174.08 contains language referring to “a paved surface connected by a paved surface to a dedicated public right-of-way and/or alley.” This wording is found in 174.08(2)(C)(1) and is directed at parking in the rear yard setback of a residence.

In an effort to clarify the Code and foster consistency in various sections of Code, Chief McCluskey recommends an amendment to 60.10.07 striking subsection 21 as this information is contained within 174.08 for private property. In addition, City Code 40.08.03 addresses parking only in designated parking stalls at City Parks, therefore subsection 21 of 60.10.07 is duplicative and unnecessary.

Furthermore, violations related to parking on private property should be handled through the nuisance abatement process versus being included in Chapter 60.10.07, which outlines parking violations for which police officers may issue municipal citations. Police officers cannot enforce parking violations on private property, thus adding confusion to the current wording in 60.10.07.

Finally, this amendment also recommends removing wording related to parking of vehicles on private property for the purpose of sale – moving this language to 174.08 – due to this also being enforceable as a nuisance abatement and not as a municipal infraction issued by police officers.

The recommended changes are redlined below:

#### **60.10.07 PARKING PROHIBITED.**

No one shall stop, stand, or park a vehicle except when necessary to avoid conflict with other traffic or in compliance with the directions of a peace officer or traffic control device, in any of the following places:

1. Crosswalk. On a crosswalk.

*(Code of Iowa, Sec. 321.358[5])*

2. Center Parkway. On the center parkway or dividing area of any divided street.

*(Code of Iowa, Sec. 321.236[1])*

3. Mailboxes. Within twenty (20) feet on either side of a mailbox which is so placed and so equipped as to permit the depositing of mail from vehicles on the roadway.

*(Code of Iowa, Sec. 321.236[1])*

4. Sidewalks. On or across a sidewalk.

*(Code of Iowa, Sec. 321.358[1])*

5. Driveway. In front of, or within three (3) feet of a curb cut of, a public or private driveway.

*(Code of Iowa, Sec. 321.358[2])*

6. Intersection. Within an intersection or within ten (10) feet of an intersection of any street or alley, or as otherwise marked.

7. Fire Hydrant. Within five (5) feet of a fire hydrant.

*(Code of Iowa, Sec. 321.358[4])*

8. Stop Sign or Signal. Within ten (10) feet upon the approach to any flashing beacon, stop or yield sign, or traffic control signal located at the side of a roadway.

*(Code of Iowa, Sec. 321.358[6])*

9. Railroad Crossing. Within fifty (50) feet of the nearest rail of a railroad crossing, except when parked parallel with such rail and not exhibiting a red light.

*(Code of Iowa, Sec. 321.358[8])*

10. Fire Station. Within twenty (20) feet of the driveway entrance to any fire station and on the side of a street opposite the entrance to any fire station within seventy-five (75) feet of said entrance when properly sign posted.

*(Code of Iowa, Sec. 321.358[9])*

11. Excavations. Alongside or opposite any street excavation or obstruction when such stopping, standing or parking would obstruct traffic.

*(Code of Iowa, Sec. 321.358[10])*

12. Double Parking. On the roadway side of any vehicle stopped or parked at the edge or curb of a street.

*(Code of Iowa, Sec. 321.358[11])*

13. Hazardous Locations. When, because of restricted visibility or when standing or parked vehicles would constitute a hazard to moving traffic, or when other traffic conditions require, the Council may cause curbs to be painted with a yellow color and erect no parking or standing signs.

*(Code of Iowa, Sec. 321.358[13])*

14. Churches, Nursing Homes and Other Buildings. A space of fifty (50) feet is hereby reserved at the side of the street in front of any theatre, auditorium, hotel having more than twenty-five (25) sleeping rooms, hospital, nursing home, taxicab stand, bus depot, church, or other building where large assemblages of people are being held, within which space, when clearly marked as such, no motor vehicle shall be left standing, parked or stopped except in taking on or discharging passengers or freight, and then only for such length of time as is necessary for such purpose.

*(Code of Iowa, Sec. 321.360)*

15. Alleys. No person shall park a vehicle within an alley except for the expeditious loading, unloading, and delivery which is incident to said loading and unloading of material or merchandise or passengers, and in no event shall any vehicle park in any alley for more than forty (40) minutes at any one time.

16. Ramps. In front of a curb cut or ramp which is located on public or private property in a manner which blocks access to the curb cut or ramp.

*(Code of Iowa, Sec. 321.358[15])*

17. Area Between Lot Line and Curb Line. On any unpaved portion of any street between the curb line and the lot line, except that, on recommendation of the City Administrator, duly approved by resolution of the Council, parking may be permitted at such locations when requested in writing by property owners. Each such location must be properly marked by approved metal signs at the extremities of such location. The expense of such signs shall be borne by the property owner.

18. In More Than One Space. In any designated parking space so that any part of the vehicle occupies more than one such space or protrudes beyond the markings designating such space.

19. Safety Zones. Between a safety zone and the adjacent curb or within ten (10) feet of points on the curb immediately opposite the ends of a safety zone.

*(Code of Iowa, Sec. 321.358[7])*

20. Off-Street Parking. On privately owned property or in an area developed as an off-street parking facility, without the consent of the owner, lessee, or person in charge of such privately owned property or facility. (A violation of this subsection shall place such vehicle in the status of an illegally parked vehicle and, upon complaint of the owner, lessee, or person in charge of the privately owned property or facility, said vehicle may be dealt with pursuant to the procedures in this Code of Ordinances governing abandoned vehicles.)

~~21. Unimproved Surfaces—Private or Public. On grass, unpaved areas, or any unimproved portion of a yard or lawn. Parking is only permitted on improved surfaces, such as concrete or asphalt.~~

~~22~~21. Automotive Sales. In an area not zoned for commercial use, parking on ~~private or~~ public property incidental to the sale of automobiles, as defined in Section 167.07(2)(A) of this Code of Ordinances, and as prohibited in Section 171.08(2)(G) of this Code of Ordinances.

~~23~~22. Fire Lanes. Within any No Parking Fire Lane and/or within ten (10) feet of any No Parking Fire Lane traffic control device.

**RESOLUTION NO. 2020-88**

**A RESOLUTION SETTING TIME AND PLACE FOR A PUBLIC HEARING FOR  
ORDINANCE NO. 2020-06 - AN ORDINANCE AMENDING CHAPTER 60.10.07 OF THE  
WINDSOR HEIGHTS CODE OF ORDINANCES TO REMOVE SUBSECTION 21  
RELATED TO UNIMPROVED SURFACES AND REMOVING PRIVATE PROPERTY  
LANGUAGE FROM SUBSECTION 22**

**WHEREAS**, the City Council of the City of Windsor Heights is considering Ordinance No. 20-06 amending Chapter 60.10.07 of the Windsor Heights Code of Ordinances removing subsection 21 related to unimproved surfaces and removing private property language from subsection 22; and

**WHEREAS**, The Code of Iowa required cities to hold a public hearing on proposed ordinances; and

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Windsor Heights, Iowa, as follows:

Section 1. This Council will meet Via Zoom, Windsor Heights, Iowa, on the 20<sup>th</sup> day of July, 2020, at 6:00 p.m. at which time and place it will hold a public hearing on the proposed Ordinance No. 20-06 Amending Chapter 60.10.07 of the Windsor Heights Code of Ordinances removing subsection 21 related to unimproved surfaces and removing private property language from subsection 22.

Section 2. The City Clerk shall post notice of said hearing, which posting shall be at the three public places in the City which have been permanently designated by ordinance, website and social media platforms, and published in the Des Moines Register

Passed and approved this 6<sup>th</sup> day of July, 2020.

\_\_\_\_\_  
Dave Burgess, Mayor

ATTEST:

\_\_\_\_\_  
Travis Cooke, City Clerk

**COUNCIL ACTION FORM**

**AGENDA ITEM: CONSIDER SETTING PUBLIC HEARING FOR AMENDMENT TO CITY CODE 174.08 TO FURTHER DEFINE SURFACES ALLOWED FOR PARKING ON PRIVATE PROPERTY AND TO ADD PARKING PROHIBITIONS FOR VEHICLES PARKED ON PRIVATE PROPERTY FOR THE PURPOSE OF SALE.**

**HISTORY:**

Recently, while fielding questions related to parking on private property, Chief McCluskey found some ambiguity in City Code 174.08 regarding parking regulations. The current language of the Code leaves some vagueness concerning what constitutes an allowable parking surface, especially concerning the use of gravel, the use of paving stones, or the use of bricks, for example.

City Code 174.08 addresses parking for personal and recreational vehicles on private property, and 174.08 contains language referring to “a paved surface connected by a paved surface to a dedicated public right-of-way and/or alley.” This wording is found in 174.08(2)(C)(1) and is directed at parking in the rear yard setback of a residence.

In an effort to clarify the Code and foster consistency in various sections of Code, Chief McCluskey recommends an amendment to 174.08 further defining allowable surfaces for parking, and moving wording related to parking vehicles on private property for the purpose of sale from 60.10.07 to 174.08 to align with other private property parking regulations.

Violations related to parking on private property should be handled through the nuisance abatement process versus being included in Chapter 60.10, which outlines parking violations for which police officers may issue municipal citations. Police officers cannot legally enforce parking violations on private property, thus adding confusion with the current wording in 60.10.07.

The recommended changes are redlined below:

**174.08 PARKING FOR PERSONAL AND RECREATIONAL VEHICLES.**

1. Applicability. This section permits the parking of personal vehicles on a single lot in a residential district subject to specific conditions. Personal vehicles include: passenger cars; vans; pickup trucks, camper shells, toppers, and other similar appurtenances intended for attachment to a personal vehicle; trailers under 20 feet in length; and boats. Trucks, tractor cab units, trailers, recreational vehicles, and vehicles over 2.5 tons gross empty weight shall be defined as heavy commercial vehicles.

## 2. Location of Parking

- A. Parking is permitted within any enclosed structure when such structure conforms to the regulations of its zoning district.
- B. Parking of personal vehicles is permitted on a paved driveway (outside of an enclosed structure) within the front yard setback, but shall in no case encroach upon the public right-of-way.
- C. Parking of personal vehicles may occur in the rear yard setback (outside of an enclosed structure and not on the front yard paved driveway) if ~~the Zoning Administrator determines that~~ such parking ~~conforms to the provisions of this Zoning Code,~~ meets the following conditions:
  - 1. The parking space is provided on a ~~paved~~ surface consisting of asphalt, concrete, brick, or paving stones made of one of the aforementioned substances. Parking is prohibited on gravel, regind, crushed concrete/asphalt, sand, dirt, grass or other surfaces not mentioned in this section ~~connected by a paved surface to a dedicated public right-of-way and/or alley.~~
  - 2. The ~~paved~~ parking surface does not exceed the maximum impervious coverage limit for the lot.
- D. Heavy commercial vehicles, including tractor cab units weighing more than 2.5 tons gross empty weight, and recreational vehicles shall not be parked on any lot within the RI, R2, R3, R4 and MH residential zoning districts, except as provided below.
- E. In areas not zoned for commercial use, parking of vehicles on private property for the purpose of sale of such vehicle is prohibited.

## 3. Special Provisions for Recreational Vehicles and Boats. Parking and storage of recreational vehicles and boats within residential districts is subject to the following additional conditions. These conditions are in addition to those requirements for the parking of Personal Vehicles.

- A. Recreational vehicles and boats must be maintained in a clean, well-kept state.

- B. Recreational vehicles and boats equipped with liquefied petroleum gas containers must ensure that such containers must meet the current standards of the Interstate Commerce Commission, the United States Department of Transportation, or the American Society of Mechanical Engineers. Any valves must be closed at all times that the vehicle is not in preparation for immediate use. Leaks in containers must be repaired immediately.
- C. Recreational vehicles may be used as temporary housing by non-paying guests for a maximum of three consecutive days or 14 days total during any calendar year. Cooking in the recreational vehicle is prohibited at all times.
- D. Recreational vehicles and boats may not be permanently connected to utility lines.
- E. Recreational vehicles and boats may not be used for the storage of goods, materials, or equipment other than those items which pertain to the use of the vehicle.
- F. If at all physically feasible on a lot, recreational vehicles and boats shall be parked outside of required front yard and street side yard setbacks ~~if the Zoning Administrator determines that such parking conforms to the provisions of this Zoning Code~~ and if such parking shall meet the following conditions:
  - 1. For all boats equal to or exceeding 16 feet in length, the parking space is provided on a ~~paved~~ surface consisting of asphalt, concrete, brick, or paving stones made of one of the aforementioned substances. Parking is prohibited on gravel, regrind, crushed concrete/asphalt, sand, dirt, grass or other surfaces not mentioned in this section. ~~connected by a paved surface to a dedicated public right-of-way and/or alley.~~
  - 2. For all boats less than 16 feet in length, the parking space provided is a separate or stand-alone ~~paved~~ surface meeting the requirements of section 1 above, with its width equal to or exceeding the width of the boat and with its length equal to or exceeding the length of the boat.
  - 3. For all other recreational vehicles, the parking space is provided on a ~~paved~~ surface consisting of asphalt, concrete, brick, or paving stones made of one of the aforementioned substances. Parking is prohibited on gravel, regrind, crushed concrete/asphalt, sand, dirt, grass or other surfaces not mentioned in this section.
  - 4. The ~~paved~~ parking surface does not exceed the maximum impervious coverage limit for the lot.

- G. No more than two recreational vehicles and/or boats may be parked on a single property at any one time. Any recreational vehicle or boat parked on a property must be owned in whole or in part by the resident of the property.

**RESOLUTION NO. 2020-88**

**A RESOLUTION SETTING TIME AND PLACE FOR A PUBLIC HEARING FOR  
ORDINANCE NO. 2020-07 - AN ORDINANCE AMENDING CHAPTER 174.08 OF THE  
WINDSOR HEIGHTS CODE OF ORDINANCES TO FURTHER DEFINE SURFACES  
ALLOWED FOR PARKING ON PRIVATE PROPERTY AND TO ADD PARKING  
PROHIBITIONS FOR VEHICLES PARKED ON PRIVATE PROPERTY FOR THE  
PURPOSE OF SALE**

**WHEREAS**, the City Council of the City of Windsor Heights is considering Ordinance No. 20-07 amending Chapter 174.08 of the Windsor Heights Code of Ordinances to further define surfaces allowed for parking on private property and to add parking prohibition for vehicles parked on private property for the purpose of sale; and

**WHEREAS**, The Code of Iowa required cities to hold a public hearing on proposed ordinances; and

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Windsor Heights, Iowa, as follows:

Section 1. This Council will meet Via Zoom, Windsor Heights, Iowa, on the 20<sup>th</sup> day of July, 2020, at 6:00 p.m. at which time and place it will hold a public hearing on the proposed Ordinance No. 20-07 amending Chapter 174.08 of the Windsor Heights Code of Ordinances to further define surfaces allowed for parking on private property and to add parking prohibition for vehicles parked on private property for the purpose of sale.

Section 2. The City Clerk shall post notice of said hearing, which posting shall be at the three public places in the City which have been permanently designated by ordinance, website and social media platforms, and published in the Des Moines Register

Passed and approved this 6<sup>th</sup> day of July, 2020.

\_\_\_\_\_  
Dave Burgess, Mayor

ATTEST:

\_\_\_\_\_  
Travis Cooke, City Clerk



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM:

SUBJECT: Consideration of Resolution No. 2020-90 - A Resolution Receiving and Filing  
73rd Street Corridor Traffic Study

**GENERAL INFORMATION**

**SUMMARY**

BMI has finished up the traffic study for the 73rd Street corridor. They will be presenting their findings at the July 6th council meeting. This needs to be received and filed by the council prior to continuing with design work for the road between University Ave and Hickman Rd.

Please note that the recommendations in the report are only recommendations that are substantiated by observed traffic flows and turning movements which are supported by technical and industry standards. The council can absolutely direct BMI to proceed with the design with whatever configuration you'd like. Think of the traffic study as a starting point and guide to help you decide what you would like to see for the project.

My plan is to take the items that council wishes to have in the design for the 73rd Street project that are not in the traffic study and have them on a separate resolution at the July 20th Meeting. BMI will then use this resolution as their guidance as they proceed with their work on the design.

It is also worth noting that they are only working on design for the section of 73rd Street between Hickman Road and University Avenue. There may be items that you'd like changed in the design for the portion of the road between University and Center Street. Those items will be addressed in the next portion of the design which is at least a year out.

**ATTACHMENTS**

1. 73rd Street Traffic Analysis - FinalR

2. Resolution No. 2020-90 - Recieve and File 73rd Street Traffic Study



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**Traffic Analysis**

# **73<sup>rd</sup> Street Corridor**

## Windsor Heights, IA

**Submitted by:**  
**Bolton & Menk, Inc.**  
**309 E. 5<sup>th</sup> Street, Suite 202**  
**Des Moines, IA 50309**  
**P: 515-259-9190**  
**F: 515-233-4430**

# Certification

Traffic Analysis

for

73<sup>rd</sup> Street Corridor

City of Windsor Heights, IA  
BMI Project No. – A13.120659

June 11, 2020

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under that laws of the State of Iowa.

6/11/2020

Rob J. Haaland  
License Number 19529

Date

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2020

Pages or sheets covered by this seal:

Pages 1 to 21, Appendix A to C

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## Appendix

- Appendix A: Peak Hour Count Information
- Appendix B: Trip Generation
- Appendix C: LOS Tables

## I. Executive Summary

The City of Windsor Heights is planning improvements to 73<sup>rd</sup> Street from the south city limits (Center Street) to the north city limits (Hickman Road). The improvements are proposed to include resurfacing or reconstruction of the roadway and would be phased as funding allows. The purpose of this traffic analysis is to review the existing transportation system and determine if additional improvements are needed to provide an acceptable system for the corridor users today and in the years to come. This study follows the requirements outlined in the Manual of Transportation Engineering Studies, 2<sup>nd</sup> Ed, published by the Institute of Transportation Engineers.

Per requirements outlined in the Manual of Transportation Engineering Studies, data for this study was collected in early March 2020 with turning movement counts collected March 3, 2020.

The following summarizes the main outcomes of this study:

### A. Safety

A review of crashes over the past 10 years shows that there have been 233 crashes at the nine study intersections and segments between the intersections from January 1, 2015 to December 31, 2019. The crash rates at two of the study intersections highlight a concern.

The following crash issues and trends were noted during the review and are listed below with recommended improvements:

- 73<sup>rd</sup> Street at I-235 Eastbound Ramp Termini/Center Street
  - The crash rate is above the statewide average for rear-end and angle, oncoming left turns crashes are predominant, each making up 23% of the crashes at the intersection. Northbound traffic was involved in a disproportionate amount of the crashes. The curve through the intersection and lack of northbound left turn lane are likely contributing factors. Adding a northbound left turn lane would help this situation.
- 73<sup>rd</sup> Street at Buffalo Road

The crash rate is above the statewide average with rear-end crashes comprising 30% of the crashes. There is no specific trend in the direction of approach, therefore, no specific mitigation is recommended. With the low severity of crashes occurring on a mix of approach directions, this intersection may just have a higher crash rate due to the volume of traffic.

### B. Proposed Improvements

The level of service for the intersections was within acceptable range, LOS A thru D for all scenarios as noted in the traffic modeling section of the report. The intersections were studied with their current actuated signal operations, which is not adaptive. Installing an adaptive signal system can create further improvements to level of service for the system by adjusting timings for high and low peak traffic times.

The segment north of University Avenue functions well and is expected to function well with LOS of A as a 2-lane section. Observations were made at the intersections near Clive Learning Academy. The existing system works well with short periods of delay during drop off and pick up, therefore, the existing geometry is recommended to stay the same. The pedestrian traffic signal in front of Clive Learning Academy on 73<sup>rd</sup> Street should be replaced with a pedestrian hybrid beacon.

The segment including University Avenue and south of University Avenue functions at LOS D or better for intersections with movements having LOS E and F in the existing conditions.

The addition of the Northbound left turn lane at 73<sup>rd</sup> Street at I-235 Eastbound Ramp Termini/Center Street highlighted in the safety improvements improves the intersection and corridor delays, therefore, the northbound left turn lane should be added.

C. Pedestrian / Bicyclist / Transit accommodations

Sidewalk and Trail along 73<sup>rd</sup> Street are already available north of Buffalo Road. While a pedestrian system is available, they are narrow and should be widened to 5 ft to meet ADA requirements. The sidewalk north of University Avenue on the east side should be widened to a trail to provide an expanded safe route for children from neighborhoods east of 73<sup>rd</sup> Street to the Clive Learning Academy.

There is a pedestrian signal used for a school crossing next to Clive Learning Academy. This pedestrian signal is needed to provide a crossing for the students that cross 73<sup>rd</sup> Street from the residential area on the east to the school. While the pedestrian signal appears to be effective, if it is replaced during construction a pedestrian hybrid beacon should be installed in its place as it is the appropriate traffic control for this type of crossing and it provides less disruption to the through traffic on 73<sup>rd</sup> Street.

Neither sidewalk nor trail extend south of Buffalo Road. There was a feasibility study completed in 2019 that noted due to constraints of the area it was determined adding the pedestrian facilities is not feasible without roadway modifications to accommodate a sidewalk or trail. However, if roadway modifications could be made to accommodate pedestrian facilities during construction adding these improvements should be further investigated during design.

## II. Introduction

The City of Windsor Heights is planning improvements to 73<sup>rd</sup> Street from the south city limits near Interstate I-235 to the north city limits at Hickman Road. This segment is 1.67 miles long and runs north/south. The improvements are proposed to include resurfacing or reconstruction and would be phased as funding allows. Two project phases are currently identified with University Avenue being the dividing point. The purpose of this traffic analysis is to identify potential existing and future transportation issues due to growth on the corridor and recommend solutions to mitigate the potential issues to provide a safe transportation facility for vehicular, pedestrian and bicycle traffic.

The analysis includes the following nine study intersections:

1. 73<sup>rd</sup> Street at I-235 eastbound ramp termini/Center Street
2. 73<sup>rd</sup> Street at I-235 westbound ramp termini
3. 73<sup>rd</sup> Street at Buffalo Road
4. 73<sup>rd</sup> Street at Apple Valley Driveway
5. 73<sup>rd</sup> Street at University Avenue
6. 73<sup>rd</sup> Street at Del Matro Avenue
7. 73<sup>rd</sup> Street at Clive Learning Academy Entrance
8. 73<sup>rd</sup> Street at Washington Avenue
9. 73<sup>rd</sup> Street at College Drive

Note: the intersection at Hickman Road was not included because of the ongoing Hickman Road Signal Timing Improvements Project that should address traffic flow at the intersection.

The intersections of I-235 eastbound exit ramp termini, Center Street, I-235 westbound exit ramp termini, Buffalo Road, and University Avenue are signalized. The remaining intersections are side street stop controlled.

### III. Existing Conditions Review

The proposed study area is the 73<sup>rd</sup> Street Corridor in Windsor Heights, Iowa extending south to north. The project location is shown in **Figure 1**.

#### 73<sup>rd</sup> Street

73<sup>rd</sup> Street within the project area is surrounded by commercial and residential. From the south city limits to north of University Avenue, 73<sup>rd</sup> Street is bordered by commercial on both sides. North of University Avenue to the north city limits, 73<sup>rd</sup> Street is bordered by residential and a school.

73<sup>rd</sup> Street has two main typical cross sections within this corridor. From the south city limits to approximately 250 ft north of University Avenue, the corridor is 4-lane with two lanes in each direction and turn lanes added at certain intersections to accommodate turning movements. It is undivided south of the I-235 eastbound ramp intersection. It is divided with a painted median between the I-235 eastbound and westbound ramp intersections. North of the I-235 westbound ramp intersection to Buffalo Road it varies between divided with raised medians and undivided. From Buffalo Road to the south edge of University Avenue it remains divided with raised medians.

**Figure 1: 73<sup>rd</sup> Street Project Corridor**



73<sup>rd</sup> Street has a functional classification of minor arterial from south city limits to north city limits per the Iowa DOT Functional Classification Map.

There is a railroad crossing between the I-235 westbound ramp intersection and the Buffalo Road intersection. Although the trains through here are infrequent, they do stop traffic for the time they are using the tracks. While this does affect the traffic flow along 73<sup>rd</sup> Street, the infrequency of the trains makes it less of a concern.

There are signalized intersections at:

- I-235 eastbound exit ramp termini/Center Street,
- I-235 westbound exit ramp termini,
- Buffalo Road,
- University Avenue,

The signals are semi actuated and function using preset timing limits which adjust for the time of day.

The speed limit along 73<sup>rd</sup> street is 35 mph south of University Avenue and 25 mph north of University Avenue.

Parking is not allowed along 73<sup>rd</sup> Street.

#### I-235 Eastbound exit ramp termini/Center Street (signalized)

The I-235 eastbound ramp intersection provides an entrance ramp and an exit ramp access to I-235 on the west side of 73<sup>rd</sup> Street. The east side of 73<sup>rd</sup> Street is Center Street, a two-lane local street. At this intersection, 73<sup>rd</sup> Street is four lane with two lanes in each direction with a southbound left turn lane and northbound channelized right turn lane. Access onto I-235 is provided through a shared lane for northbound through and left turning traffic. Southbound traffic accessing the eastbound I-235 ramp is provided a channelized right turn via a loop ramp located 475' north of this intersection. See **Figure 2**.

**Figure 2: I-235 Eastbound exit ramp termini/Center Street Intersection**



The eastbound approach traffic exiting the I-235 off-ramp has a single lane for through/left turning traffic and a right turn lane. The westbound Center street approach has one shared lane for all movements.

73<sup>rd</sup> Street curves through the intersection with northbound and southbound traffic required to maneuver a short curve with a 45-degree alignment change in the intersection.

The speed limit for Center Street is posted at 25 mph. Parking is not allowed on the ramp or Center Street.

There are no sidewalks on the north, east, or west legs, however, 4 ft wide sidewalk extends south of the intersection on both sides of 73<sup>rd</sup> Street.

#### I-235 Westbound exit ramp termini (signalized)

The I-235 westbound ramp termini provides both entrance ramp and exit ramp access to I-235 on the west side of 73<sup>rd</sup> Street. The east side of 73<sup>rd</sup> Street is a private driveway to 3E – Electrical Engineering & Equipment Company. Access onto the interstate is provided through a northbound left turn lane and a southbound channelized right turn at the intersection. These segments connect into one on-ramp approximately 150 ft west of the intersection. The westbound traffic exiting I-235 uses a loop ramp that has a channelized right 150' west of the intersection to access southbound 73<sup>rd</sup> Street. The westbound traffic also has two lanes providing a through/left and left to access 3E and northbound 73<sup>rd</sup> Street. The 3E private drive has one receiving lane and two exit lanes, a through/right and a left. See **Figure 3**.

**Figure 3: I-235 Westbound exit ramp termini Intersection**



There are no posted speed limits for the interstate ramp or the private driveway. Parking is not allowed on the ramp and the driveway on the eastside leads immediately to a parking lot for 3E.

There are no sidewalks at the intersection.

#### Buffalo Road (signalized)

The Buffalo Road intersection provides access to commercial on both sides of the street, with large box stores to the east and connection to West Des Moines to the west. Buffalo Road in both directions is a two-lane road with one lane in each direction. There are added left turn lanes at the intersection to provide for the large volume of left turning traffic east and westbound. 73<sup>rd</sup> Street has added left turn lanes at the intersection both northbound and southbound. There is also an added northbound right turn lane. See **Figure 4**.

**Figure 4: Buffalo Road Intersection**



Buffalo Road has a functional classification of local road. West of 73<sup>rd</sup> Street, Buffalo Road has a posted speed limit of 25 mph. There is not a posted speed limit east of 73<sup>rd</sup> Street.

The city notes an issue with traffic for the strip mall on the southwest corner backing out of the driveway and blocking the lanes as vehicles wait to access the coffee shop drive-thru in the morning. This was not specifically observed during the site observations, but video collected for the turning movement counts shows times during the morning peak where traffic is waiting in the roadway to enter the site. Traffic crashes were reviewed for this specific location and while there are eight crashes in 5 years that occur adjacent to this driveway, none are during the AM peak when significant blocking occurs and all are property damage only.

There is no parking allowed on Buffalo Road in either direction.

There are sidewalks on the north and west sides of the intersection. The sidewalks are 4 ft wide southwest of the intersection, 4.5 ft wide northwest of the intersection and 5 ft wide to the east, north of the intersection.

### Apple Valley (side street stop)

The Apple Valley intersection is a combination of driveways. There is a driveway for small commercial on the west and a driveway for the same large box commercial to the east that also has access from Buffalo Road. 73<sup>rd</sup> Street has added left turn lanes for both north and southbound traffic. While having low volumes, the northbound left turn lane exists to match the opposing southbound left turn lane which has more significant flow. The Apple Valley driveways are each two-lane with one lane in each direction. See **Figure 5**.

**Figure 5: Apple Valley Intersection**



As the east and west legs are privately owned driveways, there is not a posted speed limit east or west of 73<sup>rd</sup> Street.

Parking restrictions are not signed in either direction, but both driveways lead to parking lots.

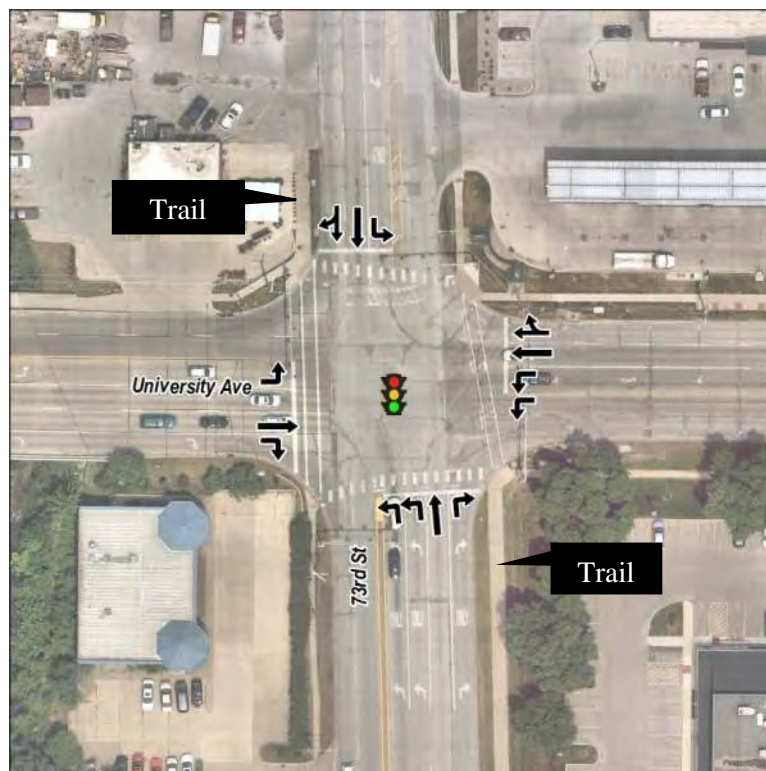
There is an 8 ft wide trail along the east side of 73<sup>rd</sup> Street and a 4 ft wide sidewalk along the west side of 73<sup>rd</sup> Street at this intersection. There are no sidewalks along the driveways into either site from the intersection.

### University Avenue (signalized)

The University Avenue intersection provides access to commercial on all corners of the intersection. University Avenue is a main roadway through Windsor Heights to the east of the intersection. To the west of the intersection it provides connection to the City of Clive. University Avenue is in the process of being reconstructed from east of 73<sup>rd</sup> Street east to 63<sup>rd</sup> Street as part of the University Avenue Project. When reconstructed east of the intersection it will be a three-lane typical cross-section with an added westbound left turn lane for dual lefts, and a right turn lane on the westbound approach at 73<sup>rd</sup> Street. West of the intersection, University Avenue will remain the same width with pavement striping changes. The eastbound approach will be one through lane, one right turn lane and one left turn lane. The eastbound left turn lane will be offset from the through lane to match with the northern most opposing westbound left turn lane. South of the intersection is

expected to remain the same with two receiving lanes and four incoming northbound lanes. The incoming northbound approach will be dual northbound left turn lanes, one through lane, and one right turn lane. Southbound is also planned to remain the same with one receiving lane, a southbound left turn lane, a southbound through lane and a combined southbound through/right turn lane. See **Figure 6**. University Avenue has a functional classification of minor arterial.

**Figure 6: University Avenue Intersection**



West of 73<sup>rd</sup> Street, University Avenue has a posted speed limit of 35 mph. University Avenue through Windsor Heights has a posted speed limit of 30 mph.

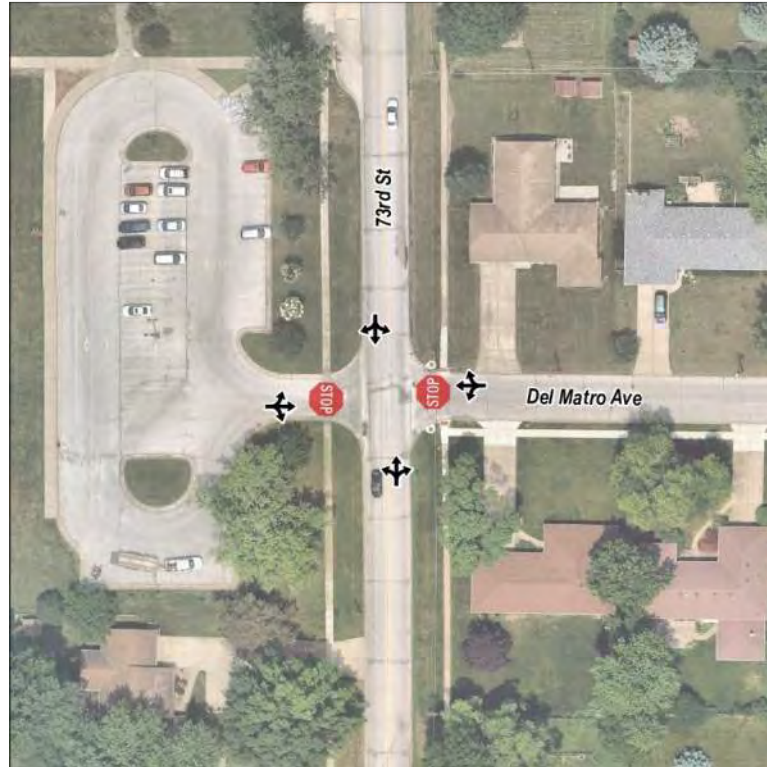
There is no parking allowed on University Avenue.

An existing 4 ft sidewalk extends north along the east side of 73<sup>rd</sup> Street, south along the west side of 73<sup>rd</sup> Street, and west along the north side of University Avenue. The 8 ft trail connects from the south on the east side of 73<sup>rd</sup> Street, crosses the east and north legs and extends north on the west side of 73<sup>rd</sup> Street. This trail extends 825 ft north of the intersection where it turns west away from 73<sup>rd</sup> Street. A 4 ft sidewalk continues north from this point. The University Avenue Project includes constructing a 10 ft trail extending east from the intersection on the south side of University Avenue. The project also includes constructing a 5 ft sidewalk extending east along the north side of University Avenue. City of Windsor Heights staff noted they have received complaints from trail users about having to cross two legs of this intersection.

#### Del Matro Avenue (side street stop)

The Del Matro Avenue intersection is a combination of street to the east and driveway to the Clive Learning Academy parking lot to the west. Del Matro Avenue is a two-lane residential street with one lane in each direction. The driveway to Clive Learning Academy is also two-lane with one lane in each direction. It serves as parking for staff. The parking lot for students and parents is 570' further north on 73<sup>rd</sup> Street at the Clive Learning Academy Entrance. See **Figure 7**.

**Figure 7: Del Matro Avenue Intersection**



Del Matro Avenue has a functional classification of local street and a posted speed limit of 25 mph.

Parking is allowed on the south side of Del Matro Avenue east of the intersection but is restricted along the south side and both sides near the intersection.

There is 4 ft wide sidewalk along the west side of 73<sup>rd</sup> Street and a 3.5 ft wide sidewalk along the east side of 73<sup>rd</sup> Street. There is also 4 ft wide sidewalk along the south side of Del Matro Avenue.

#### Clive Learning Academy Entrance (side street stop)

Clive Learning Academy uses their northmost driveway as the entrance only for school drop-off and pick-up. The driveway is the west leg of this three-leg intersection. This driveway is an entrance only with traffic maneuvering within the site and exiting 165 ft south. See **Figure 8**.

Between these driveways, there is a pedestrian signal used for a school crossing. This pedestrian signal is needed to provide a crossing for the students that cross 73<sup>rd</sup> Street from the residential area on the east to the school. While the pedestrian signal appears to be effective, if it is replaced during construction a pedestrian hybrid beacon should be installed in its place as it is the appropriate traffic control for this type of crossing and it provides less disruption to the through traffic on 73<sup>rd</sup> Street.

**Figure 8: Clive Learning Academy Entrance Intersection**



There is 6 ft wide sidewalk along the west side of 73<sup>rd</sup> Street adjacent to the school. The sidewalk on the east side is 3.5 ft wide.

**Washington Avenue (side street stop)**

The Washington Avenue intersection is a three-leg intersection, with Washington Avenue extending east from 73<sup>rd</sup> Street. It is 140' north of the Clive Learning Academy entrance drive and 50' south of College Street. See **Figure 9**. Washington Avenue is a local street but sees extra traffic because it is one of a few roads that connects east-west across Windsor Heights from 73<sup>rd</sup> Street to 63<sup>rd</sup> Street. It is a two-lane residential street with one lane in each direction.

Washington Avenue has a posted speed limit of 25 mph.

Parking is allowed on the south side of Washington Avenue, but is restricted along the north side along Washington Avenue and on both sides near the intersection.

There is 3.5 ft wide sidewalk along both sides of 73<sup>rd</sup> Street in this area. There is also a 4 ft wide sidewalk along the south side of Washington Avenue east of 73<sup>rd</sup> Street.

**Figure 9: Washington Avenue Intersection**



College Drive (side street stop)

The College Drive intersection is a three-leg intersection, with College Drive extending west from 73<sup>rd</sup> Street. It is 50' north of Washington Avenue. See **Figure 10**. College Drive is a local street but sees extra traffic because it is the only east-west connector to a residential neighborhood between University Avenue and Hickman Road. It is a two-lane residential street with one lane in each direction.

**Figure 10: College Drive Intersection**



College Drive has a posted speed limit of 25 mph.

Parking is allowed on the north side of College Drive but is restricted along the north side and both sides near the intersection.

The sidewalk is 3.5 ft wide along the west side of 73<sup>rd</sup> Street at this intersection and 4 ft wide along the east side of 73<sup>rd</sup> Street. There is also a 3.5 ft wide sidewalk along the south side of College Drive west of 73<sup>rd</sup> Street.

#### **A. EXISTING TRAFFIC INFORMATION**

13-hour turning movement counts for the nine study intersections were performed on March 3, 2020. The AM Peak Hour and PM Peak Hour was determined to be 7:15-8:15 am and 4:30-5:30 pm, respectively. Annual Average Daily Traffic information was obtained from the Iowa DOT's Traffic Flow Maps. The AADTs were used in calculating system growth and crash rates. See **Appendix A** for the study area aerial, AADT's, and peak hour count information.

### **IV. Safety Review**

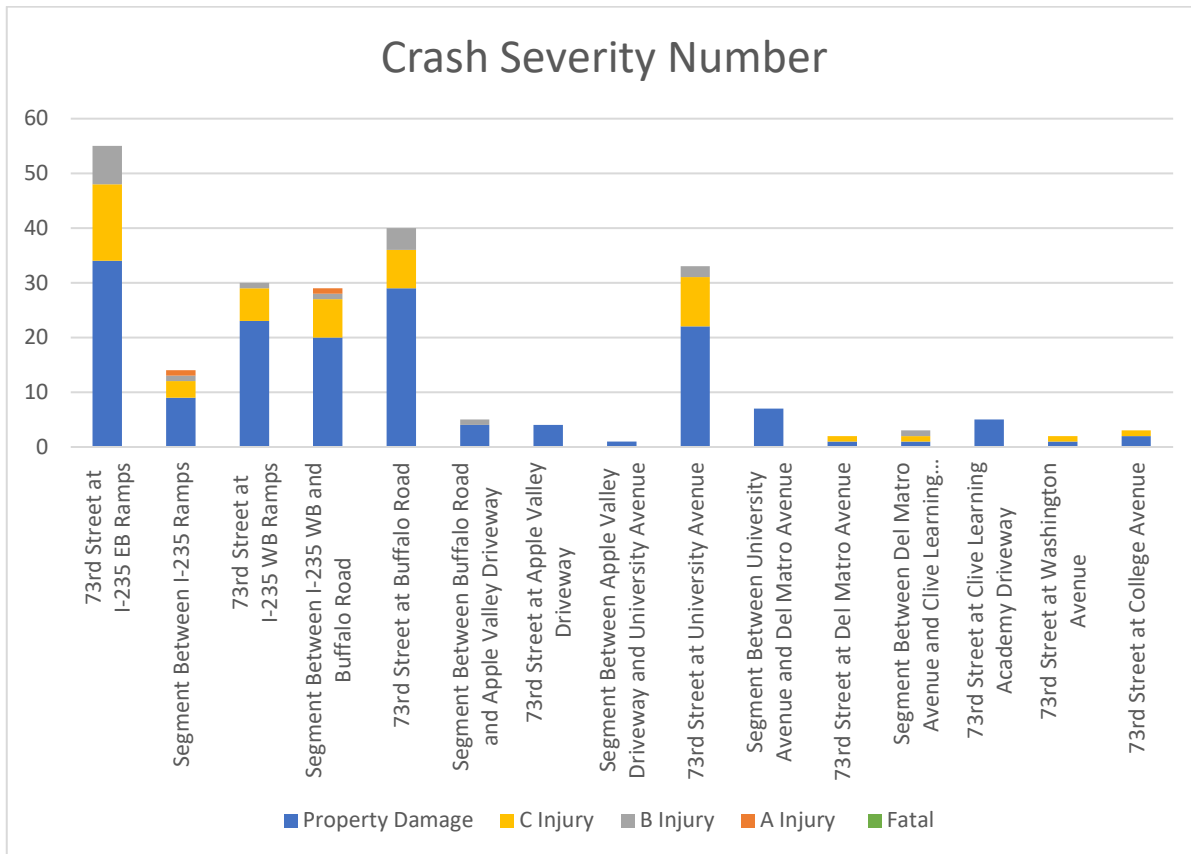
The crash history of the study corridor was completed using the crash data available through the Iowa DOT Iowa Crash Analysis Tool (ICAT) for January 1, 2015 through December 31, 2019. There were 174 reported crashes at the study intersections and 59 reported crashes along the segments between the study intersections for a total of 233 crashes along the corridor during this 5-year period.

There were no fatal crashes along the corridor and only two major injury crashes. One of the major injury crashes occurred in the segment between the I-235 ramps and the other occurred in the segment between the I-235 westbound ramp and Buffalo Road. The detailed crash reports state that the major injury crash between the I-235 ramps was a crash with a motorcycle following too close

and the crash between the I-235 westbound ramp and Buffalo Road was a single vehicle crash caused by an inebriated driver travelling too fast and losing control.

Of the remaining 231 total crashes along the corridor, there were 18 minor injury crashes along the corridor with 14 at the study intersections and four between the study intersections. Possible Injury crashes accounted for 50 crashes along the corridor with 39 of them at the study intersections and 11 between the study intersections. 163 crashes were property damage only crashes along the corridor, with 121 at the study intersections and 42 between intersections. **Chart 1** and **Table 1** show the breakdown of crash severities and types for the intersections and segments between.

**Chart 1: Number of Crashes by Crash Severity 2015-2019**



**Table 1: Number of Intersection Crashes by Crash Type 2009-2018**

	Crash Type								
	73rd Street at I-235 EB Ramps	73rd Street at I-235 WB Ramps	73rd Street at Buffalo Road	73rd Street at Apple Valley Driveway	73rd Street at University Avenue	73rd Street at Del Matro Avenue	73rd Street at Clive Learning Academy Driveway	73rd Street at Washington Avenue	73rd Street at College Avenue
Non-Collision (Single Vehicle)	6	2	3	0	3	0	0	0	0
Head-on (Front to front)	6	4	7	0	2	0	0	0	0
Rear End (front to rear)	13	13	12	2	8	2	5	2	3
Angle, Oncoming Left Turn	13	5	4	0	5	0	0	0	0
Broadside (front to side)	4	6	8	2	11	0	0	0	0
Sideswipe, Same Direction	8	0	5	0	2	0	0	0	0
Sideswipe, Opposite Direction	5	0	0	0	1	0	0	0	0
Rear to Rear	0	0	0	0	0	0	0	0	0
Rear to Side	0	0	0	0	0	0	0	0	0
Not reported	0	0	0	0	0	0	0	0	0
Other	0	0	1	0	1	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0

The I-235 eastbound ramp/Center Street intersection has a disproportionately higher percentage of rear end (23%) and angle oncoming left turn (23%). There is also a trend showing that a significant

number of the crashes involve northbound traffic. The curve through this intersection, a southbound left turn lane without a northbound left turn lane, and the pavement jointing can lead a northbound through vehicle into the southbound left turn lane, likely contributing to some confusion for drivers traversing the intersection. The addition of a northbound left turn lane with protected left-turn phase would reduce some confusion as it would line up traffic through the intersection and provide safer left-turning.

Although the Buffalo Road intersection has a higher percentage of rear end crashes, there was no apparent trend to be mitigated as these crashes are occurring in all approach directions and the higher intersection crash rate is likely due to the volume of cars travelling through this intersection.

Crash rates were reviewed for the intersections and the segments between the study intersections to see if issues are present. Crash rates above the statewide average for a similar type of intersection or roadway segment are often indicative of an issue on the corridor that needs to be examined further. The crash rates were calculated using 2016 AADTs from the Iowa DOT's Traffic Flow Map. The crash rates for the study intersections and segments can be found in **Tables 2 and 3**, respectively. The crash rates for intersections are determined as a rate per million vehicles entering. The crash rates for segments are determined as a rate per 100 million vehicle miles traveled, which is the industry standard for this calculation.

**Table 2: Intersection Crash Rates**

<u>Intersection</u>	<u>Crash Rate</u>	<u>Statewide Average</u>
73rd Street at I-235 EB Ramps	1.29	0.9
73rd Street at I-235 WB Ramps	0.54	0.9
73rd Street at Buffalo Road	0.87	0.8
73rd Street at Apple Valley Driveway	0.12	0.8
73rd Street at University Avenue	0.72	0.8
73rd Street at Del Matro Avenue	0.12	0.8
73rd Street at Clive Learning Academy Driveway	0.32	0.8
73rd Street at Washington Avenue	0.12	0.8
73rd Street at College Avenue	0.18	0.8

The intersection crash rates for the I-235 eastbound ramp/Center Street and the Buffalo Road intersection were above the statewide average, as shown in red above. The remainder of the intersection crash rates are below the statewide average.

**Table 3: Segment Crash Rates**

Segment	<u>Crash Rate</u>	<u>Statewide Average</u>
Segment Between I-235 Ramps	162	382
Segment Between I-235 WB and Buffalo Road	316	382
Segment Between Buffalo Road and Apple Valley Driveway	126	382
Segment Between Apple Valley Driveway and University Avenue	43	382
Segment Between University Avenue and Del Matro Avenue	92	382
Segment Between Del Matro Avenue and Clive Learning Academy Driveway	168	382

All segments had crash rates are below the statewide average.

As shown in Tables 2 and 3, the intersection and segment crash rates are operating below the statewide averages based on roadway type, with the exception of the I-235 Eastbound ramp/Center Street and Buffalo Road intersections. For those intersections and segments with of crash rates below the statewide average, the crash rate and severity does not indicate any significant crash concern for those intersections or segments.

However, the crash rate and trend for the I-235 Eastbound ramp/Center Street is concerning and potential improvement to the intersection, such as the installation of a northbound left turn lane, could provide a safer intersection. The higher than average crash rate for the Buffalo road intersection is a cause for concern, but the lack of a trend in type and approach makes it difficult to mitigate.

## V. Proposed Improvements

As part of this study, the proposed roadway improvements were analyzed. 73rd Street is being reviewed to see if it should be widened to a three-lane section north of University Avenue. The existing 73rd Street cross section south of University Avenue is planned to stay as is with mitigation added as needed to accommodate safety and traffic flow now and in the future.

### A. ANNUAL GROWTH OF TRAFFIC

Annual growth of traffic is anticipated on this corridor due to development and/or redevelopment in areas both along the corridor and within Windsor Heights. The annual growth rates were calculated using historical data obtained from the Iowa DOT Traffic Flow Maps. Information on these maps included AADTs for 73rd Street and side roads throughout the corridor. Growth rates were calculated for the study intersections with negative growth rates between -2.50% and -1.00%. While a negative growth rates were determined a standard minimum 0.5% growth rate was used for this study. This is considered minimal growth and is representative for a developed area with potential for limited redevelopment. The growth rate was applied to the turning movement counts collected to determine the Construction Year (2024) and Design Year (2044) turning movement volumes. The 2024 construction year and 2044 design year turning movement count volumes can be found in **Appendix A**.

## B. TRAFFIC SIGNAL WARRANTS

Traffic signal warrants have been developed as national guidelines to promote continuity of traffic control devices to ensure that traffic signals are installed at intersections that would benefit from their use. Traffic signal warrants were reviewed for the study intersections to determine if a new signal is needed at a stop-controlled location or if an existing signal should be removed.

The Manual on Uniform Traffic Control Devices (MUTCD) states that the investigation of the need for a traffic signal control shall include an analysis of the applicable factors contained in the following traffic signal warrants:

- Warrant 1: Eight-Hour Vehicular Volume
- Warrant 2: Four-Hour Vehicular Volume
- Warrant 3: Peak Hour
- Warrant 4: Pedestrian Volume
- Warrant 5: School Crossing
- Warrant 6: Coordinated Signal System
- Warrant 7: Crash Experience
- Warrant 8: Roadway Network
- Warrant 9: Intersection Near a Grade Crossing

A traffic signal shall not be installed unless one or more of the warrants can be met. Furthermore, a signal shall not be installed unless an engineering study indicates that the signal will improve the overall safety and operation of the intersection. Finally, the signal should not disrupt the progressive flow of traffic.

Where traffic signals exist, 80% of the volumes for warrants can be used to determine if the signal should stay. The review determined the traffic control at each intersection was appropriate and should remain as is.

## C. POTENTIAL DEVELOPMENT

Potential development that could generate additional traffic on the corridor was reviewed. Since the corridor is mostly developed, there is little area for new development, however, the area in front of the existing Walmart/Sam's Club south of Apple Valley has been discussed as a potential area for future mixed-use development. The main area where this development could occur is between Walnut Creek and the Walmart/Sam's Club parking lots. There are currently existing restaurants present, B-Bops and Burger King, but space does exist where an old auto service center, an open parking lot, and undeveloped ground currently exist. The size of this potential redevelopment area was determined using aerial photography. For the purposes of this study, the space was assumed to be a potential mixed-use strip mall/shopping center. Being there is no specific plan for timing of this development as of yet, the development was added only to the future year 2044 scenarios.

Trip generation was completed using the Trip Generation Manual, 10<sup>th</sup> Edition, Institute of Transportation Engineers, 2017. Trip generation rates were evaluated using data for Shopping Center (ITE 820). The trip generation results are contained in **Appendix B**. The trip generation is summarized in **Table 4**.

**Table 4: Trip Generation Summary**

Land Use	ITE Code	Proposed Size	AM Peak Hour		PM Peak Hour		Weekday	
			Entering	Exiting	Entering	Exiting	Entering	Exiting
<b>Shopping Center</b>	820	37,500 sf	109	67	152	164	1823	1823
			AM Peak Hour total	176	PM Peak Hour total	316	Weekday total	3646

As shown in the traffic modeling section, there are no recommended improvements needed to accommodate the redevelopment of this area based on the development assumptions detailed above. As details for this redevelopment become firm, a separate traffic analysis should be prepared to analyze any potential impacts from this site to the surrounding roadway network.

## VI. Traffic Modeling

The traffic operations analysis for the intersections consider the following measures to determine the adequacy of the intersection design to meet acceptable operations: intersection delay/Level of Service (LOS) and volume-to-capacity ratios. An explanation of each of these measures is provided below:

### A. LEVEL OF SERVICE AND DELAY

The operational analysis results are described as a Level of Service (LOS) ranging from A to F. These letters serve to describe a range of operating conditions for different types of facilities. Levels of Service are calculated based on the Highway Capacity Manual 6<sup>th</sup> edition, which defines the level of service, based on control delay. Control delay is the delay experienced by vehicles slowing down as they are approaching the intersection, the wait time at the intersection, and the time for the vehicle to speed up through the intersection and enter into the traffic stream. The average intersection control delay is a volume weighted average of delay experienced by all motorists entering the intersection on all intersection approaches. The control delay is modeled within the analysis software, Traffic ware Synchro. Level of Service D or higher are commonly taken as acceptable design year LOS. The level of service and its associated intersection delay for a signalized and unsignalized intersection is presented below. The delay threshold for unsignalized intersections is lower for each LOS compared to signalized intersections, which accounts for the fact that people expect a higher quality of service when at a stop-controlled intersection.

LOS A thru D provide continuous flow traffic without unexpected delay. LOS E indicates the system is congested and traffic will be delayed more. LOS F indicates system overload and failure with traffic delayed significantly. LOS A thru D is considered acceptable by many agencies throughout the metro area.

**Table 5: Level of Service Criteria**

	<b>Signalized Intersection</b>	<b>Unsignalized Intersection</b>
<b>LOS</b>	<b>Control Delay per Vehicle (sec.)</b>	<b>Control Delay per Vehicle (sec.)</b>
A	≤ 10	≤ 10
B	>10 and ≤ 20	>10 and ≤ 15
C	>20 and ≤ 35	>15 and ≤ 25
D	>35 and ≤ 55	>25 and ≤ 35
E	>55 and ≤ 80	>35 and ≤ 50
F	>80	>50

If  $v/c > 1.0$ , LOS will be equal to F regardless of the delay value.

Four scenarios were analyzed to determine the effects of the traffic on the transportation system. Mitigation changes were created and analyzed to improve issues that were noted during the analysis. The scenarios analyzed were:

- 1) Existing conditions – The existing conditions (2020) were analyzed using the existing roadways and turning movement counts to determine if there were existing issues. Mitigation was reviewed for locations that have longer than acceptable delays. This also provides a basis for improvements required for the Opening Day Scenario and 20-year Projected No-Build Scenario.
- 2) Construction Year – The opening day conditions (2024) were analyzed to determine the

effects of a change from two-lane section to three-lane section with the addition of a two-way-left turn lane north of University Avenue.

- 3) Future Year Projected No-Build – The future projected no build conditions (2044) were analyzed to determine improvements required due to the annual growth of traffic on the system. These results were reviewed to determine if changes to the existing geometrics would be needed if reconstructed as is. Mitigation determined in the existing conditions was added. This scenario includes the additional traffic from the redevelopment area in front of Walmart/Sams Club.
- 4) Future Year Projected Build - The future projected build conditions (2044) were analyzed to determine the effects of a change from two-lane section to three-lane section with a two-way-left turn lane north of University Avenue. This scenario includes annual growth of traffic on the system and the additional traffic from the redevelopment area in front of Walmart/Sams Club.

**Table 6: Intersection Level of Service by Scenario**

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)													
			Existing Conditions		Existing Conditions w Mitigation		Current Year Build		Current Year Build w Mitigation		Future Year No Build		Future Year No Build w Mitigation		Future Year Build	
1	73rd St & I-235 EB Ramps/Center St	AM Peak	33	C	11	B	37	D	11	B	36	D	11	B	41	D
	Signalized Intersection	PM Peak	42	D	17	B	44	D	16	B	45	D	16	B	48	D
2	73rd St & I-235 WB Ramps/Private Driveway	AM Peak	12	B	12	B	12	B	12	B	12	B	12	B	14	B
	Signalized Intersection	PM Peak	15	B	16	B	15	B	16	B	17	B	16	B	20	C
3	73rd St & Buffalo Rd	AM Peak	14	B	14	B	13	B	15	B	14	B	14	B	16	B
	Signalized Intersection	PM Peak	20	C	20	C	21	C	22	C	19	B	22	C	35	D
4	73rd St & Private Drive/Apple Valley	AM Peak	2	A	2	A	2	A	2	A	2	A	2	A	2	A
	Stop Controlled	PM Peak	3	A	4	A	3	A	4	A	3	A	4	A	4	A
5	73rd St & University Ave	AM Peak	23	C	22	C	23	C	21	C	23	C	23	C	24	C
	Signalized Intersection	PM Peak	22	C	22	C	23	C	23	C	24	C	23	C	25	C
6	73rd St & Del Matro Ave	AM Peak	1	A	1	A	1	A	2	A	2	A	2	A	2	A
	Stop Controlled	PM Peak	2	A	3	A	2	A	3	A	2	A	3	A	2	A
7	73rd St & Clive Learning Academy	AM Peak	1	A	1	A	1	A	1	A	1	A	1	A	1	A
	Stop Controlled	PM Peak	1	A	1	A	1	A	1	A	1	A	2	A	1	A
8	73rd St & Washington Ave	AM Peak	1	A	1	A	1	A	1	A	1	A	1	A	1	A
	Stop Controlled	PM Peak	1	A	1	A	1	A	1	A	1	A	1	A	1	A
9	73rd St & College Dr	AM Peak	1	A	1	A	1	A	1	A	1	A	1	A	1	A
	Stop Controlled	PM Peak	1	A	1	A	1	A	1	A	1	A	1	A	1	A

1. Delay in seconds per vehicle

2. Maximum delay and LOS on any approach and/or movement

3. Limiting Movement is the highest delay movement.

As shown in **Table 6**, the level of service for the intersections was within acceptable range, LOS D or better, for all scenarios. A review of intersections north of University shows that the segment north of University Avenue functions well as a 2-lane section, with the greatest intersection delay being 2.6 s/veh.

More detailed level of service information for the intersection and specific turning movements for each scenario can be found in **Appendix C**.

Some turning movements experienced delays that are longer than the normally acceptable delays, LOS E or LOS F. The Northbound left at the I-235 Eastbound ramps is the only movement at LOS F and has significant delays at 215.2 s/veh. This movement also has issues with a long queue length approaching the next intersection to the south. The intersection was analyzed under a mitigation scenario with an added 200 ft long northbound turn lane. This remedies the issue with the long delays and long queue lengths.

The overall Corridor Delay, Travel Time, and Speed information were reviewed to see what effects the number of through lanes and discussed mitigation would have for traveling the length of the corridor. Overall Corridor Delay, Travel Time, and Speed information can be found in **Table 7**.

**Table 7: Corridor Delay, Travel Time, and Speed**

		Peak Hour	Existing Conditions	Existing Conditions with Mitigation	Opening Year	Opening Year with Mitigation	Future Year No Build	Future Year No Build with Mitigation	Future Year Build	Future Year Build with Mitigation
Northbound	Delay (s)	AM Peak	84.1	40.1	92.6	42.3	93	41.5	113.8	46.8
		PM Peak	129.1	52.4	135.9	71.5	133.2	70.7	165.2	91.8
	Travel Time (s)	AM Peak	357.7	204.9	460.7	206.6	465.1	206.8	1095.3	213.3
		PM Peak	721.4	218.6	840.8	238.2	995	237.1	1790.1	264
	Speed (mph)	AM Peak	21	25	20	25	20	25	18	24
		PM Peak	17	23	17	21	17	22	15	20
Southbound	Delay (s)	AM Peak	55.3	53.6	54.5	53.8	54.1	54.3	64.5	67.2
		PM Peak	60.8	77	64.3	66.2	67.6	68.1	85.4	92.3
	Travel Time (s)	AM Peak	223	221.2	222.4	221.7	222.2	222.1	232.1	234.4
		PM Peak	225.8	241.1	229	230.7	231.9	232.7	251.4	258.4
	Speed (mph)	AM Peak	23	23	23	23	23	23	22	22
		PM Peak	23	21	22	22	22	22	20	20

The overall delay, travel times, and speeds changed significantly for northbound traffic without mitigation, with the delays and travel times increasing and the speeds decreasing. Adding mitigation, consisting of a northbound left turn lane at I-235 Eastbound ramp, improves the metrics significantly. The comparison of base to mitigation scenarios with the northbound left turn lane at I-235 Eastbound Ramp included shows significant improvements with delays decreasing 50-57%, travel times improving 61-83%, and overall speeds increasing 24-33%.

The overall delay, travel times, and speeds remained similar for southbound traffic for all scenarios with a change of less than 10% from existing condition to future year build. The comparison of scenarios from base to mitigation shows less than 1% change in travel times for most of the scenarios, with only one having a difference of 6.4%. The added two-way left turn lane north of University Avenue makes little difference for traveling southbound. The mitigation of adding the northbound left turn lane at the I-235 eastbound ramp will negatively affect the southbound traffic through increased overall delay and travel times in each scenario, but these effects are minimal.

## VII. Multimodal Review

Des Moines Area Regional Transit (DART) Route 3 follows University Avenue from downtown to just east of 73<sup>rd</sup> Street to a large station/stop at Wal-Mart/Sam's Club. It then crosses 73<sup>rd</sup> Street on Buffalo Road and passes Dowling Catholic High School on the way to Valley West Mall in West Des Moines.

There is a shared use path along the east side of the roadway from where it connects to the Clive Greenbelt along Walnut Creek, about 200 ft south of the Apple Valley driveway, to University Avenue where it switches to the west side and extends about 850 ft north of University Avenue before turning away from the roadway. As mentioned previously in the existing conditions section, city staff noted they have received complaints from trail users about having to cross two legs of this intersection. Options should be reviewed to determine if there are alternatives for trail connections in this area.

As mentioned previously in the existing conditions section, there are pedestrian facilities adjacent to the road north of Buffalo Road to the north end of the corridor. These existing pedestrian facilities vary in width from 3.5 ft to 10 ft. The sidewalk less than 4 ft wide should be replaced to meet ADA requirements. Sidewalks 4 ft to 5 ft wide, should either have 5 ft passing zones added at 150 ft spacing or be replaced with a 5 ft sidewalk to be brought into ADA compliance.

The sidewalk north of University Avenue on the east side should be widened to a trail to provide an expanded safe route for children from neighborhoods east of 73<sup>rd</sup> Street to the Clive Learning Academy.

Neither sidewalk nor trail extend south of Buffalo Road. There was a feasibility study completed in 2019 due to evidence of pedestrian use as counted in the existing turning movement counts collected and through the worn footpaths along 73<sup>rd</sup> Street in this area. Due to constraints of the area it was determined adding the pedestrian facilities is not feasible without roadway modifications to accommodate a sidewalk or trail. However, if roadway modifications could be made to accommodate pedestrian facilities during construction adding these improvements should be further investigated during design.

## VIII. Conclusions & Recommendations

The following summarizes the main outcomes of this study:

### A. Safety

A review of crashes over the past 10 years shows that there have been 233 crashes at the nine study intersections and segments between the intersections from January 1, 2015 to December 31, 2019. The crash rates at two of the study intersections highlight a concern.

The following crash issues and trends were noted during the review and are listed below with recommended improvements:

- 73<sup>rd</sup> Street at I-235 Eastbound Ramp Termini/Center Street
  - The crash rate is above the statewide average for rear-end and angle, oncoming left turns crashes are predominant, each making up 23% of the crashes at the intersection. Northbound traffic was involved in a disproportionate amount of the crashes. The curve through the intersection and lack of northbound left turn lane are likely contributing factors. Adding a northbound left turn lane would help this situation.

- 73<sup>rd</sup> Street at Buffalo Road

The crash rate is above the statewide average with rear-end crashes comprising 30% of the crashes. There is no specific trend in the direction of approach, therefore, no specific mitigation is recommended. With the low severity of crashes occurring on a mix of approach directions, this intersection may just have a higher crash rate due to the volume of traffic.

### B. Proposed Improvements

The level of service for the intersections was within acceptable range, LOS A thru D for all scenarios as noted in the traffic modeling section of the report. The intersections were studied with their current actuated signal operations, which is not adaptive. Installing an adaptive signal system can create further improvements to level of service for the system by adjusting timings for high and low peak traffic times.

The segment north of University Avenue functions well and is expected to function well with LOS of A as a 2-lane section. Observations were made at the intersections near Clive Learning Academy. The existing system works well with short periods of delay during drop off and pick up, therefore, the existing geometry is recommended to stay the same. The pedestrian traffic signal in front of Clive Learning Academy on 73<sup>rd</sup> Street should be replaced with a pedestrian hybrid beacon.

The segment including University Avenue and south of University Avenue functions at LOS D or better for intersections with movements having LOS E and F in the existing conditions. The addition of the Northbound left turn lane at 73<sup>rd</sup> Street at I-235 Eastbound Ramp Termini/Center Street highlighted in the safety improvements improves the intersection and

corridor delays, therefore, the northbound left turn lane should be added.

C. Pedestrian / Bicyclist / Transit accommodations

Sidewalk and Trail along 73rd Street are already available north of Buffalo Road. While a pedestrian system is available, they are narrow and should be widened to 5 ft to meet ADA requirements. The sidewalk north of University Avenue on the east side should be widened to a trail to provide an expanded safe route for children from neighborhoods east of 73rd Street to the Clive Learning Academy.

The Trail crossings for 73<sup>rd</sup> Street at University should be reviewed for options to determine if there are alternatives for trail connections in this area.

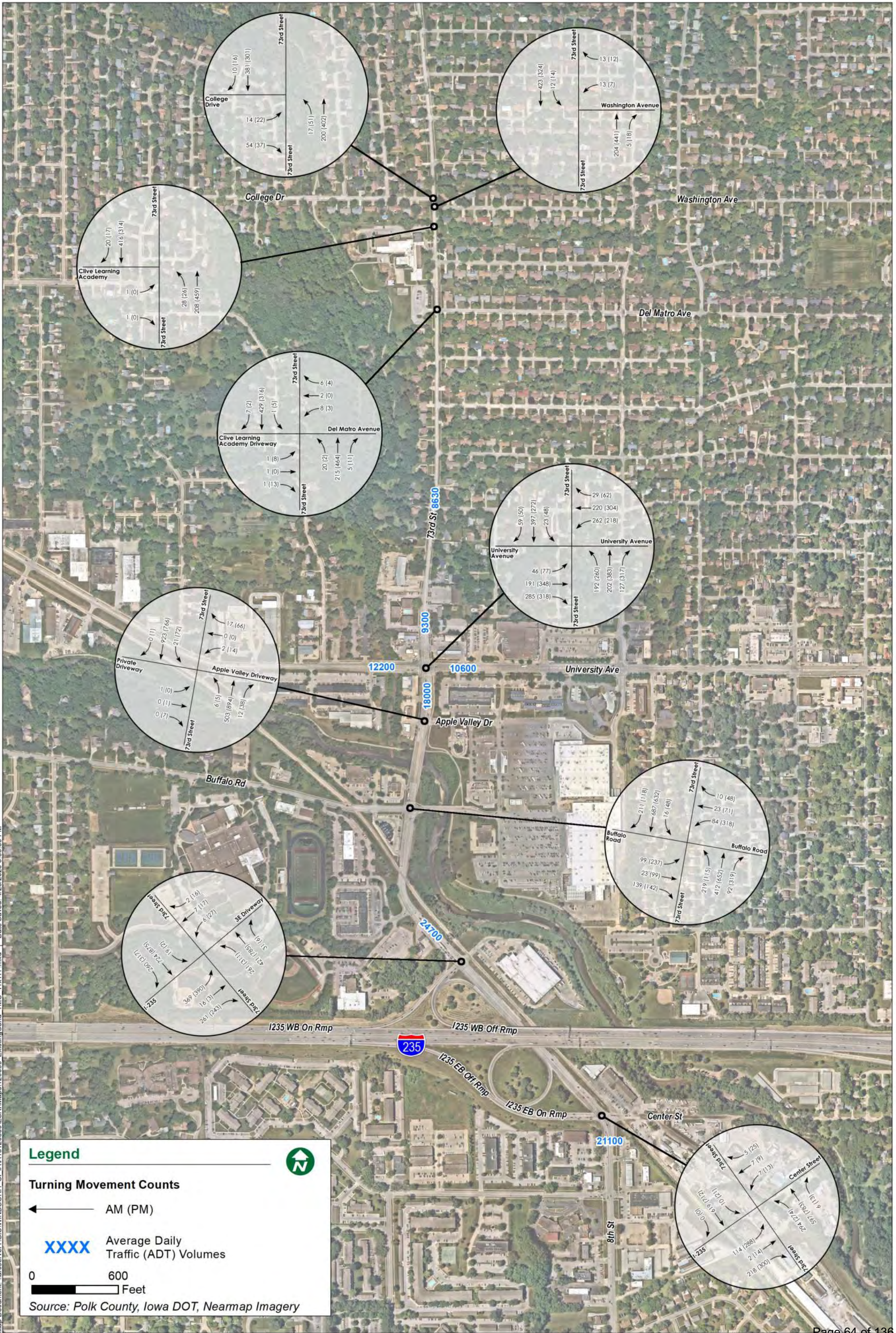
There is a pedestrian signal used for a school crossing next to Clive Learning Academy. This pedestrian signal is needed to provide a crossing for the students that cross 73<sup>rd</sup> Street from the residential area on the east to the school. While the pedestrian signal appears to be effective, if it is replaced during construction a pedestrian hybrid beacon should be installed in its place as it is the appropriate traffic control for this type of crossing and it provides less disruption to the through traffic on 73<sup>rd</sup> Street.

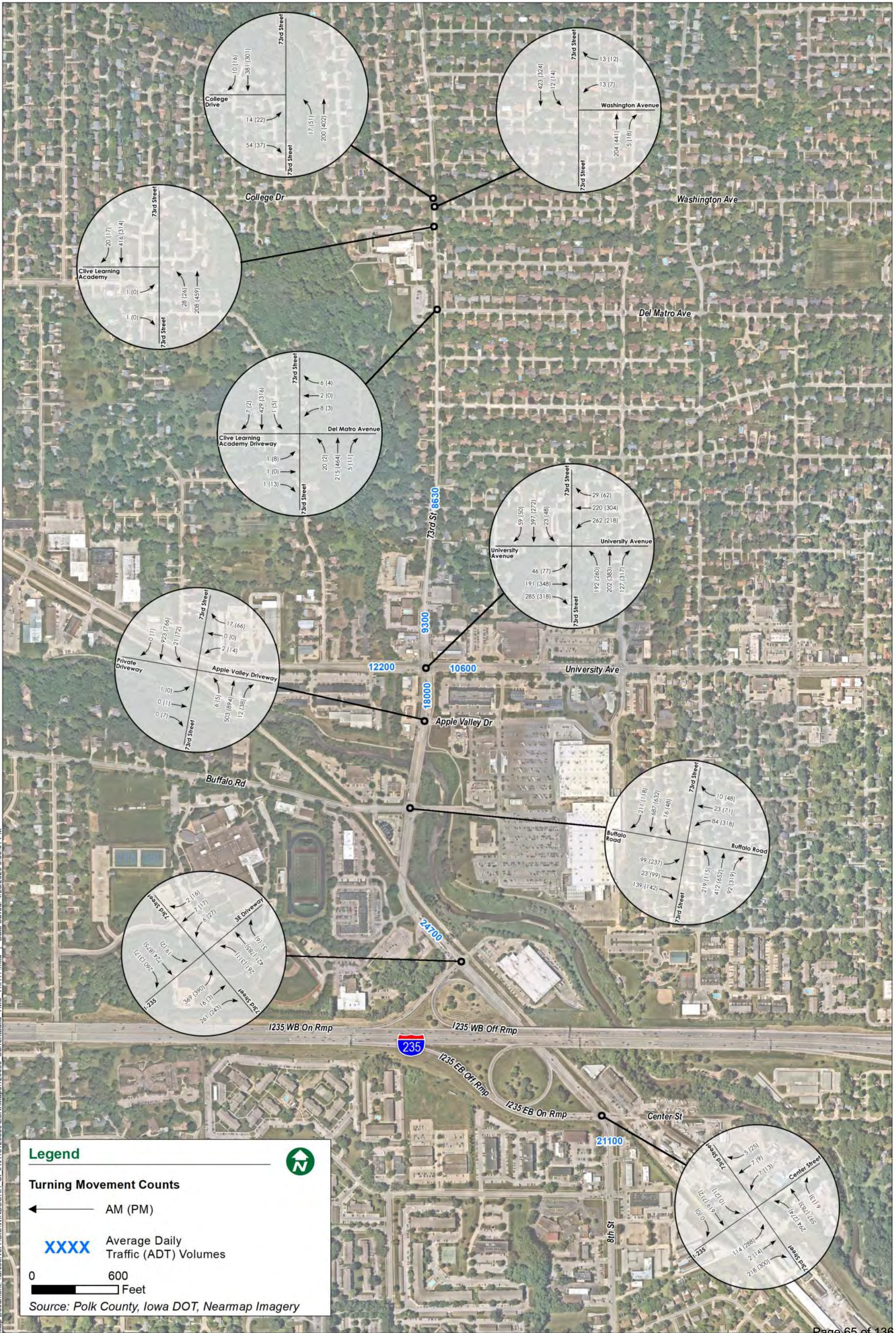
Neither sidewalk nor trail extend south of Buffalo Road. There was a feasibility study completed in 2019 that noted due to constraints of the area it was determined adding the pedestrian facilities is not feasible without roadway modifications to accommodate a sidewalk or trail. However, if roadway modifications could be made to accommodate pedestrian facilities during construction adding these improvements should be further investigated during design.

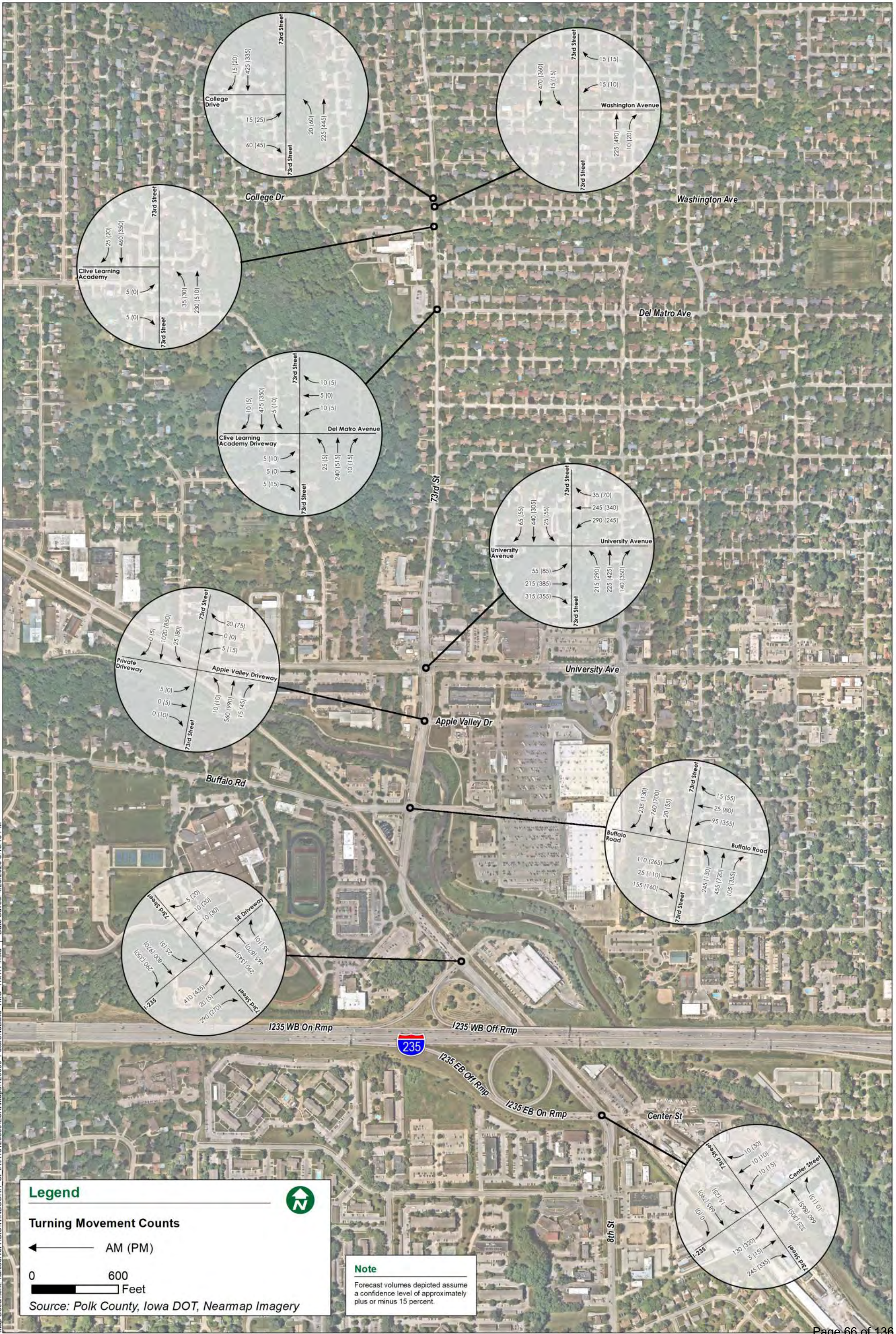
## Appendix A: Peak Hour Count Information

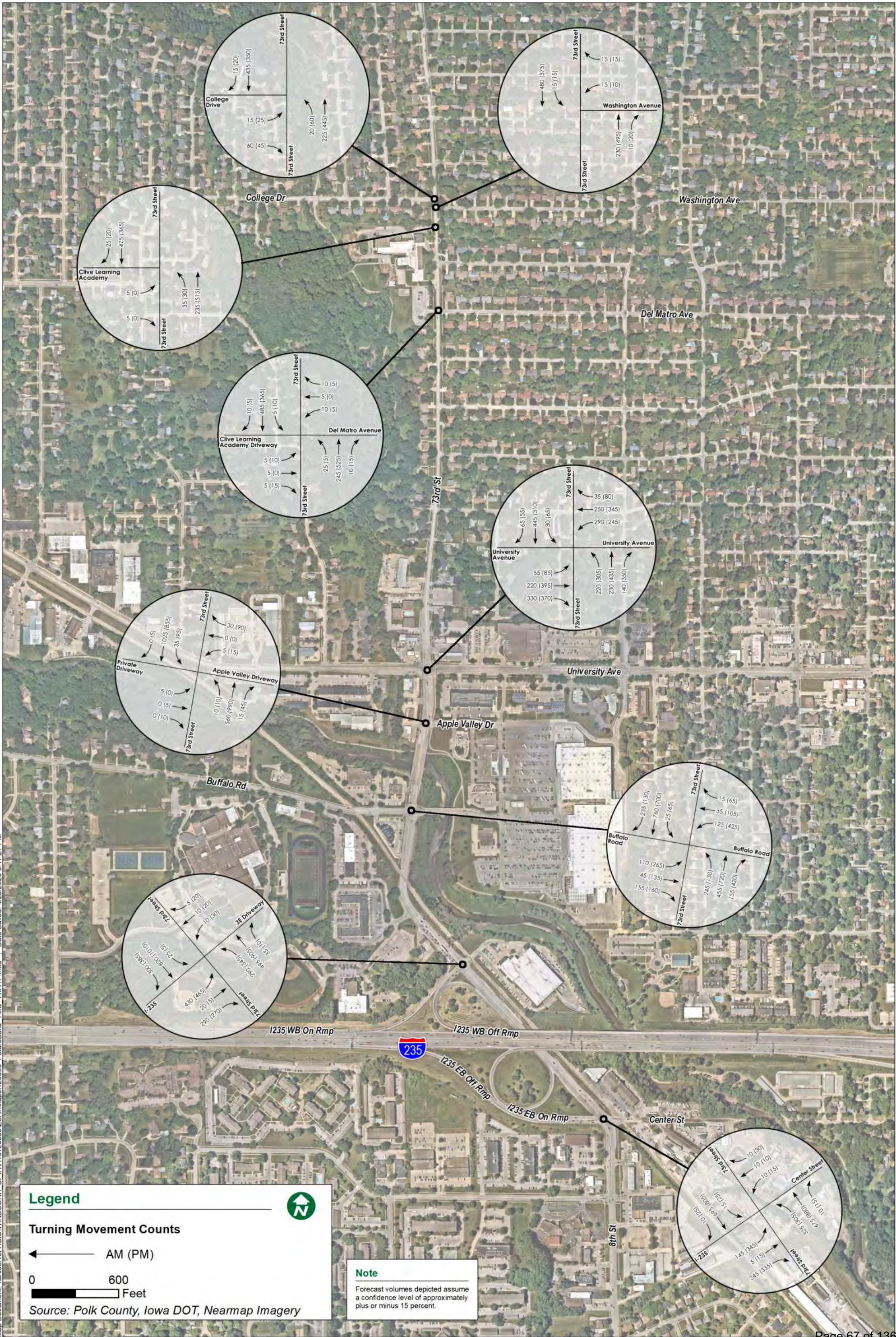


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## Appendix B: Trip Generation

# Traffic Assumptions

## Potential Development

Shopping Center	Based on 1,000 sf		47.9 per 1,000 sf			ITE Code	820	Internal-to-Internal Reduction				Pass-by	New Trips
	Average Rate	Fitted Curve Equation	#	% enter	% exit	entering	exiting		entering	exiting		entering	exiting
AM	0.94	$(T) = 0.50(X) + 151.78$	176	62	38	109	67	0%	109	67	0%	0	0
PM	3.81	$\ln(T) = 0.74\ln(X) + 2.89$	316	48	52	152	164	0%	152	164	0%	0	0
Weekday	37.75	$\ln(T) = 0.68\ln(X) + 5.57$	3645	50	50	1823	1823	0%	1823	1823	0%	0	0

	Pass-by		New Trips	
	entering	exiting	entering	exiting
AM	0	0	109	67
PM	0	0	152	164
Weekday	0	0	1823	1823

Area assumed is the area bounded by the Walmart and Sams Club Parking Lot to the east, Walnut Creek Trail to the south and west, and the drive adjacent to Apple Valley to the north. The area of Burger King and east of B-Bops was excluded.

## Appendix C: LOS Tables

Table 1: Existing Conditions Traffic Operations Analysis - 73rd Street Corridor Study

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																				Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue						
					NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR		WBL					WBT		WBR		Direction	Average Queue (ft)	Max Queue (ft)
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	33	C	106	F	51	D	22	C	15	B	8	A	-		33	C	33	C	9	A	29	C	27	C	7	A	106	F	NBL	NBL/T	450	550
		PM Peak	42	D	172	F	69	E	21	C	24	C	9	A	-		41	D	43	D	23	C	20	C	28	C	9	A	172	F	NBL	NBL/T	500	550
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	12	B	20	C	7	A	4	A	11	B	11	B	6	A	26	C	33	C	1	A	45	D	38	D	8	A	45	D	WBL	EBL/T	150	225
		PM Peak	15	B	22	C	9	A	6	A	16	B	18	B	6	A	28	C	37	D	0	A	32	C	32	C	12	B	37	D	EBT	SBT	150	250
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	14	B	28	C	5	A	3	A	12	B	13	B	13	B	36	D	30	C	11	B	25	C	24	C	6	A	36	D	EBL	SBT/R	125	250
		PM Peak	20	C	32	C	20	C	8	A	27	C	18	B	18	B	37	D	31	C	20	C	23	C	13	B	8	A	37	D	EBL	EBT/R	125	375
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	2	A	12	B	1	A	1	A	4	A	2	A	-		14	B	-		-		15	C	-		5	A	15	C	WBL	WBL/T/R	25	50
		PM Peak	3	A	8	A	3	A	2	A	13	B	1	A	1	A	-		-		6	A	26	D	-		11	B	26	D	WBL	WBL/T/R	50	125
5	73rd St & University Ave Signalized Intersection	AM Peak	23	C	34	C	14	B	4	A	23	C	24	C	18	B	35	D	35	D	14	B	34	C	22	C	6	A	35	D	EBL	WBL	125	275
		PM Peak	22	C	30	C	16	B	8	A	32	C	21	C	13	B	37	D	35	D	11	B	40	D	24	C	10	B	40	D	WBL	EBT	175	375
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	1	A	5	A	2	A	3	A	2	A	1	A	1	A	11	B	4	A	4	A	10	B	9	A	3	A	11	B	EBL	NBL/T/R	25	75
		PM Peak	2	A	6	A	3	A	4	A	3	A	0	A	1	A	7	A	-		4	A	10	B	-		5	A	10	B	WBL	EBL/T/R	25	50
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	1	A	5	A	1	A	-		-		0	A	0	A	12	B	-		9	A	-		-		-		12	B	EBL	NBL/T	25	100
		PM Peak	1	A	4	A	2	A	-		-		0	A	0	A	-		-		-		-		-		-		4	A	NBL	NBL/T	25	125
8	73rd St & Washington Ave Stop Controlled	AM Peak	1	A	-		0	A	0	A	2	A	0	A	-		-		-		-		7	A	-		4	A	7	A	WBL	WBL/R	25	50
		PM Peak	1	A	-		1	A	0	A	2	A	0	A	-		-		-		-		9	A	-		5	A	9	A	WBL	NBT/R	25	100
9	73rd St & College Dr Stop Controlled	AM Peak	1	A	3	A	0	A	-		-		1	A	0	A	8	A	-		6	A	-		-		-		8	A	EBL	EBL/R	50	75
		PM Peak	1	A	2	A	0	A	-		-		1	A	0	A	10	B	-		4	A	-		-		-		10	B	EBL	EBL/R	50	75

1. Delay in seconds per vehicle
2. Maximum delay and LOS on any approach and/or movement
3. Limiting Movement is the highest delay movement.

Table 2: Peak Hour Queues By Movement - Existing Conditions Geometry

Intersection ID	Intersection	Peak Hour	Queue Lengths																																																									
			EBL		EBL/R		EBL/T		EBL/T/R		EBT		EBT/R		EBR		WBL 1		WBL 2		WBL/R		WBL/T/R		WBT		WBT/R		WBR		NBL 1		NBL 2		NBL/T		NBL/T/R		NBT 1		NBT 2		NBT/R		NBR		SBL		SBL/T		SBL/T/R		SBT 1		SBT 2		SBT/R		SBR	
			Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max						
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	-	-	-	-	50	150	-	-	-	-	-	-	50	125	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	450	550	-	-	425	550	-	-	-	-	25	50	25	25	-	-	-	-	25	100	50	125	-	-	-	-
		PM Peak	-	-	-	-	200	400	-	-	-	-	-	-	100	125	-	-	-	-	-	-	50	100	-	-	-	-	-	-	-	-	-	-	500	550	-	-	500	550	-	-	-	-	25	75	25	50	-	-	-	-	25	125	50	125	-	-	-	-
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	100	150	-	-	150	225	-	-	-	-	-	-	25	50	25	50	-	-	-	-	-	-	25	50	-	-	100	225	-	-	-	-	-	-	50	200	-	-	-	-	50	150	-	-	-	-	100	150	75	150	-	-	25	75				
		PM Peak	100	150	-	-	175	225	-	-	-	-	-	-	25	100	25	100	-	-	-	-	-	-	25	100	-	-	125	250	-	-	-	-	-	-	75	175	-	-	100	175	-	-	25	50	-	-	-	-	150	250	125	225	-	-	-	-	25	75
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	75	150	-	-	-	-	-	-	-	-	75	175	-	-	50	125	-	-	-	-	-	-	25	75	-	-	100	200	-	-	-	-	-	-	50	225	50	100	-	-	25	50	25	50	-	-	-	-	75	225	-	-	125	250	-	-		
		PM Peak	125	175	-	-	-	-	-	-	-	-	125	375	-	-	150	200	-	-	-	-	-	-	75	275	-	-	75	150	-	-	-	-	-	-	100	250	150	300	-	-	75	200	50	75	-	-	-	-	100	250	-	-	125	250	-	-		
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	25	50	-	-	-	-	0	25	-	-					
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	50	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	25	100	-	-	25	25	-	-	-	-	-	-					
5	73rd St & University Ave Signalized Intersection	AM Peak	50	125	-	-	-	-	-	-	125	225	-	-	100	175	50	225	125	275	-	-	-	-	100	250	-	-	25	125	50	125	75	150	-	-	-	-	75	175	-	-	-	-	25	75	25	75	-	-	-	-	100	200	-	-	125	250	-	-
		PM Peak	75	225	-	-	-	-	-	-	175	375	-	-	100	325	50	175	125	250	-	-	-	-	150	275	-	-	50	125	75	125	100	150	-	-	-	-	100	250	-	-	-	-	75	200	50	100	-	-	-	-	75	125	-	-	100	175	-	-
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-				
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-					
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-						
8	73rd St & Washington Ave Stop Controlled	AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	100	-	-	-	-	-	-	25	50	-	-	-	-	25	50	-	-	-	-	-	-				
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	25	100	-	-	-	-	25	50	-	-	-	-	-	-				
9	73rd St & College Dr Stop Controlled	AM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-						
		PM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-						

Table 3: Existing Conditions with Mitigation Traffic Operations Analysis - 73rd Street Corridor Study

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																		Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue								
					NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR					WBL		WBT		WBR		Direction	Average Queue (ft)	Max Queue (ft)
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	11	B	25	C	5	A	3	A	20	C	8	A	-		34	C	45	D	10	B	28	C	28	C	6	A	45	D	EBT	NBT	75	300
		PM Peak	17	B	38	D	8	A	3	A	24	C	10	B	-		40	D	47	D	23	C	15	B	22	C	9	A	47	D	EBT	EBL/T	200	400
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	12	B	16	B	6	A	4	A	11	B	10	B	6	A	27	C	26	C	1	A	36	D	45	D	7	A	45	D	WBT	EBL/T	150	250
		PM Peak	16	B	22	C	9	A	5	A	13	B	22	C	7	A	28	C	28	C	0	A	27	C	35	D	12	B	35	D	WBT	SBT	175	325
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	14	B	26	C	5	A	2	A	13	B	12	B	12	B	37	D	31	C	11	B	25	C	23	C	8	A	37	D	EBL	SBT/R	125	250
		PM Peak	20	C	26	C	15	B	8	A	29	C	20	C	20	C	41	D	36	D	22	C	22	C	15	B	9	A	41	D	EBL	EBT/R	150	375
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	2	A	11	B	1	A	1	A	5	A	2	A	-		41	E	-		-		14	B	-		5	A	41	E	EBL	WBL/T/R	25	50
		PM Peak	4	A	7	A	4	A	4	A	15	C	1	A	1	A	-		46	E	7	A	23	C	-		12	B	46	E	EBT	WBL/T/R	50	100
5	73rd St & University Ave Signalized Intersection	AM Peak	22	C	33	C	15	B	4	A	26	C	22	C	17	B	34	C	31	C	13	B	34	C	22	C	6	A	34	C	EBL	WBT	100	250
		PM Peak	22	C	26	C	14	B	9	A	28	C	20	C	12	B	39	D	36	D	12	B	39	D	22	C	9	A	39	D	WBL	EBT	200	375
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	1	A	5	A	2	A	3	A	5	A	1	A	0	A	3	A	5	A	3	A	8	A	7	A	3	A	8	A	WBL	NBL/T/R	25	75
		PM Peak	3	A	8	A	4	A	3	A	4	A	1	A	0	A	8	A	-		4	A	7	A	-		5	A	8	A	EBL	EBL/T/R	25	75
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	1	A	5	A	1	A	-		-		0	A	0	A	6	A	-		4	A	-		-		-		6	A	EBL	NBL/T	25	100
		PM Peak	1	A	5	A	2	A	-		-		0	A	0	A	-		-		-		-		-		-		5	A	NBL	NBL/T	25	100
8	73rd St & Washington Ave Stop Controlled	AM Peak	1	A	-		1	A	0	A	1	A	0	A	-		-		-		-		7	A	-		4	A	7	A	WBL	NBT/R	25	75
		PM Peak	1	A	-		1	A	0	A	3	A	0	A	-		-		-		-		9	A	-		7	A	9	A	WBL	NBT/R	25	100
9	73rd St & College Dr Stop Controlled	AM Peak	1	A	3	A	0	A	-		-		1	A	0	A	7	A	-		6	A	-		-		-		7	A	EBL	EBL/R	50	75
		PM Peak	1	A	2	A	0	A	-		-		1	A	0	A	9	A	-		5	A	-		-		-		9	A	EBL	EBL/R	50	75

1. Delay in seconds per vehicle
2. Maximum delay and LOS on any approach and/or movement
3. Limiting Movement is the highest delay movement.

Table 4: Peak Hour Queues By Movement - Existing Conditions with Mitigation Geometry

Intersection ID	Intersection	Peak Hour	Queue Lengths																																																											
			EBL		EBL/R		EBL/T		EBL/T/R		EBT		EBT/R		EBR		WBL 1		WBL 2		WBL/R		WBL/T/R		WBT		WBT/R		WBR		NBL 1		NBL 2		NBL/T		NBL/T/R		NBT 1		NBT 2		NBT/R		NBR		SBL		SBL/T		SBL/T/R		SBT 1		SBT 2		SBT/R		SBR			
			Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max								
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	-	-	-	-	75	200	-	-	-	-	-	-	50	125	-	-	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	75	300	50	225	-	-	-	-	25	50	-	-	-	-	25	100	50	100	-	-	-	-	
		PM Peak	-	-	-	-	200	400	-	-	-	-	-	-	-	100	125	-	-	-	-	-	-	-	-	-	-	-	-	50	100	-	-	-	-	-	-	-	-	125	350	75	225	-	-	-	-	25	75	-	-	-	-	50	150	75	150	-	-	-	-	
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	100	150	-	-	150	250	-	-	-	-	-	-	25	175	25	50	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	50	125	-	-	50	125	-	-	25	50	-	-	-	-	75	175	75	200	-	-	25	125			
		PM Peak	100	150	-	-	175	250	-	-	-	-	-	-	-	25	150	25	100	-	-	-	-	-	-	-	-	-	25	100	-	-	-	-	-	-	75	200	-	-	100	225	-	-	25	25	-	-	-	-	175	325	175	325	-	-	25	250				
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	75	150	-	-	-	-	-	-	-	-	75	200	-	-	50	125	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	-	-	50	150	50	125	-	-	25	50	25	50	-	-	-	-	75	200	-	-	125	250	-	-				
		PM Peak	150	175	-	-	-	-	-	-	-	-	150	375	-	-	150	200	-	-	-	-	-	-	-	-	-	-	75	325	-	-	-	-	-	-	100	200	150	275	-	-	50	150	50	100	-	-	-	-	100	250	-	-	150	275	-	-				
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	25	50	-	-	-	-	-	-			
		PM Peak	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	50	100	-	-	-	-	25	50	-	-	-	-	-	-	
5	73rd St & University Ave Signalized Intersection	AM Peak	50	125	-	-	-	-	-	-	125	200	-	-	100	200	50	200	125	250	-	-	-	-	-	-	100	250	-	-	25	100	50	125	75	125	-	-	-	-	75	150	-	-	-	-	25	100	25	75	-	-	-	-	100	175	-	-	125	250	-	-
		PM Peak	75	225	-	-	-	-	-	-	200	375	-	-	100	300	50	175	100	200	-	-	-	-	-	-	150	250	-	-	50	125	50	150	100	175	-	-	-	-	100	225	-	-	-	-	75	200	50	100	-	-	-	-	75	150	-	-	100	150	-	-
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-		
		PM Peak	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-				
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8	73rd St & Washington Ave Stop Controlled	AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9	73rd St & College Dr Stop Controlled	AM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		PM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 5: Current Year 3 lane Traffic Operations Analysis - 73rd Street Corridor Study

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																		Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue								
					NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR					WBL		WBT		WBR		Direction	Average Queue (ft)	Max Queue (ft)
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	37	D	131	F	59	E	15	B	16	B	7	A	-		32	C	57	E	10	B	30	C	24	C	6	A	131	F	NBL	NBT	450	550
		PM Peak	44	D	184	F	72	E	25	C	24	C	8	A	-		43	D	47	D	24	C	23	C	25	C	9	A	184	F	NBL	NBT	500	550
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	12	B	19	B	8	A	5	A	17	B	11	B	6	A	27	C	26	C	0	A	38	D	39	D	5	A	39	D	WBT	EBL/T	150	250
		PM Peak	15	B	24	C	10	B	8	A	26	C	17	B	7	A	29	C	23	C	1	A	28	C	29	C	12	B	29	C	EBL	SBT	125	250
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	13	B	22	C	4	A	3	A	14	B	13	B	14	B	35	D	32	C	11	B	26	C	25	C	6	A	35	D	EBL	SBT/R	125	275
		PM Peak	21	C	39	D	19	B	7	A	28	C	19	B	18	B	39	D	33	C	23	C	20	C	15	B	8	A	39	D	NBL	EBT/R	175	350
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	2	A	13	B	1	A	1	A	5	A	2	A	-		25	D	-		-		20	C	-		5	A	25	D	EBL	WBL/T/R	25	50
		PM Peak	3	A	5	A	3	A	3	A	12	B	1	A	1	A	-		21	C	8	A	30	D	-		12	B	30	D	WBL	WBL/T/R	50	125
5	73rd St & University Ave Signalized Intersection	AM Peak	23	C	35	D	15	B	3	A	26	C	22	C	17	B	34	C	32	C	13	B	35	D	20	C	6	A	35	D	NBL	SBT/R	125	250
		PM Peak	23	C	31	C	17	B	9	A	28	C	22	C	13	B	38	D	34	C	11	B	38	D	23	C	9	A	38	D	WBL	EBT	200	375
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	1	A	5	A	2	A	3	A	5	A	1	A	0	A	8	A	9	A	3	A	8	A	9	A	5	A	9	A	EBT	NBL	25	50
		PM Peak	2	A	7	A	4	A	4	A	4	A	0	A	0	A	8	A	-		4	A	7	A	-		6	A	8	A	EBL	WBL/T/R	25	50
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	1	A	4	A	1	A	-		-		0	A	0	A	8	A	-		9	A	-		-		-		9	A	EBR	NBL	25	50
		PM Peak	1	A	4	A	2	A	-		-		0	A	0	A	-		-		-		-		-		-		4	A	NBL	NBT	25	100
8	73rd St & Washington Ave Stop Controlled	AM Peak	1	A	-		0	A	0	A	2	A	0	A	-		-		-		-		8	A	-		4	A	8	A	WBL	SBT	25	75
		PM Peak	1	A	-		1	A	0	A	3	A	0	A	-		-		-		-		10	B	-		8	A	10	B	WBL	NBT/R	25	100
9	73rd St & College Dr Stop Controlled	AM Peak	1	A	3	A	0	A	-		-		1	A	0	A	9	A	-		6	A	-		-		-		9	A	EBL	EBL/R	50	100
		PM Peak	1	A	2	A	0	A	-		-		1	A	0	A	10	B	-		6	A	-		-		-		10	B	EBL	EBL/R	50	100

1. Delay in seconds per vehicle
2. Maximum delay and LOS on any approach and/or movement
3. Limiting Movement is the highest delay movement.

Table 6: Peak Hour Queues By Movement - Current Year 3 lane Geometry

Intersection ID	Intersection	Peak Hour	Queue Lengths																																																					
			EBL		EBL/R		EBL/T		EBL/T/R		EBT		EBT/R		EBR		WBL 1		WBL 2		WBL/R		WBL/T/R		WBT		WBT/R		WBR		NBL 1		NBL 2		NBL/T		NBT 1		NBT 2		NBT/R		NBR		SBL		SBT 1		SBT 2		SBT/R		SBR			
			Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max								
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	-	-	-	-	75	175	-	-	-	-	-	-	50	125	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	-	-	-	475	550	450	550	-	-	-	-	25	25	25	100	25	100	-	-	-	-	
		PM Peak	-	-	-	-	200	400	-	-	-	-	-	-	100	125	-	-	-	-	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	525	550	500	550	-	-	-	-	25	100	25	50	25	100	50	125	-	-	-	-
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	100	150	-	-	150	250	-	-	-	-	-	-	0	50	25	50	-	-	-	-	-	-	-	25	75	-	-	100	225	-	-	-	-	50	125	-	-	50	125	-	-	25	50	100	175	75	175	-	-	25	75			
		PM Peak	100	150	-	-	175	250	-	-	-	-	-	-	25	175	25	75	-	-	-	-	-	-	25	100	-	-	125	250	-	-	-	-	75	225	-	-	100	200	-	-	25	25	125	250	125	250	-	-	25	200				
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	75	175	-	-	-	-	-	-	-	-	75	200	-	-	50	125	-	-	-	-	-	-	25	75	-	-	100	200	-	-	-	-	25	75	50	100	-	-	25	50	25	50	100	250	-	-	125	275	-	-				
		PM Peak	150	175	-	-	-	-	-	-	-	-	175	350	-	-	150	200	-	-	-	-	-	-	75	300	-	-	75	175	-	-	-	-	75	225	125	275	-	-	50	125	50	100	100	200	-	-	150	250	-	-				
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	25	50	-	-	25	50	-	-	-	-	-	-				
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	50	125	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	25	25	-	-	25	100	-	-	-	-	-	-	-					
5	73rd St & University Ave Signalized Intersection	AM Peak	50	100	-	-	-	-	-	-	125	225	-	-	100	175	50	175	125	225	-	-	-	-	100	175	-	-	25	100	50	125	75	125	-	-	75	175	-	-	-	-	25	75	25	75	100	200	-	-	125	250	-	-		
		PM Peak	75	175	-	-	-	-	-	-	200	375	-	-	100	275	50	175	125	225	-	-	-	-	150	275	-	-	50	125	50	125	75	150	-	-	125	250	-	-	-	-	100	200	50	75	75	150	-	-	100	175	-	-		
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-				
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-					
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-			
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	25	100	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-				
8	73rd St & Washington Ave Stop Controlled	AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	25	25	25	75	-	-	-	-	-	-
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	100	-	-	25	25	25	50	-	-	-	-	-	-		
9	73rd St & College Dr Stop Controlled	AM Peak	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	
		PM Peak	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	-	-	

Table 7: Current Year 3 Lane with Mitigation Traffic Operations Analysis - 73rd Street Corridor Study

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																		Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue								
					NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR					WBL		WBT		WBR		Direction	Average Queue (ft)	Max Queue (ft)
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	11	B	20	C	5	A	3	A	19	B	10	B	-		32	C	28	C	10	B	23	C	29	C	8	A	32	C	EBL	NBT	75	250
		PM Peak	16	B	25	C	7	A	3	A	24	C	10	B	-		44	D	41	D	24	C	23	C	22	C	9	A	44	D	EBL	EBL/T	225	400
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	12	B	26	C	8	A	4	A	11	B	9	A	6	A	26	C	27	C	1	A	43	D	44	D	7	A	44	D	WBT	EBL/T	150	250
		PM Peak	16	B	37	D	10	B	7	A	23	C	17	B	7	A	28	C	39	D	0	A	29	C	25	C	13	B	39	D	EBT	NBT	100	325
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	15	B	28	C	7	A	3	A	13	B	14	B	15	B	34	C	31	C	12	B	25	C	22	C	5	A	34	C	EBL	SBT/R	150	300
		PM Peak	22	C	43	D	20	C	7	A	33	C	22	C	21	C	38	D	32	C	23	C	19	B	14	B	8	A	43	D	NBL	EBT/R	150	350
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	2	A	8	A	1	A	1	A	4	A	1	A	-		23	C	-		-		17	C	-		4	A	23	C	EBL	WBL/T/R	25	50
		PM Peak	4	A	6	A	4	A	3	A	14	B	1	A	2	A	-		48	E	10	B	30	D	-		13	B	48	E	EBT	WBL/T/R	50	100
5	73rd St & University Ave Signalized Intersection	AM Peak	21	C	31	C	13	B	3	A	24	C	22	C	16	B	20	C	31	C	12	B	38	D	21	C	5	A	38	D	WBL	WBL	125	250
		PM Peak	23	C	29	C	18	B	10	B	33	C	20	C	11	B	36	D	36	D	12	B	39	D	24	C	10	B	39	D	WBL	EBT	200	450
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	2	A	5	A	2	A	3	A	2	A	1	A	0	A	8	A	4	A	3	A	8	A	7	A	5	A	8	A	WBL	WBL/T/R	25	50
		PM Peak	3	A	6	A	4	A	3	A	5	A	0	A	0	A	12	B	-		4	A	6	A	-		4	A	12	B	EBL	EBL/T/R	25	75
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	1	A	4	A	1	A	-		-		0	A	0	A	-		-		3	A	-		-		-		4	A	NBL	NBL	25	50
		PM Peak	1	A	4	A	2	A	-		-		0	A	0	A	-		-		-		-		-		-		4	A	NBL	NBT	25	75
8	73rd St & Washington Ave Stop Controlled	AM Peak	1	A	-		0	A	0	A	2	A	0	A	-		-		-		-		9	A	-		4	A	9	A	WBL	NBT/R	25	75
		PM Peak	1	A	-		1	A	0	A	3	A	0	A	-		-		-		-		11	B	-		7	A	11	B	WBL	NBT/R	25	100
9	73rd St & College Dr Stop Controlled	AM Peak	1	A	3	A	0	A	-		-		1	A	0	A	9	A	-		6	A	-		-		-		9	A	EBL	EBL/R	50	100
		PM Peak	1	A	2	A	0	A	-		-		1	A	0	A	11	B	-		5	A	-		-		-		11	B	EBL	EBL/R	50	75

1. Delay in seconds per vehicle
2. Maximum delay and LOS on any approach and/or movement
3. Limiting Movement is the highest delay movement.

Table 8: Peak Hour Queues By Movement - Current Year 3 Lane with Mitigation Geometry

Intersection ID	Intersection	Peak Hour	Queue Lengths																																																		
			EBL		EBL/R		EBL/T		EBL/T/R		EBT		EBT/R		EBR		WBL 1		WBL 2		WBL/R		WBL/T/R		WBT		WBT/R		WBR		NBL 1		NBL 2		NBT 1		NBT 2		NBT/R		NBR		SBL		SBT 1		SBT 2		SBT/R		SBR		
			Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max					
1	73rd St & I-235 EB Ramps/Center St <i>Signalized Intersection</i>	AM Peak	-	-	-	-	75	150	-	-	-	-	-	-	50	125	-	-	-	-	-	-	25	75	-	-	-	-	-	-	100	225	-	-	75	250	50	150	-	-	-	-	25	25	50	100	50	125	-	-	-	-	
		PM Peak	-	-	-	-	225	400	-	-	-	-	-	-	125	125	-	-	-	-	-	-	25	100	-	-	-	-	-	-	125	225	-	-	100	275	75	225	-	-	-	-	25	50	50	125	75	125	-	-	-	-	
2	73rd St & I-235 WB Ramps/Private Driveway <i>Signalized Intersection</i>	AM Peak	100	150	-	-	150	250	-	-	-	-	-	-	25	50	25	75	-	-	-	-	-	-	-	-	-	25	50	-	-	125	225	-	-	75	150	-	-	50	125	-	-	25	50	75	150	75	150	-	-	25	50
		PM Peak	100	150	-	-	175	225	-	-	-	-	-	-	25	100	25	75	-	-	-	-	-	-	-	-	25	100	-	-	150	250	-	-	100	325	-	-	125	250	-	-	25	25	125	225	125	225	-	-	25	175	
3	73rd St & Buffalo Rd <i>Signalized Intersection</i>	AM Peak	75	150	-	-	-	-	-	-	-	-	75	150	-	-	50	125	-	-	-	-	-	-	-	-	-	25	75	-	-	100	200	-	-	50	175	50	150	-	-	25	50	25	50	100	225	-	-	150	300	-	-
		PM Peak	150	175	-	-	-	-	-	-	-	-	150	350	-	-	125	200	-	-	-	-	-	-	-	-	-	75	175	-	-	75	175	-	-	125	250	175	325	-	-	75	250	50	125	125	250	-	-	150	300	-	-
4	73rd St & Private Drive/Apple Valley <i>Stop Controlled</i>	AM Peak	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	50	100	-	-	-	-	-	-	25	25	-	-	-	-	-	-	25	25	-	-	50	75	-	-	-	-	-	-	-	-		
5	73rd St & University Ave <i>Signalized Intersection</i>	AM Peak	50	100	-	-	-	-	-	-	100	225	-	-	75	175	75	175	125	250	-	-	-	-	100	225	-	-	25	125	50	125	75	150	75	175	-	-	-	-	25	100	25	75	100	175	-	-	125	200	-	-	
		PM Peak	75	225	-	-	-	-	-	-	200	450	-	-	100	275	50	150	100	250	-	-	-	-	150	350	-	-	50	125	75	150	75	150	125	250	-	-	-	-	100	225	50	100	75	150	-	-	100	175	-	-	
6	73rd St & Del Matro Ave <i>Stop Controlled</i>	AM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		PM Peak	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-			
7	73rd St & Clive Learning Academy <i>Stop Controlled</i>	AM Peak	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	0	25	-	-	-	-	-	-	-	-	-	-	0	25	-	-					
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	25	75	-	-	-	-	-	-	-	-	-	25	50	-	-						
8	73rd St & Washington Ave <i>Stop Controlled</i>	AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	25	50	-	-	-	-	-	-			
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
9	73rd St & College Dr <i>Stop Controlled</i>	AM Peak	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	25	50	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-	
		PM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	25	50	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-

Table 9: Future Year No Build Traffic Operations Analysis - 73rd Street Corridor Study

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																		Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue								
					NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR					WBL		WBT		WBR		Direction	Average Queue (ft)	Max Queue (ft)
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	36	D	122	F	57	E	21	C	15	B	8	A	-		32	C	22	C	10	B	26	C	30	C	6	A	122	F	NBL	NBT	425	550
		PM Peak	45	D	191	F	76	E	25	C	20	C	9	A	-		40	D	40	D	22	C	21	C	26	C	8	A	191	F	NBL	NBL/T	525	550
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	12	B	18	B	8	A	4	A	10	B	11	B	6	A	27	C	27	C	1	A	36	D	38	D	11	B	38	D	WBT	EBL/T	150	225
		PM Peak	17	B	23	C	12	B	7	A	15	B	17	B	7	A	34	C	34	C	1	A	33	C	34	C	11	B	34	C	EBT	EBL/T	175	250
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	14	B	28	C	5	A	3	A	15	B	12	B	12	B	35	D	33	C	12	B	26	C	24	C	6	A	35	D	EBL	SBT/R	125	250
		PM Peak	19	B	35	D	14	B	6	A	33	C	18	B	16	B	38	D	33	C	20	C	23	C	15	B	9	A	38	D	EBL	EBT/R	150	325
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	2	A	8	A	1	A	1	A	5	A	2	A	-		35	E	-		-		15	C	-		4	A	35	E	EBL	WBL/T/R	25	50
		PM Peak	3	A	9	A	3	A	2	A	13	B	1	A	1	A	-		12	B	7	A	33	D	-		15	C	33	D	WBL	WBL/T/R	50	125
5	73rd St & University Ave Signalized Intersection	AM Peak	23	C	33	C	15	B	4	A	25	C	23	C	16	B	36	D	33	C	13	B	35	D	22	C	6	A	36	D	EBL	WBL	125	250
		PM Peak	24	C	28	C	19	B	8	A	32	C	25	C	15	B	40	D	39	D	13	B	41	D	26	C	11	B	41	D	WBL	EBT	200	550
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	2	A	5	A	2	A	3	A	2	A	1	A	0	A	11	B	-		3	A	8	A	8	A	5	A	11	B	EBL	NBL/T/R	25	75
		PM Peak	2	A	6	A	3	A	5	A	4	A	1	A	0	A	11	B	-		4	A	10	B	-		5	A	11	B	EBL	EBL/T/R	25	50
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	1	A	4	A	1	A	-		-		0	A	0	A	14	B	-		5	A	-		-		-		14	B	EBL	NBL/T	25	125
		PM Peak	1	A	4	A	2	A	-		-		0	A	0	A	-		-		-		-		-		-		4	A	NBL	NBL/T	25	100
8	73rd St & Washington Ave Stop Controlled	AM Peak	1	A	-		0	A	0	A	1	A	0	A	-		-		-		-		8	A	-		4	A	8	A	WBL	NBT/R	25	50
		PM Peak	1	A	-		1	A	0	A	2	A	0	A	-		-		-		-		9	A	-		6	A	9	A	WBL	NBT/R	25	100
9	73rd St & College Dr Stop Controlled	AM Peak	1	A	2	A	0	A	-		-		1	A	0	A	7	A	-		5	A	-		-		-		7	A	EBL	EBL/R	50	75
		PM Peak	1	A	2	A	0	A	-		-		1	A	0	A	10	B	-		6	A	-		-		-		10	B	EBL	EBL/R	50	75

1. Delay in seconds per vehicle
2. Maximum delay and LOS on any approach and/or movement
3. Limiting Movement is the highest delay movement.

Table 10: Peak Hour Queues By Movement - Future Year No Build Geometry

Intersection ID	Intersection	Peak Hour	Queue Lengths																																																									
			EBL		EBL/R		EBL/T		EBL/T/R		EBT		EBT/R		EBR		WBL 1		WBL 2		WBL/R		WBL/T/R		WBT		WBT/R		WBR		NBL 1		NBL 2		NBL/T		NBL/T/R		NBT 1		NBT 2		NBT/R		NBR		SBL		SBL/T		SBL/T/R		SBT 1		SBT 2		SBT/R		SBR	
			Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max						
1	73rd St & I-235 EB Ramps/Center St <i>Signalized Intersection</i>	AM Peak	-	-	-	-	50	150	-	-	-	-	-	-	50	125	-	-	-	-	-	-	25	100	-	-	-	-	-	-	-	-	-	-	450	550	-	-	425	550	-	-	-	-	25	75	25	25	-	-	-	-	25	100	50	125	-	-	-	-
		PM Peak	-	-	-	-	225	400	-	-	-	-	-	-	125	125	-	-	-	-	-	-	50	100	-	-	-	-	-	-	-	-	-	525	550	-	-	525	550	-	-	-	-	25	100	25	50	-	-	-	-	50	125	50	125	-	-	-	-	
2	73rd St & I-235 WB Ramps/Private Driveway <i>Signalized Intersection</i>	AM Peak	100	150	-	-	150	225	-	-	-	-	-	-	25	150	25	50	-	-	-	-	-	-	25	75	-	-	100	200	-	-	-	-	50	125	-	-	50	125	-	-	50	125	-	-	25	50	-	-	-	-	100	200	75	175	-	-	25	100
		PM Peak	100	150	-	-	175	250	-	-	-	-	-	-	25	175	25	100	-	-	-	-	-	-	50	125	-	-	125	225	-	-	-	-	75	150	-	-	125	200	-	-	0	25	-	-	-	-	150	225	150	225	-	-	25	150				
3	73rd St & Buffalo Rd <i>Signalized Intersection</i>	AM Peak	75	175	-	-	175	250	-	-	-	-	-	-	-	-	50	125	-	-	-	-	-	-	25	75	-	-	125	225	-	-	-	-	50	200	50	200	-	-	25	50	25	50	-	-	-	-	100	200	-	-	125	250	-	-				
		PM Peak	150	175	-	-	-	-	-	-	-	-	-	-	150	200	-	-	150	200	-	-	-	-	75	225	-	-	75	175	-	-	-	-	75	150	100	225	-	-	50	125	50	100	-	-	-	-	100	175	-	-	125	250	-	-				
4	73rd St & Private Drive/Apple Valley <i>Stop Controlled</i>	AM Peak	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	0	25	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-				
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	50	125	-	-	-	-	50	100	-	-	-	-	-	-	-	-	25	75	-	-	50	100	-	-	-	-	25	50	-	-	-	-	-	-				
5	73rd St & University Ave <i>Signalized Intersection</i>	AM Peak	50	125	-	-	-	-	-	-	125	225	-	-	100	175	75	175	125	250	-	-	-	-	100	250	-	-	25	100	50	125	75	150	-	-	-	-	75	150	-	-	-	-	25	100	25	75	-	-	-	-	100	225	-	-	125	225	-	-
		PM Peak	75	225	-	-	-	-	-	-	200	550	-	-	100	325	50	175	125	225	-	-	-	-	150	350	-	-	50	125	50	125	75	150	-	-	-	-	125	300	-	-	-	-	75	225	50	100	-	-	-	-	75	150	-	-	100	175	-	-
6	73rd St & Del Matro Ave <i>Stop Controlled</i>	AM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	0	25	-	-	-	-	-	-	-	-	-	-	-			
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	0	25	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-			
7	73rd St & Clive Learning Academy <i>Stop Controlled</i>	AM Peak	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	125	-	-	-	-	0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-					
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-						
8	73rd St & Washington Ave <i>Stop Controlled</i>	AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	25	50	-	-	-	-	-	-					
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	100	-	-	-	-	25	50	-	-	-	-	-	-		
9	73rd St & College Dr <i>Stop Controlled</i>	AM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-					
		PM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-						

Table 11: Future Year No Build with Mitigation Traffic Operations Analysis - 73rd Street Corridor Study

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																		Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue								
					NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR					WBL		WBT		WBR		Direction	Average Queue (ft)	Max Queue (ft)
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	11	B	22	C	5	A	3	A	18	B	8	A	-		32	C	40	D	9	A	27	C	25	C	9	A	40	D	EBT	NBL	125	225
		PM Peak	16	B	29	C	9	A	3	A	23	C	12	B	-		36	D	42	D	19	B	25	C	31	C	11	B	42	D	EBT	EBL/T	200	400
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	12	B	17	B	7	A	4	A	10	B	11	B	6	A	26	C	30	C	1	A	35	D	47	D	14	B	47	D	WBT	EBL/T	150	250
		PM Peak	16	B	34	C	9	A	9	A	27	C	16	B	7	A	32	C	41	D	1	A	35	D	35	D	14	B	41	D	EBT	NBT	100	275
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	14	B	26	C	5	A	2	A	15	B	12	B	14	B	35	D	34	C	12	B	27	C	22	C	7	A	35	D	EBL	SBT/R	125	275
		PM Peak	22	C	47	D	19	B	7	A	37	D	20	C	19	B	37	D	33	C	20	C	23	C	16	B	9	A	47	D	NBL	EBT/R	150	325
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	2	A	10	B	1	A	1	A	5	A	2	A	-		23	C	-		-		14	B	-		4	A	23	C	EBL	SBL	25	50
		PM Peak	4	A	6	A	4	A	3	A	15	C	1	A	1	A	-		47	E	7	A	30	D	-		13	B	47	E	EBT	WBL/T/R	50	125
5	73rd St & University Ave Signalized Intersection	AM Peak	23	C	34	C	16	B	3	A	23	C	23	C	16	B	34	C	32	C	14	B	33	C	22	C	6	A	34	C	EBL	SBT/R	125	250
		PM Peak	23	C	24	C	16	B	9	A	36	D	25	C	16	B	41	D	38	D	12	B	40	D	24	C	10	B	41	D	EBL	EBT	200	400
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	2	A	6	A	3	A	2	A	1	A	1	A	1	A	8	A	14	B	3	A	6	A	10	B	4	A	14	B	EBT	NBL/T/R	25	125
		PM Peak	3	A	11	B	4	A	3	A	4	A	1	A	0	A	9	A	-		4	A	7	A	-		5	A	11	B	NBL	SBL/T/R	25	50
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	1	A	4	A	1	A	-		-		0	A	0	A	7	A	-		1	A	-		-		-		7	A	EBL	NBL/T	25	125
		PM Peak	2	A	4	A	2	A	-		-		0	A	0	A	-		-		-		-		-		-		4	A	NBL	NBL/T	25	150
8	73rd St & Washington Ave Stop Controlled	AM Peak	1	A	-		1	A	0	A	1	A	0	A	-		-		-		-		7	A	-		4	A	7	A	WBL	NBT/R	25	75
		PM Peak	1	A	-		1	A	0	A	2	A	0	A	-		-		-		-		11	B	-		9	A	11	B	WBL	NBT/R	25	100
9	73rd St & College Dr Stop Controlled	AM Peak	1	A	2	A	0	A	-		-		1	A	0	A	10	B	-		7	A	-		-		-		10	B	EBL	EBL/R	50	75
		PM Peak	1	A	2	A	0	A	-		-		1	A	0	A	11	B	-		6	A	-		-		-		11	B	EBL	EBL/R	50	75

1. Delay in seconds per vehicle
2. Maximum delay and LOS on any approach and/or movement
3. Limiting Movement is the highest delay movement.

Table 12: Peak Hour Queues By Movement - Future Year No Build with Mitigation Geometry

Intersection ID	Intersection	Peak Hour	Queue Lengths																																																																									
			EBL		EBL/R		EBL/T		EBL/T/R		EBT		EBT/R		EBR		WBL 1		WBL 2		WBL/R		WBL/T/R		WBT		WBT/R		WBR		NBL 1		NBL 2		NBL/T		NBL/T/R		NBT 1		NBT 2		NBT/R		NBR		SBL		SBL/T		SBL/T/R		SBT 1		SBT 2		SBT/R		SBR																	
			Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max																				
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	-	-	-	-	75	200	-	-	-	-	-	-	50	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	200	50	150	-	-	-	-	25	50	-	-	-	-	25	100	50	100	-	-	-	-																	
		PM Peak	-	-	-	-	200	400	-	-	-	-	-	-	-	125	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125	250	100	250	-	-	-	-	25	25	-	-	-	-	50	125	75	125	-	-	-	-																		
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	100	150	-	-	150	250	-	-	-	-	-	-	25	150	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	175	-	-	50	175	-	-	25	50	-	-	-	-	75	175	75	175	-	-	25	50																		
		PM Peak	100	150	-	-	175	225	-	-	-	-	-	-	-	25	150	25	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	125	-	-	100	275	-	-	100	200	-	-	25	50	-	-	-	-	125	250	125	250	-	-	25	250															
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	75	150	-	-	-	-	-	-	-	-	-	75	175	-	50	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	150	50	100	-	-	25	50	-	-	-	-	100	225	-	-	125	275	-	-																					
		PM Peak	150	175	-	-	-	-	-	-	-	-	-	150	325	-	150	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125	275	175	300	-	-	50	125	50	100	-	-	-	-	100	250	-	-	150	300	-	-																				
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																	
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	-																		
5	73rd St & University Ave Signalized Intersection	AM Peak	50	125	-	-	-	-	-	-	125	225	-	-	100	225	75	200	125	225	-	-	-	-	-	-	100	200	-	-	25	125	50	100	75	125	-	-	-	-	75	175	-	-	-	-	25	100	25	75	-	-	-	-	100	200	-	-	125	250	-	-														
		PM Peak	75	225	-	-	-	-	-	-	200	400	-	-	100	325	50	150	125	250	-	-	-	-	-	-	150	325	-	-	50	125	75	150	100	150	-	-	-	-	125	275	-	-	-	-	100	225	50	100	-	-	-	-	75	150	-	-	100	175	-	-														
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																
		PM Peak	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-															
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
8	73rd St & Washington Ave Stop Controlled	AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-															
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
9	73rd St & College Dr Stop Controlled	AM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
		PM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 13: Future Year Build Traffic Operations Analysis - 73rd Street Corridor Study

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																		Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue								
					NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR					WBL		WBT		WBR		Direction	Average Queue (ft)	Max Queue (ft)
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	41	D	176	F	74	E	12	B	13	B	8	A	-	31	C	34	C	11	B	29	C	30	C	8	A	176	F	NBL	NBL/T	500	550	
		PM Peak	48	D	249	F	92	F	25	C	21	C	9	A	-	48	D	51	D	34	C	20	C	31	C	9	A	249	F	NBL	NBL/T	525	550	
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	14	B	20	C	10	B	6	A	16	B	13	B	7	A	26	C	27	C	1	A	41	D	44	D	7	A	44	D	WBT	EBL/T	150	250
		PM Peak	20	C	26	C	15	B	14	B	19	B	21	C	8	A	36	D	44	D	1	A	33	C	41	D	16	B	44	D	EBT	SBT	175	325
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	16	B	26	C	5	A	3	A	14	B	17	B	21	C	35	D	34	C	14	B	26	C	21	C	9	A	35	D	EBL	SBT/R	175	375
		PM Peak	35	D	48	D	28	C	11	B	37	D	35	D	37	D	71	E	63	E	51	D	31	C	17	B	11	B	71	E	EBL	SBT/R	225	450
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	2	A	9	A	1	A	1	A	5	A	2	A	-	18	C	-	-	-	-	17	C	-	-	5	A	18	C	EBL	WBL/T/R	25	75	
		PM Peak	4	A	7	A	4	A	3	A	14	B	2	A	1	A	-	18	C	8	A	34	D	-	-	14	B	34	D	WBL	WBL/T/R	75	150	
5	73rd St & University Ave Signalized Intersection	AM Peak	24	C	33	C	17	B	4	A	24	C	26	C	20	C	33	C	31	C	16	B	36	D	22	C	6	A	36	D	WBL	SBT/R	150	250
		PM Peak	25	C	25	C	17	B	9	A	39	D	26	C	18	B	47	D	39	D	17	B	43	D	27	C	11	B	47	D	EBL	EBT	225	500
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	2	A	5	A	2	A	3	A	-	-	1	A	0	A	10	B	10	B	3	A	8	A	5	A	4	A	10	B	EBT	WBL/T/R	25	50
		PM Peak	2	A	6	A	4	A	4	A	2	A	1	A	0	A	8	A	-	-	4	A	8	A	-	-	5	A	8	A	WBL	EBL/T/R	25	50
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	1	A	5	A	1	A	-	-	-	-	0	A	0	A	6	A	-	-	4	A	-	-	-	-	-	6	A	EBL	NBL	25	75	
		PM Peak	1	A	4	A	2	A	-	-	-	-	0	A	0	A	-	-	-	-	-	-	-	-	-	-	-	4	A	NBL	NBT	25	100	
8	73rd St & Washington Ave Stop Controlled	AM Peak	1	A	-	-	0	A	0	A	2	A	0	A	-	-	-	-	-	-	-	10	B	-	-	4	A	10	B	WBL	WBL/R	25	75	
		PM Peak	1	A	-	-	1	A	0	A	2	A	0	A	-	-	-	-	-	-	-	12	B	-	-	7	A	12	B	WBL	NBT/R	25	100	
9	73rd St & College Dr Stop Controlled	AM Peak	1	A	3	A	0	A	-	-	-	-	1	A	0	A	10	B	-	8	A	-	-	-	-	-	10	B	EBL	EBL/R	50	100		
		PM Peak	1	A	2	A	0	A	-	-	-	-	1	A	0	A	12	B	-	6	A	-	-	-	-	-	12	B	EBL	EBL/R	50	75		

1. Delay in seconds per vehicle
2. Maximum delay and LOS on any approach and/or movement
3. Limiting Movement is the highest delay movement.

Table 14: Peak Hour Queues By Movement - Future Year Build Geometry

Intersection ID	Intersection	Peak Hour	Queue Lengths																																																					
			EBL		EBL/R		EBL/T		EBL/T/R		EBT		EBT/R		EBR		WBL 1		WBL 2		WBL/R		WBL/T/R		WBT		WBT/R		WBR		NBL 1		NBL 2		NBL/T		NBT 1		NBT 2		NBT/R		NBR		SBL		SBT 1		SBT 2		SBT/R		SBR			
			Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max								
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	-	-	-	-	75	200	-	-	-	-	-	-	50	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500	550	475	550	-	-	-	-	0	25	25	75	-	-	50	100	-	-
		PM Peak	-	-	-	-	275	375	-	-	-	-	-	-	-	125	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	525	550	525	550	-	-	-	-	25	125	125	25	25	25	100	-	-	50	125	-
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	125	150	-	-	150	250	-	-	-	-	-	-	25	175	25	50	-	-	-	-	-	-	25	75	-	-	100	200	-	-	-	-	-	-	75	175	-	-	75	125	-	-	25	75	100	225	100	200	-	-	25	75		
		PM Peak	125	150	-	-	200	250	-	-	-	-	-	-	25	225	25	100	-	-	-	-	-	50	125	-	-	125	225	-	-	-	-	-	-	100	175	-	-	150	250	-	-	25	50	150	300	175	325	-	-	25	225			
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	75	175	-	-	-	-	-	-	-	-	100	200	-	-	75	150	-	-	-	-	-	-	50	100	-	-	100	225	-	-	-	-	25	125	25	100	-	-	25	50	25	50	125	325	-	-	175	375	-	-				
		PM Peak	175	175	-	-	-	-	-	-	-	-	300	425	-	-	175	200	-	-	-	-	-	-	175	375	-	-	75	175	-	-	-	-	125	225	175	300	-	-	75	200	50	250	175	425	-	-	225	450	-	-				
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	25	50	-	-	-	-	-	-	-	-			
		PM Peak	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	75	150	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	25	50	-	-	50	100	25	100	25	25	-	-	0	25	-	-		
5	73rd St & University Ave Signalized Intersection	AM Peak	50	125	-	-	-	-	-	-	125	250	-	-	100	225	75	225	150	250	-	-	-	-	100	225	-	-	25	125	50	125	75	150	-	-	75	175	-	-	-	-	50	100	25	75	125	225	-	-	150	250	-	-		
		PM Peak	100	225	-	-	-	-	-	-	225	500	-	-	150	325	75	175	125	250	-	-	-	-	175	325	-	-	50	125	75	150	100	175	-	-	125	250	-	-	-	-	75	200	50	125	100	175	-	-	100	200	-	-		
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	0	25	-	-	-	-	-	-	-	-	-	-	-	-		
		PM Peak	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	0	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-					
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	25	100	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-					
8	73rd St & Washington Ave Stop Controlled	AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	25	25	25	50	-	-	-	-	-	-
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	100	-	-	25	25	25	75	-	-	-	-	-	-	-	
9	73rd St & College Dr Stop Controlled	AM Peak	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-					
		PM Peak	-	-	50	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-				

Table 15: Future Year Build Mitigated Traffic Operations Analysis - 73rd Street Corridor Study

Intersection ID	Intersection	Peak Hour	Intersection Delay (1.)		Movement Delay (sec/veh)																				Maximum Delay-LOS (2.)		Limiting Movement (3.)	Max Approach Queue						
					NBL		NBT		NBR		SBL		SBT		SBR		EBL		EBT		EBR		WBL					WBT		WBR		Direction	Average Queue (ft)	Max Queue (ft)
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	15	B	42	D	8	A	4	A	26	C	9	A	-		31	C	43	D	10	B	31	C	30	C	7	A	43	D	EBT	NBT	150	500
		PM Peak	26	C	62	E	14	B	5	A	31	C	15	B	-		54	D	59	E	37	D	27	C	26	C	11	B	62	E	NBL	NBT	225	525
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	14	B	21	C	8	A	5	A	19	B	16	B	7	A	26	C	24	C	1	A	30	C	27	C	7	A	30	C	WBL	SBT	125	250
		PM Peak	21	C	50	D	14	B	11	B	32	C	22	C	8	A	34	C	24	C	1	A	37	D	36	D	13	B	50	D	NBL	NBT	175	400
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	17	B	41	D	6	A	3	A	18	B	16	B	19	B	35	D	32	C	15	B	25	C	23	C	7	A	41	D	NBL	NBT	75	350
		PM Peak	33	C	47	D	29	C	12	B	40	D	34	C	39	D	60	E	57	E	46	D	29	C	17	B	13	B	60	E	EBL	NBT	250	575
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	2	A	7	A	1	A	1	A	6	A	2	A	-		27	D	-		-		11	B	-		7	A	27	D	EBL	WBL/T/R	25	75
		PM Peak	6	A	9	A	5	A	5	A	20	C	2	A	2	A	-		-		8	A	67	F	-		31	D	67	F	WBL	WBL/T/R	75	175
5	73rd St & University Ave Signalized Intersection	AM Peak	23	C	32	C	16	B	4	A	25	C	25	C	20	C	32	C	32	C	16	B	34	C	21	C	7	A	34	C	WBL	EBT	125	275
		PM Peak	26	C	23	C	20	C	12	B	38	D	27	C	19	B	47	D	43	D	18	B	45	D	27	C	13	B	47	D	EBL	EBT	250	600
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	2	A	5	A	3	A	3	A	5	A	1	A	1	A	8	A	-		3	A	8	A	9	A	5	A	9	A	WBT	WBL/T/R	25	50
		PM Peak	3	A	9	A	4	A	4	A	5	A	1	A	0	A	10	B	-		4	A	12	B	-		7	A	12	B	WBL	EBL/T/R	25	75
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	1	A	5	A	1	A	-		-		0	A	0	A	7	A	-		9	A	-		-		-		9	A	EBR	NBL	25	50
		PM Peak	1	A	4	A	2	A	-		-		0	A	0	A	-		-		-		-		-		-		4	A	NBL	NBT	25	150
8	73rd St & Washington Ave Stop Controlled	AM Peak	1	A	-		0	A	0	A	2	A	0	A	-		-		-		-		8	A	-		5	A	8	A	WBL	SBT	25	50
		PM Peak	1	A	-		1	A	0	A	4	A	0	A	-		-		-		-		13	B	-		9	A	13	B	WBL	NBT/R	25	100
9	73rd St & College Dr Stop Controlled	AM Peak	1	A	3	A	0	A	-		-		1	A	1	A	11	B	-		6	A	-		-		-		11	B	EBL	EBL/R	50	100
		PM Peak	1	A	2	A	0	A	-		-		1	A	0	A	12	B	-		6	A	-		-		-		12	B	EBL	EBL/R	50	100

1. Delay in seconds per vehicle
2. Maximum delay and LOS on any approach and/or movement
3. Limiting Movement is the highest delay movement.

Table 16: Peak Hour Queues By Movement - Future Year Build Mitigated Geometry

Intersection ID	Intersection	Peak Hour	Queue Lengths																																																	
			EBL		EBL/R		EBL/T		EBL/T/R		EBT		EBT/R		EBR		WBL 1		WBL 2		WBL/R		WBL/T/R		WBT		WBT/R		WBR		NBL 1		NBL 2		NBT 1		NBT 2		NBT/R		NBR		SBL		SBT 1		SBT 2		SBT/R		SBR	
			Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max				
1	73rd St & I-235 EB Ramps/Center St Signalized Intersection	AM Peak	-	-	-	-	75	175	-	-	-	-	-	-	50	125	-	-	-	-	-	-	25	100	-	-	-	-	-	-	150	225	-	-	150	500	75	375	-	-	-	-	25	25	25	100	-	-	50	125	-	-
		PM Peak	-	-	-	-	300	400	-	-	-	-	-	-	125	125	-	-	-	-	-	-	50	100	-	-	-	-	-	-	175	225	-	-	225	525	175	475	-	-	25	75	25	25	75	175	-	-	75	200	-	-
2	73rd St & I-235 WB Ramps/Private Driveway Signalized Intersection	AM Peak	100	150	-	-	175	250	-	-	-	-	-	-	25	175	25	50	-	-	125	225	-	-	25	50	-	-	125	225	-	-	75	200	-	-	75	200	-	-	25	100	125	250	125	225	-	-	25	100		
		PM Peak	125	150	-	-	200	250	-	-	-	-	-	-	25	225	25	100	-	-	-	-	-	-	50	125	-	-	200	250	-	-	175	400	-	-	150	300	-	-	25	25	175	275	175	325	-	-	50	300		
3	73rd St & Buffalo Rd Signalized Intersection	AM Peak	75	175	-	-	-	-	-	-	-	-	100	250	-	-	75	150	-	-	-	-	-	-	50	100	-	-	125	225	-	-	75	350	50	250	-	-	25	75	25	75	100	250	-	-	175	350	-	-		
		PM Peak	175	175	-	-	-	-	-	-	-	-	250	425	-	-	175	200	-	-	100	225	-	-	150	375	-	-	100	225	-	-	175	425	250	575	-	-	125	325	50	225	175	400	-	-	225	425	-	-		
4	73rd St & Private Drive/Apple Valley Stop Controlled	AM Peak	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-	-	-	-	-	25	25	-	-	-	-	-	0	25	-	-	25	50	-	-	-	-	-	-	-	-		
		PM Peak	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	75	175	-	-	-	-	-	-	25	50	-	-	25	50	-	-	25	175	-	-	50	100	25	75	-	-	0	25	-	-	
5	73rd St & University Ave Signalized Intersection	AM Peak	50	200	-	-	-	-	-	-	125	275	-	-	125	225	75	225	150	250	-	-	-	-	100	200	-	-	25	100	50	125	75	150	75	200	-	-	-	-	25	100	25	75	125	200	-	-	150	250	-	-
		PM Peak	100	225	-	-	-	-	-	-	250	600	-	-	150	325	75	200	125	275	-	-	-	-	175	425	-	-	50	125	75	150	100	150	150	325	-	-	-	-	125	225	50	125	100	175	-	-	100	200	-	-
6	73rd St & Del Matro Ave Stop Controlled	AM Peak	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-		
		PM Peak	-	-	-	-	-	25	75	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	0	25	-	-	-	-	-	-	-	-	-	25	25	-	-	-	-	-	-	-	-			
7	73rd St & Clive Learning Academy Stop Controlled	AM Peak	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	0	25	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-			
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	25	150	-	-	-	-	-	-	-	-	-	25	50	-	-					
8	73rd St & Washington Ave Stop Controlled	AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	-			
		PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
9	73rd St & College Dr Stop Controlled	AM Peak	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	25	-	-			
		PM Peak	-	-	50	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	50	-	-	-	-	-	-	-	-	-	-	-	25	75	-	-			

**Resolution No. 2020-90**  
**A RESOLUTION TO RECEIVE AND FILE THE 73<sup>RD</sup> STREET TRAFFIC STUDY**

**WHEREAS**, Bolton and Menk has completed the traffic study for the 73<sup>rd</sup> Street corridor from Center Street to Hickman Road as a part of the 73<sup>rd</sup> Street Reconstruction that is currently in the design phase; and

**WHEREAS**, the findings of this traffic study are found in the attached document; and

**WHEREAS**, in order for BMI to proceed with design work on the road between University Avenue and Hickman Road, they need guidance on what configurations the council wishes to see; and

**WHEREAS**, the recommendations set forth in the traffic study can be modified, added to, or disregarded at the will of the council; and

**WHEREAS**, staff will bring a separate resolution to the Council at the July 20<sup>th</sup> meeting to provide clear guidance to BMI on how to proceed with design work after receiving comments and feedback from the traffic study.

**NOW THEREFORE BE IT RESOLVED** by the City Council of the City of Windsor Heights, Iowa receives and files the traffic study conducted by Bolton & Menk.

PASSED and approved this 6th day of July 2020 by the City Council of the City of Windsor Heights, Iowa.

\_\_\_\_\_  
Dave Burgess, Mayor

ATTEST:

\_\_\_\_\_  
Travis Cooke, City Clerk



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM:

SUBJECT: Consideration of Pay Request No. 2 - University Avenue Project

**GENERAL INFORMATION**

**SUMMARY**

**ATTACHMENTS**

1. Pay Request 2 SIGNED



Real People. Real Solutions.

309 E 5th Street  
Suite 202  
Des Moines, IA 50309-1981

Ph: (515) 259-9190  
Fax: (515) 233-4430  
Bolton-Menk.com

June 30, 2020

Mark Arentsen  
Interim City Administrator  
1145 66<sup>th</sup> Street, Suite 1  
Windsor Heights, Iowa 50324

RE: University Avenue Improvements Project  
Windsor Heights, Iowa  
Contractor Pay Request No. 2

Enclosed are three (3) copies of Pay Request No. 2 for work completed on the University Avenue Improvements project for work completed through June 26, 2020 under the contract between the City of Windsor Heights and Elder Corp. We have checked the pay request and recommend payment to Elder Corp in the amount of \$145,946.51.

Upon approval of Pay Request No. 2, please sign all copies of Pay Request No. 2 in the space provided. Return one executed copy of the pay estimate to our office and one executed copy of the pay request to Elder Corp with payment.

If you have any questions or comments, please contact me at 515-259-9190.

Sincerely,

**Bolton & Menk, Inc.**

**Justin Ernst, P.E.**  
Project Manager

Enclosures

**CONTRACTOR'S PAY REQUEST**

University Avenue  
City of Windsor Heights, Iowa  
Windsor Heights, Iowa  
BMI PROJECT NO.A13.114724

**DISTRIBUTION:**

CONTRACTOR (1)

OWNER (1)

ENGINEER (1)

BONDING CO. (1)

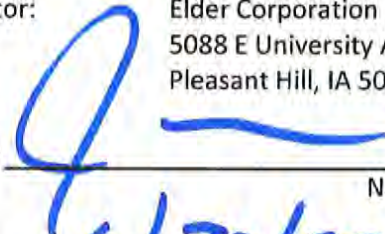
TOTAL AMOUNT BID PLUS APPROVED CHANGE ORDERS	\$6,749,494.20
TOTAL, COMPLETED WORK TO DATE	\$416,655.03
RETAINED PERCENTAGE ( 3% )	\$12,499.65
TOTAL AMOUNT OF OTHER PAYMENTS OR (DEDUCTIONS)	\$0.00
NET AMOUNT DUE TO CONTRACTOR TO DATE	\$404,155.38
TOTAL AMOUNT PAID ON PREVIOUS ESTIMATES	\$258,208.87
PAY CONTRACTOR AS ESTIMATE NO. 2	\$145,946.51

**Certificate for Partial Payment**

I hereby certify that, to the best of my knowledge and belief, all items quantities and prices of work and material shown on this Estimate are correct and that all work has been performed in full accordance with the terms and conditions of the Contract for this project between the Owner and the undersigned Contractor, and as amended by any authorized changes, and that the foregoing is a true and correct statement of the contract amount for the period covered by this Estimate.

Contractor: Elder Corporation  
5088 E University Avenue  
Pleasant Hill, IA 50327

By



Name

JIM MACHEY Sr PM

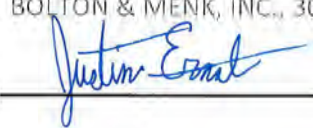
Title

Date

6/30/20

**CHECKED AND APPROVED AS TO QUANTITIES AND AMOUNT:****ENGINEER:** BOLTON & MENK, INC., 309 E 5th Street, Ste 202, Des Moines, IA 50309

By



, PROJECT ENGINEER

Date 6/30/20

**APPROVED FOR PAYMENT:****OWNER:**

By

Name

Title

Date

And

Name

Title

Date

Partial Pay Estimate No.:

2

University Avenue  
City of Windsor Heights, Iowa  
Windsor Heights, Iowa  
BMI PROJECT NO. A13.114724  
WORK COMPLETED THROUGH DATE JUNE 26, 2020

ITEM NO.	SUDAS REF NO.	ITEM	UNIT PRICE	AS BID		PREVIOUS ESTIMATE		COMPLETED TO DATE	
				ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT
1	0	CLEARING AND GRUBBING	\$172.00	29 UNIT	\$4,988.00	0.00 UNIT	\$0.00	0.00 UNIT	\$0.00
2	0	EXCAVATION, CLASS 10, ROADWAY AND BORROW	\$52.00	2949 CY	\$153,348.00	325.10 CY	\$16,905.20	325.10 CY	\$16,905.20
3	0	TOPSOIL, FURNISH AND SPREAD	\$37.00	1300 CY	\$48,100.00	0.00 CY	\$0.00	40.30 CY	\$1,491.10
4	0	SPECIAL COMPACTION OF SUBGRADE	\$6,100.00	16.22 STA	\$98,942.00	1.36 STA	\$8,296.00	1.36 STA	\$8,296.00
5	0	MODIFIED SUBBASE	\$54.00	2200 CY	\$118,800.00	397.60 CY	\$21,470.40	397.60 CY	\$21,470.40
6	0	SHOULDER FINISHING, EARTH	\$800.00	32.5 STA	\$19,500.00	0.00 STA	\$0.00	2.82 STA	\$1,572.00
7	0	PATCHES, FULL-DEPTH REPAIR	\$118.00	4237.3 SY	\$500,001.40	0.00 SY	\$0.00	0.00 SY	\$0.00
8	0	PATCHES BY COUNT (REPAIR)	\$270.00	29 EACH	\$7,830.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
9	0	REMOVAL OF CURB	\$3,200.00	0.9 STA	\$2,880.00	0.00 STA	\$0.00	0.00 STA	\$0.00
10	0	PAVEMENT SCARIFICATION	\$6.50	1873.3 SY	\$12,176.45	0.00 SY	\$0.00	0.00 SY	\$0.00
11	0	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CL	\$73.00	11722.2 SY	\$855,720.60	1326.50 SY	\$96,834.50	1,326.50 SY	\$96,834.50
12	0	MEDIAN, P.C. CONCRETE, 6 IN	\$129.00	13 SY	\$1,677.00	0.00 SY	\$0.00	0.00 SY	\$0.00
13	0	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES	\$7,900.00	1 LS	\$7,900.00	0.00 LS	\$0.00	0.00 LS	\$0.00
14	0	HOT MIX ASPHALT STANDARD TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, FRC	\$58.00	1392.2 TON	\$80,747.60	0.00 TON	\$0.00	0.00 TON	\$0.00
15	0	ASPHALT BINDER, PG 64-22S, STANDARD TRAFFIC	\$510.00	84 TON	\$42,840.00	0.00 TON	\$0.00	0.00 TON	\$0.00
16	0	TEMPORARY PAVEMENT	\$90.00	500 SY	\$45,000.00	0.00 SY	\$0.00	0.00 SY	\$0.00
17	0	REMOVAL OF CONCRETE FOOTINGS OF LIGHT POLES	\$214.00	68 EACH	\$14,552.00	1.00 EACH	\$214.00	1.00 EACH	\$214.00
18	0	REMOVAL OF LIGHT POLES	\$720.00	46 EACH	\$33,120.00	2.00 EACH	\$1,440.00	2.00 EACH	\$1,440.00
19	0	MODULAR BLOCK RETAINING WALL	\$84.00	150 SF	\$12,600.00	0.00 SF	\$0.00	0.00 SF	\$0.00
20	0	MANHOLE, STORM SEWER, SW-401, 48 IN	\$2,700.00	10 EACH	\$27,000.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
21	0	MANHOLE, STORM SEWER, SW-401, 60 IN	\$4,200.00	7 EACH	\$29,400.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
22	0	MANHOLE, STORM SEWER, SW-401, 72 IN	\$5,400.00	1 EACH	\$5,400.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
23	0	INTAKE, SW-501	\$2,500.00	3 EACH	\$7,500.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
24	0	INTAKE, SW-503	\$4,000.00	2 EACH	\$8,000.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
25	0	INTAKE, SW-505	\$3,900.00	16 EACH	\$62,400.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
26	0	INTAKE, SW-5006	\$7,800.00	3 EACH	\$23,400.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
27	0	MANHOLE ADJUSTMENT, MINOR	\$1,100.00	57 EACH	\$62,700.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
28	0	MANHOLE ADJUSTMENT, MAJOR	\$3,100.00	7 EACH	\$21,700.00	2.00 EACH	\$6,200.00	4.00 EACH	\$12,400.00
29	0	CONNECTION TO EXISTING MANHOLE	\$1,900.00	2 EACH	\$3,800.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
30	0	CONNECTION TO EXISTING INTAKE	\$1,900.00	1 EACH	\$1,900.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
31	0	SUBDRAIN, PERFORATED PLASTIC PIPE, 4 IN. DIA.	\$16.50	3483 LF	\$57,469.50	0.00 LF	\$0.00	0.00 LF	\$0.00
32	0	SUBDRAIN, PERFORATED PLASTIC PIPE, 6 IN. DIA.	\$52.00	38 LF	\$1,976.00	0.00 LF	\$0.00	0.00 LF	\$0.00
33	0	SUBDRAIN, PVC, STANDARD, NON-PERFORATED, 6 IN	\$48.00	17 LF	\$816.00	0.00 LF	\$0.00	0.00 LF	\$0.00
34	0	SUBDRAIN RISER, 6 IN., AS PER PLAN	\$670.00	13 EACH	\$8,710.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
35	0	SUBDRAIN OUTLET, DR-303	\$440.00	13 EACH	\$5,720.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
36	0	STORM SEWER GRAVITY MAIN, TRENCHED, POLYVINYL CHLORIDE PIPE (PVC	\$45.00	16 LF	\$720.00	0.00 LF	\$0.00	0.00 LF	\$0.00
37	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (R	\$79.00	155 LF	\$12,245.00	0.00 LF	\$0.00	0.00 LF	\$0.00
38	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (R	\$81.00	1003 LF	\$81,243.00	0.00 LF	\$0.00	0.00 LF	\$0.00
39	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (R	\$92.00	367 LF	\$33,764.00	0.00 LF	\$0.00	0.00 LF	\$0.00
40	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (R	\$78.00	32 LF	\$2,496.00	0.00 LF	\$0.00	0.00 LF	\$0.00
41	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (R	\$87.00	330 LF	\$28,710.00	0.00 LF	\$0.00	0.00 LF	\$0.00
42	0	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (R	\$119.00	334 LF	\$39,746.00	0.00 LF	\$0.00	0.00 LF	\$0.00
43	0	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	\$29.00	1714 LF	\$49,706.00	0.00 LF	\$0.00	0.00 LF	\$0.00
44	0	STORM, SEWER ABANDONMENT, FILL AND PLUG, LESS THAN OR EQUAL TO	\$26.50	403 LF	\$10,679.50	0.00 LF	\$0.00	0.00 LF	\$0.00

# Partial Pay Estimate No.:

University Avenue  
City of Windsor Heights, Iowa  
Windsor Heights, Iowa  
BMI PROJECT NO.A13.114724  
WORK COMPLETED THROUGH DATE JUNE 26, 2020

2

ITEM NO.	SUDAS REF NO.	ITEM	UNIT PRICE	AS BID		PREVIOUS ESTIMATE		COMPLETED TO DATE	
				ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT
45	0	EROSION OF STONE	\$83.00	6 TON	\$498.00	0.00 TON	\$0.00	0.00 TON	\$0.00
46	0	REMOVAL OF PAVEMENT	\$10.75	14151 SY	\$152,123.25	1974.00 SY	\$21,220.50	5,330.00 SY	\$57,297.50
47	0	REMOVAL OF INTAKES AND UTILITY ACCESSES	\$920.00	44 EACH	\$40,480.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
48	0	REMOVAL OF SIDEWALK	\$9.00	3201.3 SY	\$28,811.70	60.60 SY	\$545.40	194.00 SY	\$1,752.00
49	0	SIDEWALK, P.C. CONCRETE, 4 IN	\$45.00	1543.7 SY	\$69,466.50	0.00 SY	\$0.00	66.00 SY	\$2,970.00
50	0	SIDEWALK, P.C. CONCRETE, 6 IN	\$43.00	386.3 SY	\$16,610.90	0.00 SY	\$0.00	28.00 SY	\$1,204.00
51	0	SIDEWALK, REINFORCED P.C. CONCRETE, 6 IN	\$64.00	38 SY	\$2,432.00	0.00 SY	\$0.00	0.00 SY	\$0.00
52	0	DETECTABLE WARNINGS	\$86.00	859 SF	\$73,930.00	0.00 SF	\$0.00	0.00 SF	\$0.00
53	0	CURB AND GUTTER, P.C. CONCRETE, 2.0 FT	\$36.00	4621.4 LF	\$166,370.40	0.00 LF	\$0.00	0.00 LF	\$0.00
54	0	DRIVEWAY, P.C. CONCRETE, 6 IN	\$25.50	743.7 SY	\$18,964.35	0.00 SY	\$0.00	0.00 SY	\$0.00
55	0	REMOVAL OF PAVED DRIVEWAY	\$18.50	530.3 SY	\$9,810.55	0.00 SY	\$0.00	0.00 SY	\$0.00
56	0	LIGHTING POLES	\$7,900.00	36 EACH	\$284,400.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
57	0	REMOVE AND REINSTALL SIGN AS PER PLAN	\$158.00	27 EACH	\$4,266.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
58	0	REMOVAL OF TYPE A SIGN ASSEMBLY	\$105.00	33 EACH	\$3,465.00	0.00 EACH	\$0.00	1.00 EACH	\$105.00
59	0	PERFORATED SQUARE STEEL TUBE POSTS	\$16.00	260 LF	\$4,160.00	0.00 LF	\$0.00	0.00 LF	\$0.00
60	0	PERFORATED SQUARE STEEL TUBE POST ANCHOR, BREAK-AWAY SOIL INSTA	\$53.00	26 EACH	\$1,378.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
61	0	TYPE A SIGNS, SHEET ALUMINUM	\$10.50	198 SF	\$2,079.00	0.00 SF	\$0.00	0.00 SF	\$0.00
62	0	TRAFFIC SIGNALIZATION	\$505,000.00	1 LS	\$505,000.00	0.01 LS	\$5,555.00	0.01 LS	\$5,555.00
63	0	PAINTED PAVEMENT MARKINGS, DURABLE	\$142.00	236.3 STA	\$33,554.60	26.90 STA	\$3,819.80	26.90 STA	\$3,819.80
64	0	PAINTED SYMBOLS AND LEGENDS, DURABLE	\$147.00	58 EACH	\$8,526.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
65	0	TRAFFIC CONTROL	\$24,628.00	1 LS	\$24,628.00	0.15 LS	\$3,694.20	0.30 LS	\$7,388.40
66	0	TEMPORARY LANE SEPARATOR SYSTEM	\$10.50	3895 LF	\$40,897.50	\$20.00 LF	\$5,460.00	\$20.00 LF	\$5,460.00
67	0	PORTABLE DYNAMIC MESSAGE SIGN (PDMS)	\$84.00	200 CDAY	\$16,800.00	39.00 CDAY	\$3,276.00	39.00 CDAY	\$3,276.00
68	0	MOBILIZATION	\$688,588.15	1 LS	\$688,588.15	0.10 LS	\$68,858.82	0.20 LS	\$137,717.63
69	0	REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL	\$35.00	300 CY	\$10,500.00	0.00 CY	\$0.00	0.00 CY	\$0.00
70	0	WATER SERVICE CURB STOP AND BOX, WATER SERVICE CURB STOP AND BO	\$2,800.00	20 EACH	\$56,000.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
71	0	VALVE BOX EXTENSION/ADJUSTMENT	\$480.00	40 EACH	\$19,200.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
72	0	('CUBIC YARDS' ITEM) ENGINEERED SOIL MIX (BIOCELLS)	\$70.00	25 CY	\$1,750.00	0.00 CY	\$0.00	0.00 CY	\$0.00
73	0	('CUBIC YARDS' ITEM) STRUCTURAL SOIL MIX	\$260.00	315 CY	\$81,900.00	0.00 CY	\$0.00	0.00 CY	\$0.00
74	0	('CUBIC YARDS' ITEM) TOPSOIL COMPOST AMENDED (PLANTING BEDS)	\$61.00	500 CY	\$30,500.00	0.00 CY	\$0.00	0.00 CY	\$0.00
75	0	('EACH' ITEM) 10 INCH WATERMAIN ALTERNATION- BUS SHELTER	\$7,300.00	1 EACH	\$7,300.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
76	0	('EACH' ITEM) 6 FOOT BENCH	\$2,600.00	8 EACH	\$20,800.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
77	0	('EACH' ITEM) BIKE RACK	\$1,100.00	12 EACH	\$13,200.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
78	0	('EACH' ITEM) BULBS	\$2.00	1334 EACH	\$2,668.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
79	0	('EACH' ITEM) CHARGING STATION	\$2,700.00	3 EACH	\$8,100.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
80	0	('EACH' ITEM) COLUMN MONUMENT	\$34,000.00	2 EACH	\$68,000.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
81	0	('EACH' ITEM) ENTRY MONUMENT	\$45,000.00	2 EACH	\$90,000.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
82	0	('EACH' ITEM) GFCI (INCL. PEDESTAL AND ENCLOSURE)	\$600.00	19 EACH	\$11,400.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
83	0	('EACH' ITEM) HH-1	\$740.00	5 EACH	\$3,700.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
84	0	('EACH' ITEM) HH-2	\$710.00	10 EACH	\$7,100.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
85	0	('EACH' ITEM) LITTER RECEPTACLE	\$2,100.00	7 EACH	\$14,700.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
86	0	('EACH' ITEM) NYLOPLAST DRAIN BASIN 12 INCH (BIOCELLS)	\$1,400.00	2 EACH	\$2,800.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
87	0	('EACH' ITEM) PERENNIAL GROUND COVER (1 GALLON)	\$9.50	1764 EACH	\$16,758.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
88	0	('EACH' ITEM) POLE BASE FOOTING (TYPES S1 S2 S3 & S4 FIXTURES	\$3,900.00	36 EACH	\$126,000.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
89	0	('EACH' ITEM) RECYCLING RECEPTACLE	\$2,400.00	7 EACH	\$16,800.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
90	0	('EACH' ITEM) REFINISH EXISTING TRAFFIC SIGNAL POLES & ARMS	\$13,000.00	4 EACH	\$52,000.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
91	0	('EACH' ITEM) REINFORCED MONOLITHIC CONCRETE FOREBAY (BIOCELLS)	\$6,300.00	2 EACH	\$12,600.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
92	0	('EACH' ITEM) RELOCATE HYDRANT ASSEMBLY	\$4,100.00	4 EACH	\$16,400.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
93	0	('EACH' ITEM) REMOVE AND REPLACE HYDRANT ASSEMBLY	\$8,400.00	2 EACH	\$16,800.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
94	0	('EACH' ITEM) SIGN UPLIGHTS (TYPE S5 FIXTURE)	\$1,400.00	8 EACH	\$11,200.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
95	0	('EACH' ITEM) SINGLE HEAD RDWY LIGHT (TYPE S6 FIXTURE)	\$620.00	12 EACH	\$7,440.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00
96	0	('EACH' ITEM) STONE BLOCK BENCH	\$1,800.00	19 EACH	\$34,200.00	0.00 EACH	\$0.00	0.00 EACH	\$0.00

# Partial Pay Estimate No.:

University Avenue

City of Windsor Heights, Iowa

Windsor Heights, Iowa

BMI PROJECT NO. A13.114724

WORK COMPLETED THROUGH DATE JUNE 26, 2020

2

ITEM NO.	SUDAS REF NO.	ITEM	UNIT PRICE	AS BID		PREVIOUS ESTIMATE		COMPLETED TO DATE	
				ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT	ESTIMATED QUANTITY	ESTIMATED AMOUNT
97	0	('EACH' ITEM) STON BLOCK CUBE	\$1,100.00	27	EACH	\$29,700.00	0.00	EACH	\$0.00
98	0	('EACH' ITEM) TREE GRATE AND FRAME	\$3,200.00	15	EACH	\$48,000.00	0.00	EACH	\$0.00
99	0	('EACH' ITEM) TYPE 1 WATERMAIN ALTERATION	\$6,100.00	4	EACH	\$24,400.00	0.00	EACH	\$0.00
100	0	('EACH' ITEM) TYPE 3 WATERMAIN ALTERATION	\$2,300.00	1	EACH	\$7,300.00	0.00	EACH	\$0.00
101	0	('EACH' ITEM) WATER SERVICE CURB STOP & BOX ADJUSTMENT	\$2,800.00	20	EACH	\$56,000.00	0.00	EACH	\$0.00
102	0	('EACH' ITEM)WAYFINDING SIGN KIOSK	\$11,000.00	3	EACH	\$33,000.00	0.00	EACH	\$0.00
103	0	('LINEAR FEET' ITEM) #10 AWG CU	\$2.50	1629	LF	\$4,072.50	0.00	LF	\$0.00
104	0	('LINEAR FEET' ITEM) #12 AWG CU	\$5.25	4005	LF	\$21,026.25	0.00	LF	\$0.00
105	0	('LINEAR FEET' ITEM) #14 AWG CU	\$4.75	3360	LF	\$15,960.00	0.00	LF	\$0.00
106	0	('LINEAR FEET' ITEM) #16 AWG CU	\$4.75	7599	LF	\$36,095.25	0.00	LF	\$0.00
107	0	('LINEAR FEET' ITEM) #18 AWG CU	\$4.25	9106	LF	\$38,700.50	0.00	LF	\$0.00
108	0	('LINEAR FEET' ITEM) #18 AWG CU	\$4.00	26580	LF	\$106,320.00	0.00	LF	\$0.00
109	0	('LINEAR FEET' ITEM) CONCRETE BAND 8 INCH WIDTH	\$87.00	360	LF	\$31,320.00	0.00	LF	\$0.00
110	0	('LINEAR FEET' ITEM) LIMESTONE EDGER	\$26.50	600	LF	\$15,900.00	0.00	LF	\$0.00
111	0	('LINEAR FEET' ITEM) TRENCHING CONDUIT	\$12.25	19553	LF	\$239,524.25	0.00	LF	\$0.00
112	0	('SQUARE YARDS' ITEM) CONCRETE UNIT PAVERS	\$247.00	325	SY	\$80,275.00	0.00	SY	\$0.00
113	0	('TONS' ITEM) FOUNDATION ROCK	\$77.00	10	TON	\$770.00	0.00	TON	\$0.00
114	0	('TONS' ITEM) NO. 57 STONE (AGGREGATE CHAMBER)	\$90.00	16	TON	\$1,440.00	0.00	TON	\$0.00
115	0	('TONS' ITEM) NO. 8 STONE (CHOCKER LAYER)	\$77.00	3	TON	\$231.00	0.00	TON	\$0.00
116	0	MULCHING	\$2,100.00	3.6	ACRE	\$3,360.00	0.00	ACRE	\$0.00
117	0	SEEDING AND FERTILIZING (URBAN)	\$1,000.00	1.6	ACRE	\$1,600.00	0.00	ACRE	\$0.00
118	0	SLOPE PROTECTION, WOOD EXCELSIOR MAT	\$9.50	115	SQ	\$1,092.50	0.00	SQ	\$0.00
119	0	STABILIZED CONSTRUCTION ENTRANCE, EC-303	\$76.00	100	LF	\$22,800.00	0.00	LF	\$0.00
120	0	PERIMETER AND SLOP SEDIMENT CONTROL DEVICE, 9 IN. DIA.	\$2.00	5540	LF	\$11,080.00	20.00	LF	\$40.00
121	0	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	\$0.50	5540	LF	\$2,770.00	0.00	LF	\$0.00
122	0	OPEN-THROAT CURB INTAKE SEDIMENT FILTER, EC-602	\$10.50	20	LF	\$210.00	0.00	LF	\$0.00
123	0	MAINTENANCE OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	\$26.50	4	EACH	\$106.00	0.00	EACH	\$0.00
124	0	REMOVAL OF OPEN-THROAT CURB INTAKE SEDIMENT FILTER	\$26.50	4	EACH	\$106.00	0.00	EACH	\$0.00
125	0	GRATE INTAKE SEDIMENT FILTER BAG	\$205.00	43	EACH	\$8,815.00	0.00	EACH	\$0.00
126	0	MAINTENANCE OF GRATE INTAKE SEDIMENT FILTER BAG	\$26.50	43	EACH	\$1,139.50	0.00	EACH	\$0.00
127	0	REMOVAL OF GRATE INTAKE SEDIMENT FILTER BAG	\$10.50	43	EACH	\$451.50	0.00	EACH	\$0.00
128	0	MOBILIZATION, EROSION CONTROL	\$500.00	10	EACH	\$5,000.00	0.00	EACH	\$0.00
129	0	MOBILIZATION, EMERGENCY EROSIONS CONTROL	\$1,000.00	1	EACH	\$1,000.00	0.00	EACH	\$0.00
130	0	SHRUBS	\$48.00	53	EACH	\$2,544.00	0.00	EACH	\$0.00
131	0	TREES	\$470.00	48	EACH	\$22,560.00	0.00	EACH	\$0.00
132	0	MODIFIED SUBBASE	\$60.00	630	CY	\$37,800.00	0.00	CY	\$0.00
133	0	RECREATIONAL TRAIL, PORTLAND CEMENT CONCRETE, 6 IN	\$51.00	4525.1	SY	\$230,780.10	0.00	SY	\$0.00
CO-2	0	SUBGRADE STABILIZATION MATERIAL, POLYMER GIRD	\$3.85	722	SY	\$2,779.70	630.00	SY	\$2,425.50
CO-3	0	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	\$75.00	27.82	STA	\$2,086.50	0.00	STA	\$0.00
TOTAL AMOUNT:					\$6,749,494.20		\$266,194.72		\$416,655.03



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM: Dalton Jacobus

SUBJECT: Consideration of Revisions to 28E Agreement for Salt Storage (1 of 2)

**GENERAL INFORMATION**

Amendments to Salt Storage 28E (1 of 2)

**SUMMARY**

The City of West Des Moines is building a new Public Works shop and salt storage facility. Their new salt storage facility will be able to hold much more salt. Because of their increased storage capacity at their new shop, they no longer need to store salt at the MWA facility in Grimes. The following documents are updates to the existing 28E agreement. There are two major changes to this 28E from previous iterations:

- Storage allotment. The City of West Des Moines' storage allotment is being split among the remaining communities.
- Administration. The City of Urbandale will now oversee the administration of the program and maintenance of the building and equipment. The West Des Moines Public Works Department used to perform these duties.

**ATTACHMENTS**

1. MWA Salt Storage Amendment

**-Metro Waste Authority**  
**Amendment to Ground Lease and Operation Maintenance Agreement for Metropolitan  
Salt Storage Facility on Metro Waste Authority Property**

THIS AMENDMENT is made and entered into this 20 day of May, 2020, by and between Metro Waste Authority, an entity organized pursuant to Section 28E of the Iowa Code, (hereinafter referred to as "Authority" or "MWA") and the Cities of West Des Moines, Urbandale, Johnston, Clive, Windsor Heights, Waukee, Grimes, Des Moines and Pleasant Hill (hereinafter, the "Cities").

WHEREAS, MWA and the Cities, are parties to the Ground Lease and Operation Maintenance Agreement for Metropolitan Salt Storage Facility on Metro Waste Authority Property dated August 7, 2014, by and among MWA, the City and the Cities of West Des Moines, Urbandale, Johnston, Clive, Windsor Heights, Waukee, Grimes, Des Moines and Pleasant Hill (the "Agreement"); and

WHEREAS, MWA gave a Notice of Termination of Ground Lease and Operation Maintenance Agreement for Metropolitan Salt Storage Facility on Metro Waste Authority Property dated July 24, 2019, to Des Moines, indicating MWA was electing to terminate the Agreement on July 24, 2020; and

WHEREAS, the Notice of Termination was only to Des Moines and not the other Cities, further indicating it was requiring Des Moines to remove the Des Moines' ten thousand ton capacity salt storage building from the Leased Premises; and

WHEREAS, Section 3.02 of the Agreement provides that either MWA or the Cities may give a one year notice to terminate the Agreement, which termination shall be effective at the end of the one year notice; and

WHEREAS, the Agreement does not permit MWA to terminate the Agreement only as to Des Moines and not the other Cities; however Des Moines is willing to withdraw and provide a Bill of Sale to the Des Moines Building for the considerations set forth herein; including but not limited to MWA withdrawing and rescinding the Notice of Termination of Ground Lease and Operation Maintenance Agreement for Metropolitan Salt Storage Facility on Metro Waste Authority Property dated July 24, 2019 and for Des Moines being allowed to leave the Des Moines Building upon withdraw from the Agreement; and

WHEREAS, MWA and the Cities desire to amend the Agreement as provided herein.

NOW, THEREFORE, for and in consideration of the mutual covenants given each to the other, the parties hereby acknowledge the following:

1. Section 1.03, Identification of Exhibits is amended by replacing Exhibit “A” with the attached revised Exhibit “A” effective October 1, 2020.
2. Section 3.02, Termination, is deleted and replaced with the following:

At any time during the Term, either MWA or the Cities may give a one (1) year notice to terminate this Agreement, which termination shall be effective at the end of the one (1) year notice. Any notice given by the Cities shall be given by the West Des Moines Public Works Director and shall include letters from each City requesting termination. Notwithstanding the foregoing, during the Term, if Des Moines elects to withdraw from this Agreement or if one or more of the Shared Building Cities elects to forfeit its or their share of the Shared Building in accordance with Article 14 below, such City or Cities shall give MWA and the other Cities a one (1) year notice to terminate, which notice shall include only the City or Cities desiring to terminate this Agreement, and this Agreement shall continue with respect to the other remaining Cities. The costs and fees of this Agreement shall then be reallocated between the remaining Cities. Notwithstanding, this Section, it is agreed between the parties that Des Moines withdraws from this Agreement effective October 1, 2020, that this Agreement shall continue as to the MWA and other remaining Cities and all costs and fees of this Agreement shall be reallocated between the Shared Cities. MWA hereby withdraws and rescinds the Notice of Termination given to the City of Des Moines dated July 24, 2019.

3. Section 4.02, Maintenance Fee Provisions, Paragraph A, is deleted and replaced with the following:

A. *Maintenance Fee*. Beginning on the Effective Date, each City shall pay a maintenance fee of one (\$1.00) per ton of each City’s capacity storage in the Facility each remaining year of the Agreement (the “Maintenance Fee”). Des Moines’ payment shall be made to the Des Moines Maintenance Fee Account (as defined below) and the Shared Building Cities’ payment shall be made to the Shared Building Cities Maintenance Fee Account (as defined below). Thereafter, the West Des Moines Public Works Director shall invoice each City annually by July 1st of each year of the Term for each City’s respective Maintenance Fee. The Cities shall pay such invoice within thirty (30) days of receipt of said invoice. Des Moines shall pay the prorata portion of the Maintenance Fee due July 1, 2020 for the months of July, August and September of 2020 only and shall owe no further Maintenance Fee or any other fees thereafter.

4. Section 4.02, Maintenance Fee Provisions, Paragraph F, is deleted and replaced with the following:

*F. Maintenance Fees Remaining if a City Withdraws from the Agreement.* 100% of the Maintenance Fees and Interest in the Des Moines Maintenance Fee Account, as existing on September 30, 2020 shall be returned to Des Moines. If a Shared Building City withdraws from the Agreement pursuant to Article 14 herein, such Shared Building City shall forfeit any Maintenance Fees and interest paid into the Shared Building Cities Maintenance Fee Account.

5. Section 4.02, Maintenance Fee Provisions, Paragraph G is deleted and replaced with the following:

*G. Maintenance Fees Remaining After Sale of Building.* If the Shared Building Cities elect to sell the Shared Building, the Shared Building Cities shall forfeit 100% of the Maintenance Fees paid by the Shared Building Cities into the Shared Building Cities Maintenance Fee Account, and such funds shall be transferred to the purchaser of the Shared Building.

6. Section 5.09, Condition of Property at Termination of Agreement, is deleted and replaced with the following:

At the termination of this Agreement, the Shared Cities shall return the Leased Premises to its original condition. The Shared Building Cities shall be required to remove the Shared Building from the Leased Premises. The Cities shall not be required to remove any of the permanent infrastructures in place at the time of termination. Des Moines shall leave the Des Moines Building on the Leased Premises at its withdraw from this Agreement effective October 1, 2020 and shall not be required to remove any of the permanent infrastructure in place at the time of termination. For purposes of this Agreement, permanent infrastructure shall mean the paving and storm water improvements.

7. Section 5.10, Insurance of Buildings, is deleted and replaced with the following:

Des Moines shall procure and maintain full replacement insurance coverage on the Des Moines Building, including insurance covering the contents through September 30, 2020. After September 30, 2020, all risk of loss for the Des Moines Building and its contents shall belong to MWA. The Shared Building Cities shall procure and maintain full replacement insurance coverage on the Shared Building, including insurance covering the contents. The cost of insuring the Shared Building shall be allocated between the Shared Building Cities in accordance with the Shared Building Allocated Salt Storage Capacity. The West Des Moines Public Works Director shall secure and bill the Shared Building Cities for the costs of insurance for full replacement value of the Shared Building and content insurance. Certificates of Insurance and/or letters of self-insurance citing such coverages, limits and endorsements shall be provided to MWA and the West Des Moines Public Works Director by Des Moines and the Shared Building Cities on an annual basis.

8. Section 10.01 Ownership of Buildings, is deleted and replaced with the following:

MWA and the Cities agree and acknowledge that (i) the Shared Building is under the ownership and possession of the Shared Building Cities, which ownership is allocated to the Shared Building Cities in accordance with the Shared Building Allocated Salt Storage Capacity; and (ii) the Des Moines Building is under the exclusive ownership and possession of Des Moines. Des Moines shall deliver a Bill of Sale for the Des Moines Building to MWA on October 1, 2020 at which time the Des Moines Building will be under the exclusive ownership and possession of MWA and shall be the sole obligation and responsibility of MWA.

9. Section 10.03, Utilities, paragraph B deleted.

10. Section 11.01, Des Moines Building, is deleted and replaced with the following:

A. Fire or Casualty Occurring Before October 1, 2020.

If before October 1, 2020, the Des Moines Building is damaged by fire or other casualty, covered by the insurance Des Moines obtains pursuant to Section 5.10 herein, Des Moines shall either cause such repairs to be made to the Des Moines Building or remove the Des Moines Building from the Leased Premises with the proceeds of the insurance secured as set forth in Section 5.10 of this Agreement. In the event the damage is not covered by Des Moines' insurance, then in such instance the West Des Moines Public Works Director, upon written direction and concurrence by Des Moines as to whether the Des Moines Building shall be repaired or removed, shall cause such repairs to be made to the Des Moines Building or shall remove the Des Moines Building from the Leased Premises, using the proceeds from the Des Moines Maintenance Fee Account, and the following costs shall be charged to Des Moines, as applicable: (i) the cost of such repairs or replacement of the Des Moines Building, in excess of the Des Moines Maintenance Fee Account, or (ii) the cost of removal of the Des Moines Building from the Leased Premises in excess of the Des Moines Maintenance Fee Account. Des Moines shall have the right to use the Des Moines Maintenance Fee Account for any insurance deductible Des Moines shall have for any such fire or casualty, upon documentation of such deductible by Des Moines. The West Des Moines Public Works Director shall pay Des Moines the deductible amount from the Des Moines Maintenance Fee Account, upon submission of documentation of the deductible amount. Notwithstanding the foregoing, Des Moines acknowledges and agrees that: (i) any repair, replacement or removal of the Des Moines Building in the event of any fire or other casualty shall be commenced within six (6) months of such fire or other casualty, as applicable, and (ii) MWA shall not be responsible for any repair, replacement or removal of the Des Moines Building in the event of any fire or other casualty.

B. Fire or Casualty Occurring After September 30, 2020.

If the Des Moines Building is damaged by fire or other casualty after September 30, 2020, it shall be the sole responsibility and obligation of the MWA to remove or repair the Des Moines Building.

11. Section 14.01, Withdrawal by Des Moines, is deleted and replaced with the following:

Des Moines withdraws from this Agreement effective October 1, 2020 and all costs of this Agreement shall be reallocated between the remaining Cities.

12. Section 16.12, Intent of the Parties, is deleted and replaced with the following:

It is the intent of the parties to this Agreement that the operation of the Facility and the removal of the Buildings will be done without cost to MWA, unless said costs are reimbursed by the Cities as provided in this Agreement. Notwithstanding the foregoing, it is understood that Des Moines shall leave the Des Moines building upon Des Moines withdraw from the Agreement effective on October 1, 2020.

All other terms of the Agreement shall remain effective and enforceable as written.

DES MOINES METROPOLITAN AREA SOLID WASTE AGENCY D/B/A  
METRO WASTE AUTHORITY:

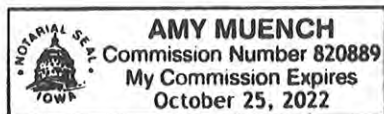
By: Mark Holm (May 22, 2020 15:16 CDT)  
Chair, MWA Board

Attest:

Mackensi Burns  
Secretary, MWA Board

STATE OF IOWA                     )  
  ) SS  
COUNTY OF POLK                )

On this 20<sup>th</sup> day of May, 2020, before a Notary Public in  
and for the Des Moines Metropolitan Area Solid Waste Agency D/B/A Metro Waste Authority,  
personally appeared Mark Holm, Chair and Mackensi Burns, Board Secretary to me  
personally known, who being duly sworn, did say that they are the Chair and Secretary,  
respectively of the Des Moines Metropolitan Area Solid Waste Agency D/B/A Metro Waste  
Authority, a legal entity created and existing under the laws of the State of Iowa, and that the seal  
affixed to the foregoing instrument is the seal of said Authority, and that said instrument was  
signed and sealed on behalf of said Authority by authority and resolution of its Board and said  
Chair and Secretary acknowledged said instrument to be the free act and deed of said Authority  
by it voluntarily executed.



Amy Muench  
Notary Public in and for the State of Iowa

CITY OF WINDSOR HEIGHTS, IOWA

By \_\_\_\_\_

Attest:

\_\_\_\_\_

STATE OF IOWA                    )  
  ) SS  
COUNTY OF POLK                )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before a Notary Public in and for the City of \_\_\_\_\_, personally appeared \_\_\_\_\_ and \_\_\_\_\_, to me personally known, who being duly sworn, did say that they are the Mayor and City Clerk, respectively of the City of \_\_\_\_\_, Iowa, a Municipality, created and existing under the laws of the State of Iowa, and that the seal affixed to the foregoing instrument is the seal of said Municipality, and that said instrument was signed and sealed on behalf of said Municipality by authority and resolution of its City Council and said Mayor and City Clerk acknowledged said instrument to be the free act and deed of said Municipality by it voluntarily executed.

\_\_\_\_\_  
Notary Public in and for the State of Iowa



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM: Dalton Jacobus

SUBJECT: Consideration of Revisions to 28E Agreement for Salt Storage (2 of 2)

**GENERAL INFORMATION**

Amendment to Salt Storage 28E Agreement (2 of 2)

**SUMMARY**

The City of West Des Moines is building a new Public Works shop and salt storage facility. Their new salt storage facility will be able to hold much more salt. Because of their increased storage capacity at their new shop, they no longer need to store salt at the MWA facility in Grimes. The following documents are updates to the existing 28E agreement. There are two major changes to this 28E from previous iterations:

- Storage allotment. The City of West Des Moines' storage allotment is being split among the remaining communities.
- Administration. The City of Urbandale will now oversee the administration of the program and maintenance of the building and equipment. The West Des Moines Public Works Department used to perform these duties.

**ATTACHMENTS**

1. 2020 28E Agreement Metro Salt Storage Facility

28E AGREEMENT FOR OPERATION AND MAINTENANCE OF THE  
METROPOLITAN SALT STORAGE FACILITY BY AND BETWEEN THE CITIES  
OF URBANDALE, JOHNSTON, CLIVE,  
WINDSOR HEIGHTS, WAUKEE, GRIMES AND PLEASANT HILL

The purpose of this 28E Agreement entered into by and between the Urbandale, Johnston, Clive, Windsor Heights, Waukee, Grimes and Pleasant Hill (hereinafter referred to collectively as “the Cities” or individually as “City”), all municipal corporations, is to revise the terms and conditions for the operation and maintenance of the Metropolitan Salt Storage Facility.

WHEREAS, the Cities own, operate and maintain the Metropolitan Salt Storage Facility within the City of Grimes on property owned by the Metropolitan Waste Authority (MWA) under the terms of a previously approved Lease Purchase Agreement (hereinafter referred to as the “MWA Agreement”); and

WHEREAS, the Cities originally entered into a 28E Agreement in 2008 for the operation and maintenance of the Metropolitan Salt Storage Facility and extended the Agreement in 2014; and

WHEREAS, the Cities desire to revise the previous Agreement for the Operation and Maintenance of the Facility.

NOW THEREFORE, for and in consideration of the mutual covenants, agreements and conditions contained herein, the parties agree as follows:

ARTICLE 1  
DEFINITIONS

Section 1.01 Definitions

The following words and phrases, wherever used in the Agreement, shall, for the purpose of this Agreement, have the following meanings:

- A. Allocated Salt Storage Capacity means the tonnage capacity reserved to each City in the Facility expressed as set forth below:

Urbandale	3,456 tons
Johnston	960 tons
Clive	1920 tons
Windsor Heights	1152 tons
Waukee	2112 tons
Grimes	1440 tons
Pleasant Hill	<u>960 tons</u>
	12,000 tons

- B. Leased Premises means the property legally described on Exhibit “A” on which the Metropolitan Salt Storage Facility is located.

- C. Metropolitan Salt Storage Facility, also referred to as the “Facility”, means the 12,000 ton capacity building, conveyor, paving, storm water improvements and other associated improvements constructed under the MWA Agreement.
- D. Building means the 12,000 ton capacity building and the conveyor.
- E. Improvements mean all other improvements to the site with the exception of the Building and conveyor.
- F. MWA means the Metro Waste Authority located generally at 300 East Locust Street, Des Moines, Iowa 50309.
- G. Salt means sodium chloride that is used by the Cities in treating and deicing streets.
- H. Salt Storage Inventory means that amount of Salt currently in storage for a particular agency.

#### Section 1.02 Cross References and Paragraph Headings

References in the text of the Agreement to articles, sections, or exhibits of this Agreement, unless otherwise specified, are for convenience in reference and are not intended to define or limit the scope of any provision of this Agreement.

#### Section 1.03 Identification of Exhibits

The following Exhibits are hereby incorporated and made a part of this Agreement as follows:

Exhibit “A” - Leased Premises

### ARTICLE 2 CHAPTER 28E PROVISIONS

#### Section 2.01 Chapter 28E Powers

Pursuant to Chapter 28E of the 2020 Code of Iowa, the Parties do hereby agree that the purpose of this Agreement is to define the operation and maintenance of the Metropolitan Salt Storage Facility located on the Leased Premises from MWA shown on Exhibit “A”.

#### Section 2.02 Effective Date

The Parties agree that this Agreement shall be effective upon its approval and execution by all Parties and its recording with the Secretary of State.

#### Section 2.03 Administrator

The Parties hereby agree that the Urbandale Director of Engineering and Public Works shall be designated administrator of this Agreement.

## Section 2.04 Originals

This Agreement shall have 8 (eight) originals and shall be effective upon its execution by all Parties.

### ARTICLE 3 TERM OF AGREEMENT

This Agreement shall commence upon approval and execution by all parties (hereinafter the “Effective Date”), and shall continue to June 30, 2028. If the MWA terminates the MWA Agreement, this Agreement shall terminate upon all Parties having discharged their respective obligations hereunder.

### ARTICLE 4 INSURANCE AND DAMAGE

Each City is responsible for paying for repair of all damages to the Facility if caused by that City, its officers, employees, subcontractors or others working on behalf of that City and those it brings onto the Facility. In the event the Facility is damaged, the Urbandale Director of Engineering and Public Works shall affect the needed repairs and the City responsible for the damage shall be responsible for paying for such repairs in an amount up to, but not to exceed, the deductible of the property insurance policy covering the Building. If the damage renders any of the contents ineffective or unusable, the Urbandale Director of Engineering and Public Works shall replace such contents and the City responsible for that loss or damage shall be responsible for paying for the replaced contents in an amount up to, but not to exceed the deductible of the property insurance policy covering the Building.

### ARTICLE 5 MAINTENANCE AND OPERATION

The Cities are obligated pursuant to the MWA Agreement to maintain the Facility and Leased Premises in accordance with the obligations of the MWA Agreement. Those obligations are as follows:

- Mowing of the Leased Premises.
- Sweeping of paved areas.
- Patching of paved areas.
- Snow removal on paved areas.
- Repair and maintenance of the buildings.

The Urbandale Director of Engineering and Public Works shall be responsible for assigning responsibilities to each City on an equitable basis for the above required maintenance. Any maintenance that is necessary and requires outside forces shall be accomplished by the Urbandale Director of Engineering and Public Works pursuant to applicable law and shall be allocated to the Cities pursuant to each Cities proportionate share of Allocated Salt Storage Capacity in the Facility. The Urbandale Director of Engineering and Public Works shall invoice the Cities for their proportionate share of the cost of such maintenance and repair. Cities shall pay such invoice within thirty days of receipt of said invoice.

ARTICLE 6  
FEES AND CHARGES

Section 6.01 Insurance Fees

The Cities shall be responsible for insuring the Facility, under their exclusive control, for the full replacement cost, including insurance covering the contents. The cost of insuring the Facility shall be allocated between the Cities on the following percentage:

Urbandale	29%
Johnston	8%
Clive	16%
Windsor Heights	9.5%
Waukee	17.5%
Grimes	12%
<u>Pleasant Hill</u>	<u>8%</u>
Total	100%

The Urbandale Director of Engineering and Public Works shall secure and bill the Cities for the Cost of insurance for full replacement value of the Facility and content insurance.

Section 6.02 Maintenance Fees

The Cities acknowledge and agree that there may be maintenance or repair that may need to be done and charged to the Cities. Each City is responsible only for its proportionate share of the maintenance costs.

- A. Each City shall pay a Maintenance Fee of one (\$1.00) per ton of each City's capacity storage in the Facility each remaining year of the Agreement. Said Maintenance Fee shall be placed in a Maintenance account by the Urbandale Director of Engineering and Public Works. The Maintenance Fee shall be used by the Urbandale Director of Engineering and Public Works to repair and maintain the Facility in accordance with the MWA Agreement and so that the Facility remains operational and useable by the Cities.
- B. Maintenance Fees Remaining in the Account at Termination of this Agreement. Any and all Maintenance Fees remaining in the escrow account at the termination of this Agreement shall be returned to the remaining Cities based upon their proportionate share of Allocated Salt Storage Capacity.
- C. Maintenance Fees Remaining if a City Withdrawals from the Agreement. If a City withdrawals from the Agreement pursuant to Article 11 herein, it shall forfeit any Maintenance Fees paid into the Maintenance Fee Account.

ARTICLE 7  
ACCOUNTING FOR SALT ALLOCATION

Section 7.01 Delivery or Pick up of Salt from Facility

The delivery and pick up of Salt from the Facility shall be accomplished as provided in this Agreement.

A. Accounting of Deliveries of Salt to the Facility

The Urbandale Director of Engineering and Public Works shall receive all deliveries of Salt for the Facility. All deliveries shall be accompanied by a Certified Scale Ticket.

B. Accounting of Loading from Salt from the Facility

- (1) Each City shall be responsible for weighing the truck carrying any Salt that City unloads from the Facility utilizing MWA scales. MWA will provide the Urbandale Director of Engineering and Public Works all weight tickets.
- (2) During winter operation of the Cities, the Urbandale Director of Engineering and Public Works shall send out weekly reports electronically to the Cities regarding the loading or unloading that occurred to their Salt Storage Inventory.

ARTICLE 8  
OPERATIONAL AND GENERAL SAFETY PROVISIONS

Section 8.01 Prohibition on Exceeding or Removing Allocated Salt Storage Capacity

No City shall cause or allow Salt to be delivered to the Facility that causes that City to exceed its Allocated Salt Storage Capacity at any one time. No City shall remove or cause to be removed from the Facility an amount of Salt that exceeds the Salt Storage Inventory of that City.

Section 8.02 Operational Requirements.

All Cities shall require their employees, contractors, subcontractors and those working on their behalf to:

- (1) Cause all trucks delivering or loading Salt shall back into the Buildings for delivery and loading.
- (2) Ensure that all truck unloading systems be closed before leaving the Buildings.
- (3) Sweep back into the Buildings any Salt spilled outside the Buildings after loading and unloading of the Facility.
- (4) Not cause, allow or permit any Salt to be pushed up against or over the concrete walls of Buildings, the cover or foundation of the Buildings.

- (5) Cause the Buildings to be locked and secured before leaving the Facility.

## ARTICLE 9 REMOVAL OF THE BUILDINGS

The Cities agree that the 12,000 ton capacity storage building is owned in the following proportionate shares:

Urbandale	29%
Johnston	8%
Clive	16%
Windsor Heights	9.5%
Waukee	17.5%
Grimes	12%
<u>Pleasant Hill</u>	<u>8%</u>
Total	100%

The Cities shall have the right and obligation to remove the Building at the termination of the MWA Agreement. The Building Cities shall remove the Building in accordance and compliance with the MWA Agreement. The Urbandale Director of Engineering and Public Works shall coordinate the removal or disposal of the Building at the termination of the MWA Agreement. If the Building Cities are unable to find an alternative location to move the Building, the Building will be sold and the proceeds divided among the Building Cities on the basis of their proportionate share in the Building as set forth above. If a Building City withdraws from the Agreement pursuant to Article 11 herein, it shall forfeit its proportionate share of any sale proceeds. If no buyer can be found for the Building, the Urbandale Director of Engineering and Public Works shall cause the removal and disposal of the Building and the costs of such removal and disposal shall be paid by the Building Cities based upon their proportionate share in the Building as set forth above. If the MWA Agreement is extended and any City withdraws during the Renewal Term, the proportionate share of the Building Cities shall be reallocated pursuant to Article 11.

## ARTICLE 10 INDEMNIFICATION

### Section 10.01 Indemnification Requirements

No party to this Agreement shall, by reason of this Agreement, be obligated to defend, hold harmless or indemnify any other party to this Agreement from any liability to third-parties; or from and against any liability, loss, damage, claim or lawsuit asserted against any or all parties to this Agreement, that arises out of or is in any way connected with this Agreement.

## Section 10.02 Mutual Waiver of Subrogation

Except for and to the extent that Article 4 of this Agreement obligates each party to this Agreement to pay for damage to property, each party to this Agreement agrees to the following mutual waiver of subrogation. To the extent permitted by law, each party to this Agreement hereby releases all other parties to this Agreement, including all elected and appointed officials, agents, employees and volunteers and other working on behalf of any party to this Agreement, from and against any and all liability or responsibility to all other parties to this Agreement or anyone claiming through or under any party to this Agreement by way of subrogation or otherwise, for any loss or damage to property caused by fire or any other casualty, and any loss due to liability or occupational injury. This provision shall be applicable and in full force and effect only with respect to loss or damage arising out of and occurring during the time of this Agreement.

## ARTICLE 11 RESTRICTION ON WITHDRAWAL BY CITIES

If one of Cities desires to withdrawal or terminate its obligations under this Agreement, it shall be deemed to have forfeited all right, title, ownership and interest in the Facility and shall have no further interest or responsibility under this Agreement. The City withdrawing shall have no further right to store Salt in the Building and shall have no further right to use the Facility. The ownership interest in the Building of the City withdrawing shall revert to the remaining Cities and shall be divided between the remaining Cities based upon their proportionate share of Allocated Salt Storage Capacity. The costs and fees of this Agreement shall then be reallocated between the remaining Cities as set forth by written notice by the Urbandale Director of Engineering and Public Works.

## ARTICLE 12 AUDIT

Any of the Cities may, by notice in writing, request access to the City of Urbandale's records for purposes of conducting an independent audit of the costs and expenses included in the Maintenance Fees and charges paid by the Cities to Urbandale. Such notice shall identify the records sought for audit. The City of Urbandale will provide access to the records within thirty days after receipt of the audit request. Such audit will be conducted by a certified public accounting firm retained by the Party requesting the audit and will be at that Party's expense. Upon receipt of its audit, if the Party having requested and paid for the audit takes exception to or objects to the manner in which the City of Urbandale carries out its fiduciary responsibilities under this Agreement, the Party having requested the audit shall provide a copy of the audit and its exception or objections to the City of Urbandale and all other Parties to this Agreement. In the event that the exception(s) taken or objection(s) raised by the Party having requested the audit, or by any other Party to this Agreement after having received a copy of the audit, results in a dispute with the City of Urbandale, all Parties to this Agreement agree that any such dispute shall be subject to and shall be resolved through binding arbitration as provided for in Article 13 herein.

ARTICLE 13  
USE OF EXCESS STORAGE CAPACITY

In the event there is excess capacity in the building, the Cities may agree to allow outside public entities to store salt in the facility. The rate must be agreed upon by the Cities. The outside entities would be permitted to store salt in the Building on a first come first serve basis. Permission to store salt in the Building is not guaranteed to any duration of time. That entity can be ordered to remove salt from the Building at any time. Said proceeds shall be placed in the Maintenance account by the Urbandale Director of Engineering and Public Works.

If an individual City has excess capacity, they are free to allow outside public entities to use their capacity and a rate they determine. No private companies will be allowed to utilize the facility.

ARTICLE 14  
GENERAL PROVISIONS

Section 14.01 Notices and Invoices

All notices which the Parties are authorized or required to give one another pursuant to this Agreement, and all invoices, shall be in writing and may be personally delivered or sent by ordinary mail to the addresses hereafter provided. Mailed notices or invoice shall be deemed to be received by the Party to who directed when they are postmarked. Such notices and invoices shall be delivered or mailed to the following persons at the addresses listed:

Public Works Director  
City of Urbandale  
3600 86<sup>th</sup> Street  
Urbandale, IA 50322

Public Works Director  
City of Johnston  
6221 Merle Hay Road  
P.O. Box 410  
Johnston, IA 50131

Public Works Director  
City of Clive  
1900 NW 114<sup>th</sup> Street  
Clive, IA 50325-77077

Public Works Director  
City of Windsor Heights  
1133 66<sup>th</sup> Street  
Windsor Heights, IA 50311

Public Works Director  
City of Waukee  
805 University Ave.  
Waukee, IA 50263

Public Works Director  
City of Grimes  
101 N Harvey Street  
Grimes, IA 50111

Public Works Director  
City of Pleasant Hill  
5160 Maple Drive  
Pleasant Hill, IA 50327

#### Section 14.02 Amendment of Agreement

This Agreement may be amended only by written agreement signed by all Parties.

#### Section 14.03 Assignment of Agreement

No Party may assign this Agreement to a third party.

#### Section 14.04 No Third Party Beneficiaries

Nothing in this Agreement shall be construed to create in any third party, or in favor of any third party, any right(s), license(s) or privilege(s).

#### Section 14.05 Severability

If any section, provision or part of this Agreement shall be found to be invalid or unconstitutional, such finding shall not affect the validity of the Agreement as a whole or any section, provision or part thereof not found to be invalid or unconstitutional.

#### Section 14.06 Governing Law; Jurisdiction

This Agreement shall be governed by and interpreted in accordance with the laws of the State of Iowa. Lawsuits brought by any Party in connection with this Agreement shall be heard and tried in Polk County District Court, Des Moines, Iowa.

#### Section 14.07 Entire Agreement and Cities

Any subsequent change or modification to the terms of this Agreement shall be in the form of a duly executed addendum to this Agreement.

#### Section 14.08 Execution of Agreement

This Agreement shall be executed in eight (8) counterparts, each of which so executed shall be deemed to be an original. Each City shall become a party hereto by the passage of a resolution approving this Agreement and execution of the same by its statutory officers. This Agreement becomes effective only on the Effective Date.

Each City approving this Agreement shall execute the separate signature pages provided for it, and the parties hereto authorize the City Clerk of the Urbandale to assemble the signature pages and append same to copies of this Agreement, to file the Agreement with the Secretary of State.

**WINDSOR HEIGHTS, IOWA**

By\_\_\_\_\_

Attest:

\_\_\_\_\_

STATE OF IOWA                    )  
  ) ss:  
COUNTY OF POLK                )

On this \_\_\_\_\_ day of \_\_\_\_\_, 2020, before me, the undersigned, a Notary Public in and for the State of Iowa, personally appeared \_\_\_\_\_ and \_\_\_\_\_, to me personally known, and who, being by me duly sworn, did say that they are Mayor and City Clerk, respectively of the \_\_\_\_\_; that the seal affixed to the foregoing instrument is the corporate seal of the corporation, and that the instrument was signed and sealed on behalf of the corporation, by authority of its City Council, as contained in (Ordinance No. \_\_\_\_\_ passed) (the Resolution adopted) by the City Council, under Roll Call No. \_\_\_\_\_ of the City Council on the \_\_\_\_ day of \_\_\_\_\_, 2008, and that \_\_\_\_\_ and \_\_\_\_\_ Acknowledged the execution of the instrument to be their voluntary act and deed and the voluntary act and deed of the corporation by it voluntarily executed.

\_\_\_\_\_  
Notary Public in and for the State of Iowa



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM:

SUBJECT: Consideration of 28E Agreement on Crossing Guards at 73rd and Hickman

**GENERAL INFORMATION**

**SUMMARY**

**ATTACHMENTS**

1. 2020 07 06 Urbandale WDMCS 28E Crossing Guards at 73 Hickman
2. Urbandale School Crossing Guard 28E

ITEM # \_\_\_\_\_  
DATE: July 6, 2020

### **COUNCIL ACTION FORM**

**AGENDA ITEM: CONSIDER APPROVAL OF 28E AGREEMENT WITH THE CITY OF URBANDALE AND THE WEST DES MOINES COMMUNITY SCHOOLS (WDMCS) TO CONTRACT SCHOOL CROSSING GUARD SERVICES AT 73<sup>RD</sup> AND HICKMAN THROUGH ALL CITY MANAGEMENT SERVICES (ACMS) IN AN AMOUNT NOT TO EXCEED \$2,750.00 ANNUALLY.**

#### **HISTORY:**

On December 28, 2011, the City of Windsor Heights entered into a 28E Agreement with the City of Urbandale to provide funding for school crossing guards at 73<sup>rd</sup> and Hickman, serving the Clive Learning Academy location in Windsor Heights. The original agreement allotted 2 hours per day and assigned 25% of the eligible program expenses to the City of Windsor Heights. The remaining 75% of the program costs were split between the City of Urbandale (25%) and the West Des Moines Community Schools (50%).

As you may recall, in May of 2019 the City of Windsor Heights entered into a 28E agreement with West Des Moines Community Schools (WDMCS) to contract school crossing guard services at Clive Learning Academy through All City Management Services (ACMS). This agreement resulted in ACMS taking over management of the crossing guard position and cost sharing between the City of Windsor Heights and the WDMCS at a rate of 50%/50%.

The City of Urbandale is now proposing a similar arrangement for the crossing guard location at 73<sup>rd</sup> and Hickman. The City of Windsor Heights would remain responsible for 25% of the costs, the City of Urbandale would be responsible for 25%, and the WDMCS would be responsible for the remaining 50%. Other than the financial responsibility, the agreement is very similar to the current agreement between WDMCS and the City of Windsor Heights.

In June of 2019, the City of Windsor Heights paid \$1,914.67 to the City of Urbandale for our share of the 73<sup>rd</sup> and Hickman crossing guard agreement. In May of 2020, we paid the City of Urbandale \$1,642.39 for our portion of the agreement.

The proposed 28E allows for the City of Windsor Heights to remain at the 25% financial responsibility level, with a total cost to the City of Windsor Heights not to exceed \$2,705.50 annually. This is based on an hourly rate in the agreement of \$30.23, a minimum of 2-hours per day, and a projected 358 total hours. While this amount is higher than the actual costs paid over the past two years, the agreement includes training, hiring, management, and equipment for the crossing guards. In the past, any expenses outside of hourly wages were also split among the three entities at the percentages noted above.

The approved FY21 budget included \$2,000.00 for this expense, however any costs in excess of \$2,000, up to the maximum of \$2,705.50, could be absorbed into the approved FY21 budget without the need for a budget amendment.

As such, Chief McCluskey would recommend approval of the 28E Agreement with the City of Urbandale and the West Des Moines Community Schools to contract the 73<sup>rd</sup> and Hickman school crossing guard positions through All City Management Services.

**IOWA CODE CHAPTER 28E AGREEMENT BETWEEN THE CITY OF URBANDALE, THE CITY OF WINDSOR HEIGHTS, AND THE WEST DES MOINES COMMUNITY SCHOOL DISTRICT FOR THE PROVISION OF SCHOOL CROSSING GUARD SERVICES**

This Agreement is made pursuant to Iowa Code Chapter 28E for the provision of school crossing guard services by and between the city of Urbandale and the city of Windsor Heights, municipal corporations organized under the laws of the state of Iowa (hereinafter "Urbandale" and "Windsor Heights," respectively, collectively the "Cities") and the West Des Moines Community School District, organized under the laws of the state of Iowa (hereinafter "WDMCSD" or the "District").

WHEREAS, Urbandale, through the Urbandale Police Department, has maintained a long-standing collaboration with WDMCSD for the provision of and payment for school crossing guard services; and

WHEREAS, WDMCSD and Windsor Heights have an existing agreement for the provision by WDMCSD of school crossing guard services for a school crossing located in the city of Urbandale; and

WHEREAS, Urbandale, Windsor Heights and the WDMCSD seek to engage a private company to provide school crossing guard services for public school crossings located in the cities of Urbandale and Windsor Heights; and

WHEREAS, Windsor Heights and WDMCSD have determined that it would be beneficial for the city of Urbandale, through the Urbandale Police Department, to execute and act as administrator of a contract with a qualified private company selected by Urbandale and WDMCSD; and

WHEREAS, All City Management Services (hereinafter "ACMS") is a private company with expertise in the provision of school crossing guard services, including the provision of all necessary training and equipment for those services; and

WHEREAS, the parties have determined that ACMS is a sole source provider of school crossing guard services and that its selection is consistent with the purchasing policies of the state of Iowa, the cities of Windsor Heights and Urbandale and WDMCSD; and

WHEREAS, in anticipation of executing a contract between Urbandale and ACMS for the provision of school crossing guard services to WDMCSD, the parties seek to set forth the terms and conditions of an agreement to allow Urbandale to administer the contract with ACMS on behalf of WDMCSD and Windsor Heights.

THEREFORE, THE PURPOSE OF THIS AGREEMENT is to exercise the joint and cooperative powers, privileges and authority of the parties granted by Iowa Code Chapter 28E to enable the parties to provide for the pedestrian safety of school children in the West Des Moines Community School District by engaging the services of ACMS for the provision of school crossing guard services.

## I. SCHOOL CROSSING GUARD SERVICES

In recognition of the need for school crossing guard services by the West Des Moines Community School District, the parties have agreed that the services provided by ACMS, as further described in Attachment 1, "All City Management Services, *Program Summary, Recruitment, and Staffing and Training*" will address that need by providing for the pedestrian safety of school children in the District. The parties further agree that Urbandale should enter into and administer a contract with ACMS, with the understanding that Windsor Heights and WDMCSD, as beneficiaries of the contract, will pay a proportionate share for the services received from ACMS.

In performance of the services, ACMS shall provide crossing guards at all school crossings designated by WDMCSD, including the existing school crossing located in the city of Windsor Heights. The number and location of school crossings in which ACMS provides services may increase or decrease as determined by WDMCSD, upon prior approval of the Cities. As beneficiaries of the services, WDMCSD and Windsor Heights agree to make payment for the additional services as provided in Section II (A), below.

As provided in the contract to be executed by Urbandale and ACMS, the parties acknowledge and agree that ACMS is an independent contractor and that its employees and representatives are not employees of Windsor Heights, Urbandale or WDMCSD. As an independent contractor, ACMS is solely responsible for payment of salaries, wages, payroll taxes, unemployment benefits or any other form of compensation or benefit to ACMS or ACMS's employees, representatives or other personnel performing the services described on Attachment 1, whether it be of a direct or indirect nature. Further, it is expressly understood and agreed that for such purposes, neither ACMS or the employees, representatives or other personnel of ACMS are entitled to any Urbandale, Windsor Heights or WDMCSD payroll, insurance, unemployment, worker's compensation, retirement, or any other benefits whatsoever.

## II. COST, PAYMENT, AND ADMINISTRATION

### A. Cost and Payment

The cost of the school crossing guard services provided by ACMS shall be the amount as shown on the "Proposed Hourly Rate" in the ACMS contract attached hereto as Exhibit 2. The City of Windsor Heights agrees that rates charged by ACMS may increase, and that Urbandale, as administrator, may negotiate future rate changes, with all increases to be effective upon mutual agreement of the parties.

The City of Windsor Heights agrees that the obligation for and payment to ACMS for the school crossing guard services shall be as follows:

- 1) The school crossing guard services provided by ACMS are for the existing school-crossing located at the 73rd Street and Hickman Road related to Clive Learning Academy, located in the 1600 block of 73rd Street, Windsor Heights. Windsor Heights shall be responsible for and pay twenty-five percent (25%) of all costs for school crossing guard services provided by ACMS for the 73rd and Hickman location, and any additional future school crossings located in the city of Windsor Heights as agreed upon by all parties. The City of Windsor Heights shall have no responsibility for the cost of or payment for school crossing guard services provided in any city other than the City of Windsor Heights.
- 2) Urbandale shall be responsible for and pay twenty-five (25%) of all costs for the school crossing guard services provided by ACMS for the existing and future school-crossings located in the city of Urbandale. Urbandale shall have no responsibility for the cost of or payment for school crossing guard services provided in any city other than the city of Urbandale.
- 3) WDMCSD, and the Cities of Urbandale and Windsor Heights agree to pay ACMS for the Services rendered pursuant to this Agreement the sum of Thirty Dollars and Twenty-three Cents (**\$30.23**) per hour, per Crossing Guard during the term. Based on a minimum of one (1) site the Contractor shall bill a minimum of 2.0 hours per day, per Crossing Guard, unless Contractor fails to perform service. Based upon a projected (358) hours of service the cost shall not exceed Ten Thousand, Eight Hundred and Twenty Two Dollars (\$10,822.00) per year.

B. Administration-No Separate Legal Entity.

No separate legal or administrative entity or joint board shall be established. Urbandale, through the Urbandale Police Department, shall serve as administrator of the contract executed by Urbandale and ACMS and shall contribute a proportionate share of the costs of services provided by ACMS to WDMCSD as set forth in Section II (A) of this Agreement, above. Urbandale shall have no responsibility or obligation for payment to ACMS or any party to this Agreement for services provided by ACMS in the city of Windsor Heights.

As administrator, the responsibilities of Urbandale shall be as follows:

- 1) Negotiate and execute a contract with ACMS following review and approval by WDMCSD for the provision of school crossing guard services in the cities of Urbandale and Windsor Heights. Additional crossings may be added as determined by WDMCSD upon mutual agreement of the Cities and WDMCSD.
- 2) Payment for eligible program services received from ACMS to WDMCSD shall be made to Urbandale quarterly. Urbandale shall invoice WDMCSD no later than April 10, July 10, October 10 and January 10 for payment for services provided in the preceding quarter. WDMCSD shall remit payment of the amount invoiced to Urbandale no later than May 10, August 10, November 10 and February 10 for services provided in the preceding quarter.

### III. INDEMNIFICATION AND HOLD HARMLESS

To the greatest extent allowed by law, each party to this Agreement will indemnify and hold the other party or parties to this Agreement, their officials, agents, employees and contractors harmless from and against any and all losses, costs, damages and expenses, including reasonable attorney fees and expenses, related to or arising from the indemnifying party's negligent or willful misconduct in the performance of its duties under this Agreement.

### IV. TERMINATION, DISPOSITION OF PROPERTY, AND NOTICE

#### A. Termination.

This Agreement shall remain in full force and effect and run concurrently with the timelines provided in the contract by and between the Urbandale and ACMS. Any party may, however, terminate this Agreement by giving written notice to the non-terminating parties no later than May 1, with termination to be effective July 1 of that year.

#### B. Property Disposition.

Upon termination of this Agreement, all property and assets, if any, shall be distributed to the party which purchased the property and assets, and if jointly purchased, shall be distributed after payment of liabilities so that each party receives its share in proportion to its contribution. If agreement cannot be reached regarding disposition, the property or assets may be sold and the proceeds distributed based upon the cost sharing percentages provided by this Agreement.

#### C. Notice.

1. All notices under this Agreement shall be in writing and are deemed as given when deposited in the United States Post Office.

Notice to the City of Urbandale shall be addressed to Chief of Police, City of Urbandale, 3740 NW 86th Street, Urbandale, Iowa 50322.

Notice to the City of Windsor Heights shall be addressed to the Chief of Police, City of Windsor Heights, 1133 66th Street, Windsor Heights, Iowa 50324.

Notice to the West Des Moines Community School District shall be addressed to Superintendent of Schools, West Des Moines Community School District, 3550 Mills Civic Parkway, West Des Moines, Iowa 50265-5556.

If during the term of this Agreement any party changes the address of the above contact persons, it shall notify all other parties of the new address.

V. AMENDMENT

This Agreement may be supplemented or amended by mutual agreement of the parties after approval by their respective governing bodies.

VI. BINDING EFFECT- NO THIRD-PARTY BENEFICIARIES

This Agreement shall be binding upon and inure to the benefit of each party and each party's successors and assigns. However, there are no third-party beneficiaries to the Agreement, which is intended to only benefit the cities of Urbandale and Windsor Heights and the West Des Moines Community School District.

VII. EXECUTION IN COUNTERPARTS

This Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

VIII. SEVERABILITY

If any clause, provision or section of this Agreement shall for any reason be held illegal or invalid by any court, the illegality or invalidity of such clause, provision or section shall not affect any of the remaining clauses, provisions or sections, and this Agreement shall be construed and enforced as if such illegal or invalid clause, provision or section had not been contained

IX. ENTIRE AGREEMENT

This Agreement supersedes all prior agreements, including but not limited to the *28E Agreement to Provide A School Crossing Guard Program between WDMCSD and Windsor Heights* approved June, 2020.

X. APPROVAL

This Agreement shall be approved by the respective governing bodies of the cities of Urbandale and Windsor Heights and the West Des Moines Community School District. Upon approval by each party the Agreement shall be filed in the Office of the Iowa Secretary of State as provided by Iowa Code Section 28E.8. The Agreement will be in effect upon the completion of such filings.

**IN WITNESS WHEREOF**, the City of Urbandale, the City of Windsor Heights and the West Des Moines Community School District have caused this Agreement to be executed in three (3) counterparts, each of which shall be considered an original as of this \_\_\_\_ day of July, 2020.

CITY OF URBANDALE

City of Windsor Heights, Iowa

By:

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

Attest: \_\_\_\_\_  
City Clerk



ALL CITY MANAGEMENT SERVICES

## Program Summary

The privatization and management of a School Crossing Guard program involves several functions. The following is a summary of our general operational plan for initiating and managing a School Crossing Guard Program. Specifically we will address our **orientation, training, recruitment** and **staffing** plan for Crossing Guard Programs.

In assuming control of a Crossing Guard Program we first set-up an **orientation and training** meeting. Our goal in pricing the program is typically to incorporate the existing Crossing Guards into our organization. The current Crossing Guards' experience and familiarity are the cornerstones in ensuring a seamless transition. However, often rumors and inaccurate information circulate among existing Crossing Guards as we transition from public to private management. The orientation and training meeting will be the first opportunity we have to meet the new and prospective employees collectively and address the issues, concerns or questions they may have.

During this orientation we will discuss, our company history, our family of Crossing Guard programs and the impending transition in the management of the Crossing Guard Program. We will spend as much time as necessary to address the issues and questions raised by all prospective employees.

After the initial orientation we distribute and assist in the completion of all ACMS employment forms. Once all employment forms have been collected we proceed with a training session for all current and prospective Crossing Guards.

**Training-** Training has been a cornerstone in the development and expansion of ACMS. We continue to learn and to incorporate new methods and standards of training into our organization. Our goal has been to elevate the level of and accountability for training throughout our organization. We continue to revise and update our training program, procedures and monitor our results.

Our training begins by giving all Crossing Guards a clear understanding of the goals, expectations and responsibilities of a School Crossing Guard. To that end, we have consolidated over 25 years of experiences and information into our "**Employee Handbook for School Crossing Guards**". This manual informs and instructs Crossing Guards on a variety of issues including personal conduct, crossing procedures, professional responsibility, emergency procedures, training requirements and problem resolution. Each new and prospective Crossing Guard is issued the handbook to begin the training portion of the meeting.

## Recruitment and Staffing

ACMS will offer existing Crossing Guard staff continued employment at their assigned sites. Managers would assess additional **staffing** needs of the program after meeting with your agency and again following our initial **Orientation and Training Meeting**.

Our goal in this orientation meeting is to incorporate the existing Crossing Guards into our organization. During this orientation we will discuss; our company history, our family of Crossing Guard programs and the impending transition in the management of the program. We will spend as much time as necessary to address the issues and questions raised by all prospective employees.

We would then focus further recruitment efforts in the geographical areas where additional Crossing Guards will be needed.

We have developed a comprehensive plan for **recruitment** of new Crossing Guards. As a part of our Staffing strategy we encourage a very aggressive recruitment program. We utilize soft advertising, local media advertising, targeted flyers, on-site solicitation, school flyers and employee referral bonuses as parts of our overall recruitment strategy. We often work closely with school districts in some of our recruitment drives.

Our ability to effectively staff a Crossing Guard Program remains a fundamental benefit that ACMS brings to most Crossing Guard Programs. Staffing sites is one of the primary responsibilities of the Area Supervisors. They are trained to continuously recruit and train prospective Crossing Guards. New recruits are first processed and submitted to the Department of Justice for background clearance.

Supervisors are also responsible for coordinating the staffing for all sites under their supervision. As part of our staffing strategy Area Supervisors aggressively enforce the following policies and procedures for Crossing Guards.

- + Supervisors must maintain an adequate alternate or substitute guard roster. We encourage at least a 5 to 1 ratio of sites versus alternate guards
- + We require any guard not reporting for duty to notify the Area Supervisor as early as possible utilizing our 24/7 Guard Hotline or directly notifying their Area Supervisor.

Notifications less than 1 hour prior to shift starts are considered unexcused absences.

- Our employee policy is "No call. No show. No Job" Throughout our training we emphasize the importance of insuring the safety of children by our presence. As such, we cannot allow the children's safety to be compromised by failing to call or show for duty.

## Training

Effective initial and ongoing training is essential in a profession dedicated to the safety of children. With over 30 years of experience and a commitment to working cooperatively with other public safety professionals, ACMS is recognized as an industry leader in the development and implementation of School Crossing Guard training and standards of excellence.

The process begins during the first contact with a potential employee when our phone interview process outlines job expectations and our zero tolerance policy for failure to report for a scheduled shift. Throughout the application process prospective employees are reminded about the critical nature of our assignments and the work ethic and integrity required of our employees.

Once hired, the training process starts in the classroom where employees review sections of the *"Employee Handbook for School Crossing Guards"* and are shown the professionally produced training DVD, "Crossing Guard Safety". The process then moves to a field practicum where the trainer demonstrates proper procedures and allows the employee to practice correct techniques. The employee's progress is closely noted on the detailed steps outlined on the Field Training Check List to ensure the employees' field competence. This cross-modality approach not only exposes the employee to the necessary training components but also addresses the needs of the visual, auditory and kinesthetic learner. While the classroom setting is expected to require approximately two to three hours and the field training approximately two-to-four hours, it's important to note that the low ratio of students to trainer allows for accurate assessments of the employees readiness to move forward.

The new employee is typically assigned to alternate work and closely supervised during their early assignments. They benefit from their trainer completing of a written assessment of their work which better allows them to understand their strengths and weakness and make improvements where necessary (the Site Performance Evaluation). Additionally, all new employees are required to carry and regularly refer to the Field Training Cards. This pocket-sized card (listing all steps for a safe cross) allows the employee to self-evaluate their performance prior to the time they have all steps of the procedures memorized.

Throughout their employment, employees are subjected to the same Site Performance Evaluation as an ongoing training and assessment tool. These evaluations happen in both side-by-side sessions as well as unannounced observations without the knowledge of the employee.

The standard issue equipment and clothing includes:

- ANSI II compliant high-visibility retro-reflective vest marked with the required insignia of a Crossing Guard
- MUTCD compliant 18" STOP/STOP paddle
- Picture Identification Card with emergency contact information
- Company-issued cap or visor with corporate logo
- Whistle for emergency alert to vehicles and pedestrians
- High-visibility ANSI II compliant wind-breaker jacket and or rain coat

A designated Trainer will oversee this initial training session. They will do active demonstrations, encourage participation and possibly show a training video. Our training goal for this meeting will be to consolidate our fundamental procedures and policies into a three (3) hour time slot. During this initial orientation/training meeting we will focus on key sections of the Employee Handbook including personal conduct, techniques and policies.

Another effective training tool we will use during this session is our **Field Training Card**. The Field Training Card is a pocket size instruction card which gives step by step instruction on our crossing procedures.

At the conclusion of the training portion of this meeting we will: 1. Review all work schedules with the current Crossing Guards. 2. Issue equipment to all current Crossing Guards. 3. Process and issue Picture ID Cards 4. Provide Supervisory contact information to all Crossing Guards. 5. Further screen and work with all prospective Crossing Guards. 6. Interview prospective Supervisors.

From this point forward, training is an ongoing process for all Crossing Guards employed by ACMS. In addition to the normal site visits by the Area Supervisor, all employees receive a follow-up **Site Performance Evaluation** 30 to 60 days after their initial employment.

The Supervisor conducts Site Performance Evaluations at the intersection the Crossing Guard normally works. Each Crossing Guard is given a "Site Performance Evaluation" during the school year. This evaluation is used as an instructional tool to validate correct procedures and correct inappropriate procedures. Any Crossing Guard receiving a low score on a Site Performance Evaluation are re-evaluated within 30 days.



Exhibit  
"2"

## **ALL CITY MANAGEMENT SERVICES**

### **Proposed Hourly Rate**

As a full service contractor, the hourly rate quoted is a fully loaded rate, meaning all of our costs are included in the proposed hourly billing rate. This would include but be not limited to; recruitment, background clearance, training, equipment, insurance, supervision and management of the Urbandale, IA Crossing Guard Program.

Proposed Hourly Rate: The city of Windsor Heights agree to pay the City of Urbandale twenty-five percent (25%) of costs for Services rendered pursuant to this Agreement, based on the sum of Thirty Dollars and Twenty-three Cents (**\$30.23**) per hour, per Crossing Guard during the term. Based on a minimum of one (1) site the Contractor shall bill a minimum of 2.0 hours per day, per Crossing Guard, unless Contractor fails to perform service. Based upon a projected total of (358) hours of service the total cost shall not exceed Ten Thousand, Eight Hundred and Twenty Two Dollars (\$10,822.00) per year. Thereby the City of Windsor Heights responsibility shall not exceed \$2,705.50 per year.

WDMCSD shall be responsible for and pay fifty percent (50%) of all costs for the school crossing guard services.

Windsor Heights shall be responsible for and pay twenty-five percent (25%) of all costs for the school crossing guard services provided by ACMS for the existing crossing location at 73<sup>rd</sup> and Hickman, and future school crossings located in the city of Windsor Heights as approved by the City of Windsor Heights.

Urbandale shall be responsible for and pay fifty percent (25%) of all costs for the school crossing guard services provided by ACMS for the existing and future school crossings located in the city of Urbandale.

Invoices for services are mailed every two weeks. Included with each invoice is a Work Summary, which details each site, each day and the hours worked at that site. Urbandale would only be billed for Crossing Guard services rendered on designated "school days" unless otherwise requested by the City.

The hourly rate does not include additional safety equipment, crosswalk delineators, cones or safety devices. If the City should desire any such additional equipment the additional cost would be billed to the City.

## ACMS Contact Information

Business Address:

10440 Pioneer Blvd, Suite 5 Santa Fe Springs, CA 90670

Phone number: 310.202.8284 or 800.540.9290      Fax number: 310.202.8325

Website address:

[www.thecrossingguardcompany.com](http://www.thecrossingguardcompany.com)

24 Hour Emergency Dispatch:

877.363.2267

General Manager: Baron Farwell:

[baron@thecrossingguardcompany.com](mailto:baron@thecrossingguardcompany.com)

Vice President of Operations: Patricia Pohl:

[pat@thecrossingguardcompany.com](mailto:pat@thecrossingguardcompany.com)

Director of Marketing: Harlan Sims:

[harlan@thecrossingguardcompany.com](mailto:harlan@thecrossingguardcompany.com)

This pricing is valid for a period of 90  
days.



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM: Whitney Tucker

SUBJECT: Consideration of Resolution No. 2020-91 - A Resolution Approving Community Center Individual Refund Requests

**GENERAL INFORMATION**

Consideration of reimbursements for Community Center Rentals outside of the approved refund time frame.

**SUMMARY**

At the 18 May 2020 City Council meeting, Council voted to approve Resolution No. 2020-74 extending the Temporary Policy for Community Center Rental Reimbursements as a Result of the COVID-19 pandemic.

This Resolution approved the complete closure of the Community Center from May 31st until June 15th. The Resolution also allowed for the reimbursement of fees for rentals scheduled during that time frame and allowed renters for events scheduled between June 15th and July 15th to voluntarily cancel their events and receive a full refund.

At the 1 June 2020 City Council meeting, the Council voted to not approve Resolution No. 2020-76, which would extend the closure and refund period for the Community Center, but to hear refund requests due to COVID-19 on a case by case basis.

Zeare Renfro has rented the Community Center for 7/18/20. She is requesting a refund because her family is spread out and is unable to travel and attend her wedding due to concerns over COVID-19. She has paid her deposit of \$1,087.50.

Elizabeth Kluesner originally rented the Community Center for 5/15/20 and then chose to reschedule to 7/26/20 because the Community Center was closed due to COVID-19. Now she would like a refund for her son's graduation party because she believes people will not attend the party due to COVID-19. She has paid her deposit of \$225.

Mandatory closure of the Community Center from March 15th through June 15th and full refund of fees associated with the closure resulted in reimbursements totaling in \$23,795.63.

**ATTACHMENTS**

1. Resolution No. 2020-91- CEC Refund Requests
2. 7-18-20 Refund Letter Renfro
3. 7-26-20 Refund Letter Kluesner
4. 8-12-20 Refund Letter Christ Community Church

**RESOLUTION 2020-91**

**A RESOLUTION ALLOWING THE REFUND FOR THE 7/18/20 RENTAL OF THE  
COMMUNITY CENTER DUE TO COVID-19 CONCERNS.**

WHEREAS, the City Council decided to open the Community Center as of 6/16/20

WHEREAS, the City Council agreed to hear individual renters requests for refunds due to  
COVID-19

WHEREAS, the WHO has named COVID-19 a pandemic;

WHEREAS, the CDC said medium-sized in-person gatherings that are adapted to allow  
individuals to remain spaced at least 6 feet apart with attendees coming from  
outside the local area have a higher risk of spreading COVID-19

WHEREAS, Zeare Renfro has rented the Community Center for 7/18/20 and is requesting a refund  
of her \$1087.50 deposit.

WHEREAS, Elizabeth Kluesner originally rented the Community Center for 5/15/20 and then chose  
to reschedule to 7/26/20 because the Community Center was closed due to COVID-19 and  
is requesting a refund of her \$225 deposit.

WHEREAS, Christ Community Church has a multi-date rental for 6/10/20, 7/15/20, and 8/12/20  
and is requesting a refund of their \$100 deposit.

WHEREAS, Mandatory closure of the Community Center from March 15<sup>th</sup> through June 15<sup>th</sup> and  
full refund of fees associated with the closure resulted in reimbursements totaling in  
**\$23,795.63.**

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF  
WINDSOR HEIGHTS, IOWA, THAT THE ATTACHED REFUNDS ARE APPROVED.

PASSED and approved this **6th day of July 2020** by the City Council of the City of  
Windsor Heights, Iowa.

\_\_\_\_\_  
Dave Burgess, Mayor

ATTEST:

\_\_\_\_\_  
Travis Cooke, City Clerk



May 27th, 2020

On May 18th, 2020 the Windsor Heights City Council approved Resolution No. 2020-74 to close the Windsor Heights Community Events Center effective until June 15th, 2020 as a result of the coronavirus pandemic. This resolution also allows for the optional cancellation of events scheduled between June 15th, 2020 and July 15th, 2020 due to the uncertainty created by the coronavirus situation. The Council approved full refund of fees that had already been paid for the rental of the facility during these time frames.

**Zeare Renfro's event is scheduled for 7/18/20. She paid her deposit of \$1087.50 with a credit card on 7/10/19. She is requesting a refund because her family is spread out and are unable to travel and attend her wedding due to COVID-19.**

**Please issue a refund amount of \$1087.50 to Zeare Renfro. A check can be mailed to the address below:**

**Zeare Renfro  
1414 Idaho St  
Des Moines, IA 50316**

Thank you,

Dalton Jacobus  
Public Works Director  
City of Windsor Heights  
1145 66<sup>th</sup> Street, Suite 1, Windsor Heights, IA 50324  
[djacobus@windsorheights.org](mailto:djacobus@windsorheights.org)  
515-645-6825



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May 27th, 2020

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Elizabeth Kluesner's event was originally scheduled for 5/15/20 and then she chose to reschedule to 7/26/20. She paid her deposit of \$225 with a check on 5/3/19. She is asking for a refund due to concerns that people would not attend her son's graduation party due to COVID-19.

Please issue a refund amount of \$225 to Elizabeth Kluesner. A check can be mailed to the address below:

Elizabeth Kluesner  
1615 59<sup>th</sup> St  
Des Moines, IA 50322

Thank you,

Dalton Jacobus  
Public Works Director  
City of Windsor Heights  
1145 66<sup>th</sup> Street, Suite 1, Windsor Heights, IA 50324  
[djacobus@windsorheights.org](mailto:djacobus@windsorheights.org)  
515-645-6825



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Christ Community Church had events scheduled on 6/10/20, 7/15/20, and 8/12/20. They paid their \$100 deposit for the three events on 1/24/20 by credit card. They are asking for a refund because they don't feel that it is safe for their congregation to meet as a large group due to COVID-19.

Please issue a refund amount of \$100 to Val Thompson. A check can be mailed to the address below:

Christ Community Church  
Attn: Val Thompson  
5101 Grand Ave  
Des Moines, IA 50312

Thank you,

Dalton Jacobus  
Public Works Director  
City of Windsor Heights  
1145 66<sup>th</sup> Street, Suite 1, Windsor Heights, IA 50324  
[djacobus@windsorheights.org](mailto:djacobus@windsorheights.org)

515-645-6825



**STAFF REPORT  
CITY COUNCIL**

July 6, 2020

TO: CITY COUNCIL

FROM:

SUBJECT: Interim City Administrator Report

**GENERAL INFORMATION**

**SUMMARY**

**ATTACHMENTS**

None