

11. Review and consideration of chemical treatment of Well #8 well column
12. Review and consideration of parking along East Avenue at Northern Hills School and addition of median along East Avenue
13. Update from Sustainable La Crosse Commission
14. Review and consideration of 2019 Utility Project Change Order #1
15. Pay Estimates: Strand Associates, Short Elliot Hendrickson Inc., Mathy Construction, Gerke Excavating, Davy Engineering, MSA Professional service, Olympic Builders, Fowler and Hammer, A-1 Excavating, HSR Associates, Americon, and any other contractor/developer
16. Adjournment

STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#4

Project/Item Name:

3rd Avenue North Parking

Location:

301 Main Street

Requested Action:

Discussion on parking

Staff Report/Description:

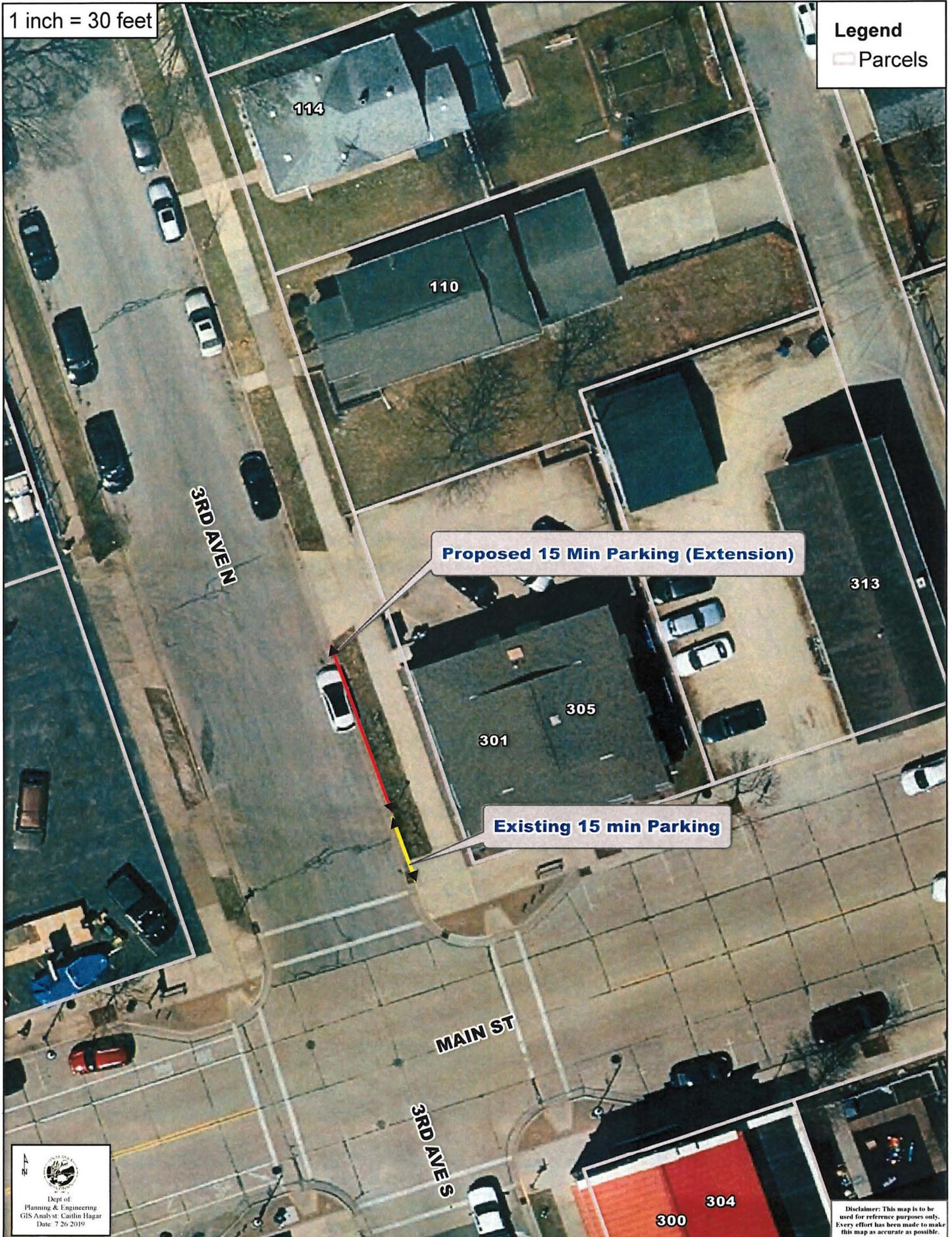
The owner of 301 Main Street is requesting extension of the current 15 minute loading zone along 3rd Avenue North. Currently the loading zone accommodates one car and he is requesting the extending to the driveway opening increasing to three cars. I have attached the minutes form the July meeting where the owner and a tenant offered comment on the subject.

Attachments:

Map and minutes

1 inch = 30 feet

Legend
□ Parcels



Dept of
Planning & Engineering
GIS Analyst: Caitlin Hagar
Date: 7/26/2019

Disclaimer: This map is to be used for reference purposes only. Every effort has been made to make this map as accurate as possible.

**Board of Public Works
of the City of Onalaska**

Tuesday, July 2, 2019

1

1 The Meeting of the Board of Public Works of the City of Onalaska was called to order at 6:30
2 p.m. on Tuesday, July 2, 2019. It was noted that the meeting had been announced and a notice
3 posted at City Hall.

4
5 Roll call was taken with the following members present: Mayor Joe Chilsen, Ald. Diane Wulf,
6 Ald. Kim Smith, City Engineer Jarrod Holter, Financial Services Director/Treasurer Fred
7 Buehler

8
9 Also Present: City Administrator Eric Rindfleisch, Ald. Boondi Iyer

10
11 **Item 2 – Approval of minutes from previous meeting**

12
13 Motion by Fred, second by Ald. Wulf, to approve the minutes from the previous meeting as
14 printed and on file in the City Clerk’s Office.

15
16 On voice vote, motion carried.

17
18 **Item 3 – Public Input (limited to 3 minutes/individual)**

19
20 Ald. K. Smith called for anyone wishing to provide public input.

21
22 **Dean Dickinson**

23 **No address given**

24
25 “I own the property at 301 Main Street. We’ve had an ongoing issue with regard to parking and
26 the lack of restriction on parking, both in front of the building on Main Street and on 3rd
27 [Avenue], which is on the west side of the building. It’s been an issue for a couple of years, but
28 it has been exacerbated by David Reay’s Restaurant and the amount of business and parking
29 that’s required for that facility. I have no argument with Dave and Barb [Skogen] and David
30 Reay’s, but I do have an issue with how the parking is being handled. We actually have people
31 coming and parking on the west side of our building, sometimes for hours. Other times there are
32 people in that vicinity who will park there all day long. We had a daycare in part of that building
33 for a while, and Mike Volden ... I wanted to express his concerns, because [parents] couldn’t
34 drop their infants off unless they walked half a block or a block. Sometimes in the winter that
35 was just bad. I am asking for the [Board of] Public Works to consider – especially on the west
36 side of that building – extending the 15-minute parking restriction all the way from the sidewalk
37 to the driveway into the parking lot. Here is a classic example of some of the issues. Today,
38 FedEx made a delivery there and had to double-park on the street. I’ve seen UPS and USPS both
39 double-park on the street because there’s no parking there. I think it would help a lot, both for
40 the businesses that we have in that building, and also maybe for other businesses in the area. I
41 have with me Bruce Barge from Barge Supply, who is one of the tenants in that building. I know

Reviewed 7/8/19 by Kevin Schubert

**Board of Public Works
of the City of Onalaska**

Tuesday, July 2, 2019

2

42 he's expressed himself on many occasions about the issue that's there. With all due respect to
43 [the Board of] Public Works, we just ask that you give some consideration to creating a 15-
44 minute parking zone on the west side of that building. It would help a lot. I know there's no
45 room for discussion [this evening], but there you go. I have addressed my concerns. I think I
46 sent a letter to [Mayor Chilsen], and also to Planning. I didn't understand what the process was,
47 and [I] also [sent a letter] to the Police Department. On occasion, I've called the Police
48 Department and asked them for enforcement. [An officer] came down and wrote a warning
49 ticket on people. That lasts for about one day, and then the next thing you know, people are
50 parking and walking down to David Reay's. Or in the case of some of the businesses on the
51 street, [including] one insurance office, he and his secretary will park there all day long. It just
52 doesn't work, and it's impacting my ability to derive income out of that building. That's part of
53 my retirement plan, and I would just simply point out it's cost me about \$200 a month because I
54 have to get another tenant in there and I have to reduce the rent after I lost the daycare. With all
55 due respect, please give that some consideration. Thank you very much."

56

57 Jarrod noted he had both received correspondence from and spoken with Dean Dickinson, and he
58 told board members this item will be placed on the August 6 Board of Public Works meeting
59 agenda.

60

61 **Bruce Barge, owner of Barge Nutrition & Supply**
62 **305 Main Street**
63 **Onalaska**

64

65 "I just want to say I think it would benefit the whole area there if that was made a 15-minute
66 parking place. It would just make sense to make that a 15-minute parking place there for
67 everybody there. It would make things easier for Pappas, [and] for me for sure. I'm agreeing
68 with Dean 100 percent on everything."

69

70 **Scott Arenz**
71 **1134 Aspen Valley Drive**
72 **Onalaska**

73

74 "I was at the last Common Council meeting [June 11], and a topic of discussion was the
75 sidewalks above and below me and not just my issue that we have with the raising and the
76 lowering of the water that's going underneath the sidewalks for the two houses above me, and
77 the maybe three houses below me. We don't really know what's going on, and I appreciate
78 Jarrod's help in looking into it further because it's going to take more than just one person to do
79 this. Like I said, I replaced the whole sidewalk and the apron on my driveway. I've done some
80 different landscaping there to divert water so it doesn't continue to be a problem. I replaced it
81 six, seven years ago, and I don't want to do it again until the stuff above me is fixed as well.
82 Like I said, I do appreciate Jarrod's help with that and his team looking at it because there

STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#5

Project/Item Name: East Avenue and Riders Club Road
intersection control

Location: East Avenue and Riders Club Road

Requested Action: Discussion on intersection control

Staff Report/Description: During the design phase of the Riders Club Road project, the Consultant designing the project performed an Intersection Control Evaluation for the intersection of Riders Club Road and East Avenue. This evaluation was performed at the request of City staff, as part of the project design, due to the frequent requests for a four way stop at the intersection. The report states that the intersection will operate adequately with a two way stop, as it exists today. The report aslo looked at installation of a roundabout and four way stop at the intersection.

Attachments: Intersection Control Evaluation



Building a Better World
for All of Us[®]

MEMORANDUM

TO: Jarrod Holter, PE

FROM: Short Elliott Hendrickson, Inc.

DATE: November 4, 2016

RE: WisDOT Project I.D. 5991-02-56/57
East Ave N & Riders Club Road Intersection Control Evaluation
Onalaska, La Crosse County

Please find enclosed for your review the Intersection Control Evaluation (ICE) for the intersection of East Avenue N and Riders Club Road in Onalaska, Wisconsin. A project to improve Riders Club Road to meet ADA compliance at crosswalks, provide on-street bicycle accommodations, and replace deteriorated pavement is currently under design. The City of Onalaska requested an evaluation of the intersection in order to identify if any operational improvements are required at this intersection. The ICE evaluates the existing two-way stop controlled (TWSC) intersection, an all-way stop controlled (AWSC) intersection, and a roundabout (RAB) intersection. Overviews of the proposed alternatives can be found in Appendix D.

Traffic analysis of the existing TWSC alternative and of the AWSC alternative was performed using Synchro/Simtraffic version 9 modeling software and traffic analysis of the RAB alternative was performed using Sidra. Traffic volumes for each model assumed a design year of 2038. A traffic impact analysis was completed in August 2015 for a development to the east of the CTH S and Riders Club Road intersection. The traffic volumes generated by this proposed development were not included in the WisDOT traffic forecast for East Avenue N and Riders Club Road. A preliminary sensitivity analysis was performed at East Avenue N and Riders Club Road that included the proposed development traffic, but the results were not included in this ICE analysis due to the uncertainty of the development schedule and of origin-destination data of proposed development traffic. Preliminary findings of the sensitivity analysis showed that the intersection could accommodate up to a 75% build-out of the development with the remedial improvement of implementing AWSC.

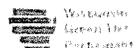
The ICE analysis showed that in the design year the existing TWSC alternative would operate at acceptable Level of Service (LOS). The AWSC and RAB alternatives would also operate at acceptable LOS in the design year. The TWSC alternative and AWSC alternative do not require the purchase of any right-of-way. The RAB alternative will require the purchase of right-of-way including the purchase of a residential property due to access constraints. Neither East Avenue N nor Riders Club Road are OSOW routes. The RAB alternative was designed to accommodate the WB-65 design vehicle.

Based on all of the analysis criteria the no-build TWSC alternative is recommended. The analysis shows the intersection to operate adequately in the design year and requires no improvements. Additionally, there does not appear to be a safety issue with the existing configuration.

JCI
Enclosure: ICE Worksheet and Appendices

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 312 South 3rd Street, La Crosse, WI 54601-4007
SEH is 100% employee-owned | sehinc.com | 608.782.3161 | 888.908.8166 fax





Intersection Control Evaluation Worksheet

Revised March 31, 2014

BUREAU OF TRAFFIC OPERATIONS

SPELL CHECK

Prepared By Short Elliott Hendrickson, Inc.

Date 4-Nov-16

NOTE: Attach Items in BLUE as appendices.

Intersection: Riders Club Rd & East Ave N

Design Project ID: 5991-02-56/57

Project Description: City of Onalaska, Riders Club Road, STH 35 to Sand Lake Road (CTH 5)

Factor	Existing Traffic Control TWSC	Alternative 1 AWSC
Safety		
Crash diagram trends	<p>A review of the most recent 5 years of available crash data (2010-2014) showed 9 crashes at the Riders Club Rd & East Ave N intersection. The crash rate at the intersection per million entering vehicles (MEV) is 0.77 crashes per MEV.</p> <p>The crashes were categorized by the following types: 7 angle crashes (78%); 1 rear-end crash (11); 1 single vehicle fixed object (11%).</p> <p>The crashes were categorized by the following severity: 5 property damage (56%); 4 personal injury (50%); 0 fatal (44%).</p> <p>See Appendix A for the intersection crash diagram.</p>	
Percent and type of crashes expected to be reduced by alternative	None	Converting the intersection control from 2-way stop control to 4-way stop control may reduce crashes at the intersection by up to 47% and fatal/injury crashes by up to 71%. Angle crashes may be reduced by up to 72%; (From FHWA-SA-08-11: Desktop Reference for Crash Reduction Factors, September 2008).
Access near the intersection and side road traffic impacts	There are residential driveways near the intersection in each direction that may be blocked by queuing during peak hour travel periods.	
Additional considerations	None	
Operational Analysis		
Discuss the Warrant Analysis (Attach AWSC/Signal warrants)	N/A	The intersection does not meet traffic signal warrants. The traffic signal warrant worksheets are included in Appendix B.

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LOS, delay, v/c ratio and 95 th percentile queues for each movement. (Attach traffic count, forecast and analysis inputs/outputs)	<table border="1"> <thead> <tr> <th rowspan="2">AM PEAK</th> <th colspan="4">EB</th> <th colspan="4">WB</th> <th colspan="4">NB</th> <th colspan="4">SB</th> </tr> <tr> <th>-</th><th>LT/T H/RT</th><th>-</th><th>-</th> <th>LT/TH /RT</th><th>-</th><th>-</th><th>-</th> <th>LT/TH /RT</th><th>-</th><th>-</th><th>-</th> <th>LT/TH /RT</th><th>-</th><th>-</th><th>-</th> </tr> </thead> <tbody> <tr> <td># of Lanes</td> <td>0</td><td>1</td><td>0</td><td>0</td> <td>1</td><td>0</td><td>0</td><td>0</td> <td>1</td><td>0</td><td>0</td><td>0</td> <td>1</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td>LOS</td> <td>-</td><td>B</td><td>-</td><td>-</td> <td>B</td><td>-</td><td>-</td><td>-</td> <td>A</td><td>-</td><td>-</td><td>-</td> <td>A</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>Delay (s)</td> <td>-</td><td>13.2</td><td>-</td><td>-</td> <td>12.4</td><td>-</td><td>-</td><td>-</td> <td>7.5</td><td>-</td><td>-</td><td>-</td> <td>7.5</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>v/c Ratio</td> <td>-</td><td>0.17 3</td><td>-</td><td>-</td> <td>0.266</td><td>-</td><td>-</td><td>-</td> <td>0.015</td><td>-</td><td>-</td><td>-</td> <td>0.051</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>Queue (ft)</td> <td>-</td><td>54</td><td>-</td><td>-</td> <td>77</td><td>-</td><td>-</td><td>-</td> <td>20</td><td>-</td><td>-</td><td>-</td> <td>35</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>Int. LOS</td> <td colspan="16">A</td> </tr> </tbody> </table>	AM PEAK	EB				WB				NB				SB				-	LT/T H/RT	-	-	LT/TH /RT	-	-	-	LT/TH /RT	-	-	-	LT/TH /RT	-	-	-	# of Lanes	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	LOS	-	B	-	-	B	-	-	-	A	-	-	-	A	-	-	-	Delay (s)	-	13.2	-	-	12.4	-	-	-	7.5	-	-	-	7.5	-	-	-	v/c Ratio	-	0.17 3	-	-	0.266	-	-	-	0.015	-	-	-	0.051	-	-	-	Queue (ft)	-	54	-	-	77	-	-	-	20	-	-	-	35	-	-	-	Int. LOS	A																<table border="1"> <thead> <tr> <th rowspan="2">AM PEAK</th> <th colspan="4">EB</th> <th colspan="4">WB</th> <th colspan="4">NB</th> <th colspan="4">SB</th> </tr> <tr> <th>-</th><th>LT/T H/RT</th><th>-</th><th>-</th> <th>LT/TH /RT</th><th>-</th><th>-</th><th>-</th> <th>LT/TH /RT</th><th>-</th><th>-</th><th>-</th> <th>LT/TH /RT</th><th>-</th><th>-</th><th>-</th> </tr> </thead> <tbody> <tr> <td># of Lanes</td> <td>0</td><td>1</td><td>0</td><td>0</td> <td>1</td><td>0</td><td>0</td><td>0</td> <td>1</td><td>0</td><td>0</td><td>0</td> <td>1</td><td>0</td><td>0</td><td>0</td> </tr> <tr> <td>LOS</td> <td>-</td><td>A</td><td>-</td><td>-</td> <td>A</td><td>-</td><td>-</td><td>-</td> <td>A</td><td>-</td><td>-</td><td>-</td> <td>A</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>Delay (s)</td> <td>-</td><td>8.5</td><td>-</td><td>-</td> <td>8.8</td><td>-</td><td>-</td><td>-</td> <td>8.5</td><td>-</td><td>-</td><td>-</td> <td>9.4</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>v/c Ratio</td> <td>-</td><td>0.12 3</td><td>-</td><td>-</td> <td>0.222</td><td>-</td><td>-</td><td>-</td> <td>0.145</td><td>-</td><td>-</td><td>-</td> <td>0.253</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>Queue (ft)</td> <td>-</td><td>54</td><td>-</td><td>-</td> <td>74</td><td>-</td><td>-</td><td>-</td> <td>64</td><td>-</td><td>-</td><td>-</td> <td>70</td><td>-</td><td>-</td><td>-</td> </tr> <tr> <td>Int. LOS</td> <td colspan="16">A</td> </tr> </tbody> </table>	AM PEAK	EB				WB				NB				SB				-	LT/T H/RT	-	-	LT/TH /RT	-	-	-	LT/TH /RT	-	-	-	LT/TH /RT	-	-	-	# of Lanes	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	LOS	-	A	-	-	A	-	-	-	A	-	-	-	A	-	-	-	Delay (s)	-	8.5	-	-	8.8	-	-	-	8.5	-	-	-	9.4	-	-	-	v/c Ratio	-	0.12 3	-	-	0.222	-	-	-	0.145	-	-	-	0.253	-	-	-	Queue (ft)	-	54	-	-	74	-	-	-	64	-	-	-	70	-	-	-	Int. LOS	A															
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Factor	Existing Traffic Control TWSC	Alternative 1 AWSC
Additional considerations	None	
Costs		
Discuss estimated costs (Attach itemized cost estimate tables)	N/A	2 Stop Signs @ \$200.00 Each = \$400 50 LF 18" Stop Line Epoxy @ \$11.00 LF = \$550 Total = \$950 See Appendix E
Operations and Maintenance Costs	N/A	None
Additional considerations	None	
Practical Feasibility		
Concerns alternative may present	The existing intersection will operate at acceptable LOS in the design year. The increased volumes in the mainline direction will cause smaller and less frequent gaps to allow for the sideroad movements which may increase angle crashes. The free-flow mainline movement also provides no traffic calming effects.	This alternative would remove the free-flow movements that currently exist and require all of the movements to stop at the intersection. This will increase the delay to the existing free-flow movements, but the overall intersection delay will decrease. The change in traffic control, especially on the mainline, could cause an increase in crashes as traffic adjusts to the new all way stop condition, but safety should improve with this alternative.
Major impacts on businesses, parking availability, real estate and utilities	There will be no impacts on properties adjacent to the intersection.	There will be no impacts on properties adjacent to the intersection.
Frequency of use as an alternate route	N/A	
Additional considerations	None	
Pedestrians and Bicycles		
Describe the need for pedestrian and bicycle facilities	The existing roadway provides room for onstreet parking that also serves as an unmarked bike lane. Additionally, sidewalks are provided on both sides of Riders Club Rd and on both sides of East Ave N.	The existing roadway provides room for onstreet parking that also serves as an unmarked bike lane. Additionally, sidewalks are provided on both sides of Riders Club Rd and on both sides of East Ave N.
Identify nearby pedestrian generators, bike routes, transit stops and if the intersection is on a Safe Route to School (part of existing conditions exhibit)	Residential neighborhoods exist in the northeast, southeast, and southwest quadrants of the intersection with the northwest quadrant being home to community athletic fields. Additionally, the Onalaska YMCA and Onalaska Aquatic Center are within walking distance of the intersection.	Residential neighborhoods exist in the northeast, southeast, and southwest quadrants of the intersection with the northwest quadrant being home to community athletic fields. Additionally, the Onalaska YMCA and Onalaska Aquatic Center are within walking distance of the intersection.
State if and what facilities are proposed, within, the project limits (part of preliminary layout of proposed alternatives)	The curb ramps in each of the quadrants will be upgraded to meet current ADA standards and a designated on-street bike lane will be provided.	The curb ramps in each of the quadrants will be upgraded to meet current ADA standards and a designated on-street bike lane will be provided.
Additional considerations	None	
OSOW Freight Network		
Identify nearby OSOW generators	None	

Factor	Existing Traffic Control TWSC	Alternative 1 AWSC
<p>If either intersecting road is on the freight network, is a significant diversion route or near a freight origin or destination discuss the following:</p> <ul style="list-style-type: none"> The geometric features and other design considerations to account for the OSOW vehicle path (e.g. grading, medians, islands). Vertical and horizontal clearance to account for the OSOW vehicle path (e.g. monotubes, signing) 	N/A	N/A
Additional considerations	None	
Environmental Impacts		
Type (i.e. historical, archeological, wetlands or hazardous material) and amount of environmental acreage impacts	N/A	N/A
Additional considerations	None	

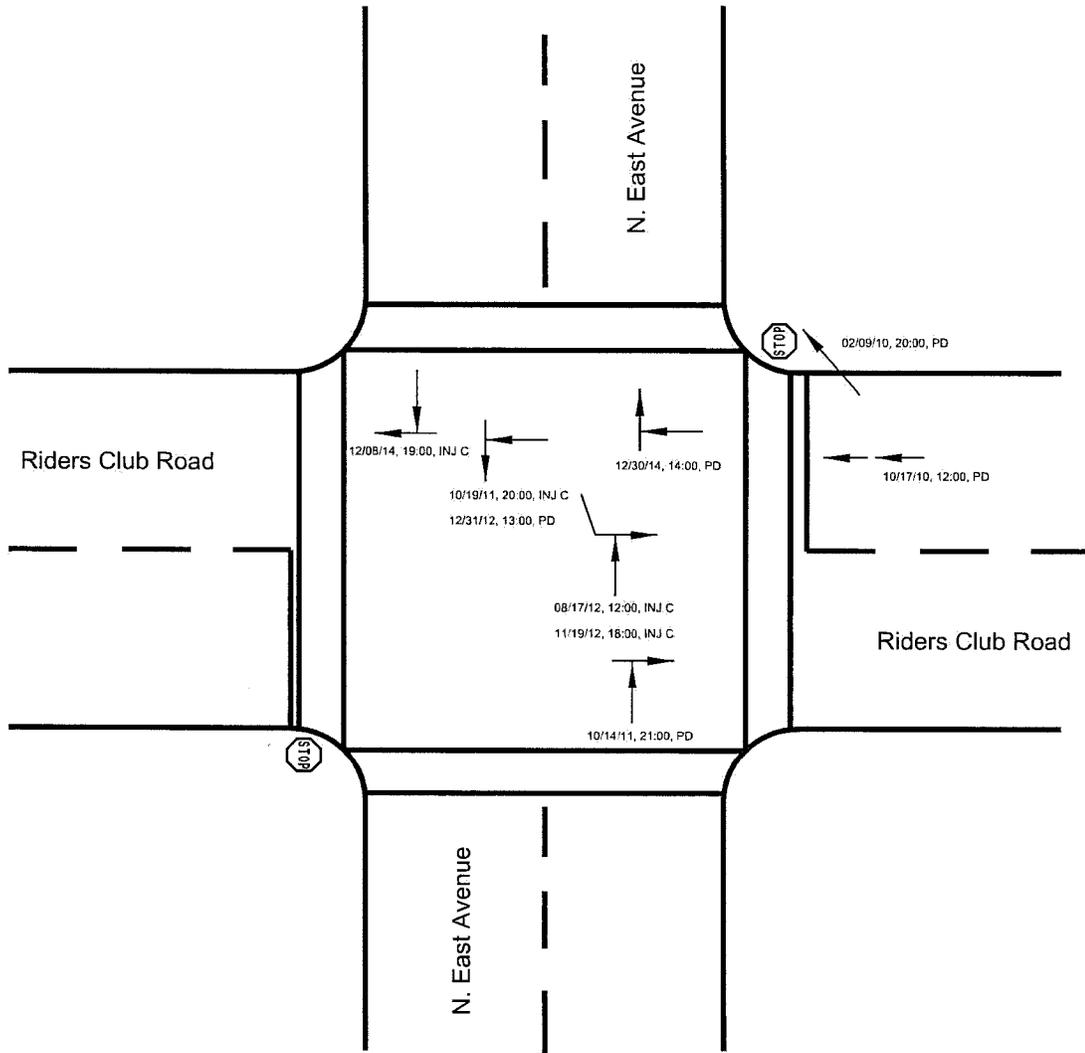
Factor	Alternative 2 Roundabout	Alternative 3
Safety		
Crash diagram trends	<p>A review of the most recent 5 years of available crash data (2010-2014) showed 9 crashes at the Riders Club Rd & East Ave N intersection. The crash rate at the intersection per million entering vehicles (MEV) is 0.77 crashes per MEV.</p> <p>The crashes were categorized by the following types: 7 angle crashes (78%); 1 rear-end crash (11%); 1 single vehicle fixed object (11%).</p> <p>The crashes were categorized by the following severity: 5 property damage (56%); 4 personal injury (50%); 0 fatal (44%).</p> <p>See Appendix A for the intersection crash diagram.</p>	
Percent and type of crashes expected to be reduced by alternative	<p>A study of 40 roundabouts in Wisconsin showed a decrease from 2 to 0 fatal crashes. For all types of injury crashes the number of locations with reduced crashes was greater than the number of locations with increased crashes. Overall roundabouts in Wisconsin have decreased fatal and injury crashes, but an increase in Property damage only crashes. (From Wisconsin Traffic Operations and Safety (TOPS) Laboratory, Safety Evaluation of Wisconsin Roundabouts:Phase 2, November 2013)</p>	
Access near the intersection and side road traffic impacts	Median splitter islands would be constructed at the intersection, but they would not restrict access to any driveways to properties that are to remain.	
Additional considerations	None	

Factor	Alternative 2 Roundabout	Alternative 3																																																																																																																																																																																																																																																																														
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Discuss the Warrant Analysis (Attach AWS/Signal warrants)	The intersection does not meet traffic signal warrants. The traffic signal warrant worksheets are included in Appendix B.																																																																																																																																																																																																																																																																															
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	Notes: Analysis performed using year 2038 forecast volumes. See Appendix C for traffic counts and additional analysis information.																																																																																																																																																																																																																																																																															
Queue impact on adjacent driveways	The queues are not anticipated to extend beyond any of the driveways in close proximity to the intersection.																																																																																																																																																																																																																																																																															
Capacity to accommodate 5-20% of diverted freeway traffic for routes parallel to freeway	N/A																																																																																																																																																																																																																																																																															
Document railroad crossings within 1000 feet of the intersection.	N/A																																																																																																																																																																																																																																																																															
Preliminary layout of existing and proposed traffic control	See Appendix D																																																																																																																																																																																																																																																																															
Additional considerations (Indicate if roundabout is expected to be a spiral design)	None																																																																																																																																																																																																																																																																															
Right-of-Way Impacts																																																																																																																																																																																																																																																																																
Amount of acreage impacted (# of relocations, access restrictions)	R/W - 0.419 acres TLE - 0.098 acres																																																																																																																																																																																																																																																																															

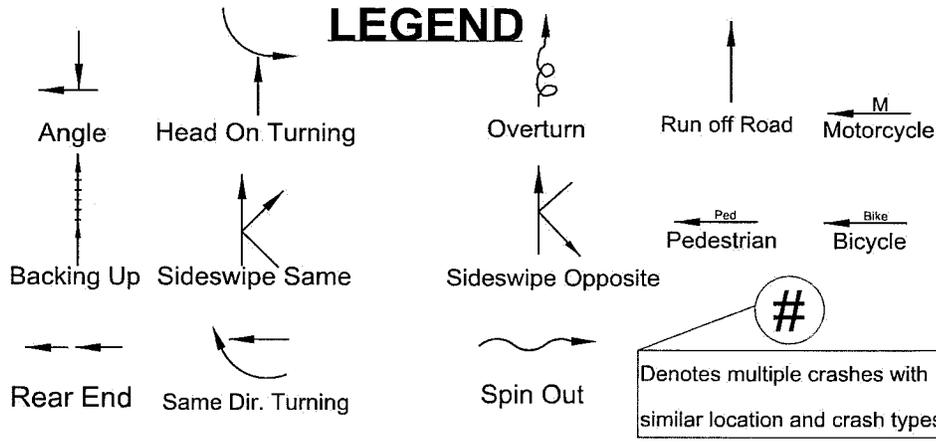
Factor	Alternative 2 Roundabout	Alternative 3
Anticipated right-of-way and real estate costs (Attach cost estimate tables)	R/W - \$243,000 TLE - \$1,800 1 Residential Relocation See Appendix E	
Additional Considerations		
Costs		
Discuss estimated costs (Attach itemized cost estimate tables)	\$545,000 See Appendix E	
Operations and Maintenance Costs	None	
Additional considerations	None	
Practical Feasibility		
Concerns alternative may present	This alternative would reconstruct the intersection as a roundabout, which would increase delay for the existing free flow movements, but would decrease the overall intersection delay. Roundabouts typically improve the safety of intersections, in particularly with respect to severity of crashes. However, roundabouts are still a relatively new intersection control and could cause an increase in minor crashes and could cause additional delay as drivers familiarize themselves with its operation.	
Major impacts on businesses, parking availability, real estate and utilities	This alternative would require acquisition of significant right-of-way, including the relocation of a residential property.	
Frequency of use as an alternate route	N/A	
Additional considerations	None	
Pedestrians and Bicycles		
Describe the need for pedestrian and bicycle facilities	The existing roadway provides room for on-street parking that also serves as an unmarked bike lane. Additionally, sidewalks are provided on both sides of Riders Club Rd and on both sides of East Ave N.	
Identify nearby pedestrian generators, bike routes, transit stops and if the intersection is on a Safe Route to School (part of existing conditions exhibit)	Residential neighborhoods exist in the northeast, southeast, and southwest quadrants of the intersection with the northwest quadrant being home to community athletic fields. Additionally, the Onalaska YMCA and Onalaska Aquatic Center are within walking distance of the intersection..	
State if and what facilities are proposed, within, the project limits (part of preliminary layout of proposed alternatives)	The sidewalks and crosswalks would be reconstructed to accommodate the roundabout. The new facilities would be constructed to accommodate the latest ADA standards and would provide room for bicycles to traverse the roundabout using the sidewalk.	
Additional considerations	None	
OSOW Vehicle Routes		
Identify nearby OSOW generators	None	

Factor	Alternative 2 Roundabout	Alternative 3
<p>If either intersecting road is on the freight network, is a significant diversion route or near a freight origin or destination discuss the following:</p> <ul style="list-style-type: none"> The geometric features and other design considerations to account for the OSOW vehicle path (e.g. grading, medians, islands). Vertical and horizontal clearance to account for the OSOW vehicle path (e.g. monotubes, signing) 	<p>Neither roadway is part of a freight network. The roundabout would be designed to accommodate a WB-65 design vehicle.</p>	
<p>Additional considerations</p>	<p>None</p>	
<p>Environmental Impacts</p>		
<p>Type (i.e. historical, archeological, wetlands or hazardous material) and amount of environmental acreage impacts</p>	<p>N/A</p>	
<p>Additional considerations</p>	<p>None</p>	
<p>Recommendation</p>		
<p>The intersection of East Avenue N and Riders Club Road is expected to operate with acceptable level of service without making any improvements. Additionally, there are no significant safety concerns that warrant improvements. The installation of all way stop control or a roundabout would provide no significant improvement to the operations or safety at the intersection. The minimal improvements provided by the roundabout alternative do not justify the significant real estate and construction cost of the alternative. It is the recommendation of this ICE worksheet that the intersection of East Avenue N and Riders Club Road remain as is with two-way stop control on Riders Club Road. The City of Onalaska supports this recommendation.</p>		

APPENDIX A – Crash Diagram



LEGEND



Denotes multiple crashes with similar location and crash types

OVERVIEW

Total Crashes: 9
 Property Damage Only: 5
 Personal Injury: 4
 Fatality: 0
 Crash Rate (2010-2014): 0.77

DRAWING FILE: B:\400\0400\0403\3091\trf1\ca\Riders Club Road Crash Diagram.dgn



COLLISION DIAGRAM

Intersection: N. East Ave & Riders Club Rd
 Crash Dates: 01/01/2010 - 12/31/2014

FILE NO.	
DATE	4/11/2016

APPENDIX B – Signal Warrants

Wisconsin Department of Transportation Traffic Signal Warrant Summary Worksheet

100%

The Worksheet(s) attached are provided as an attachment to the Engineering Investigation Study for:

Intersection: Riders Club Rd & East Ave N
County: La Crosse
City: Onalaska

Major Street: East Ave N
Critical Approach Speed: 25 mph
Lanes: 1 lane

Minor Street: Riders Club Rd
Critical Approach Speed: 25 mph
Lanes: 1 lane

% Right Turns Included	In built-up area of isolated community of < 10,000 population? No
From North (SB) 100%	Total number of approaches at intersection? 4 or more
From East (WB) 100%	If it is a "T" intersection, inflate minor threshold to 150%? No
From South (NB) 100%	Manually set volume level? No
From West (EB) 100%	

Analysis based on EXISTING volume data.

Date	Day of the Week	Time (HH:MM)			
		From	AM / PM	To	AM / PM
29-Sep	Tuesday	6:00	AM	20:00	PM

Warrant Evaluation Summary	Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume	No
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	No
Condition C: Combination: 80% of A and B	No
Warrant 2: Four-Hour Volume	No
Warrant 3: Peak Hour Volume	No
Warrant 4: Pedestrian Volume	N/A
Criterion A: Four-Hour	
Criterion B: Peak-Hour	
Warrant 5: School Crossing	N/A
Warrant 6: Coordinated Signal System	N/A
Warrant 7: Crash Experience	N/A
Warrant 8: Roadway Network	N/A
Warrant 9: Intersection Near a Grade Crossing	N/A

Warrant Analysis Conducted By:

Name: Jason Isaacson
Agency: Short Elliott Hendrickson, Inc (SEH)
Date: 10/13/2015

Warrant 1: Eight - Hour Vehicular Volume

100%

Warrant Evaluated? Yes

Warrant Satisfied? No

Manually Set To:

Condition A :		
Min. Veh. Volume		
Volume Level	100%	80%
Major Rd. Req	500	400
Minor Rd. Req	150	120
Number of Hours	0	0

Satisfied? No

Condition B:		
Interruption of Continuous Traffic		
Volume Level	100%	80%
Major Rd. Req	750	600
Minor Rd. Req	75	60
Number of Hours	0	0

Satisfied? No

Condition C:		
Combination of A & B at 80%		

Satisfied? No

Time Period	6:00 AM		Enter Start Time (Military Time) (HH:MM)		Major Road: Both App. (VPH)	Minor Road: High App. (VPH)	Total
	From	To					
1	6:00	7:00			140	82	222
2	7:00	8:00			235	140	375
3	8:00	9:00			149	137	286
4	9:00	10:00			149	130	279
5	10:00	11:00			179	120	299
6	11:00	12:00			210	130	340
7	12:00	13:00			156	143	299
8	13:00	14:00			142	132	274
9	14:00	15:00			174	133	307
10	15:00	16:00			285	194	479
11	16:00	17:00			254	238	492
12	17:00	18:00			313	261	574
13	18:00	19:00			256	271	527
14	19:00	20:00			171	137	308
15	20:00	21:00			0	0	0
16	21:00	22:00			0	0	0

Warrant 2: Four-Hour Volume

100%

Hour Start	#N/A	#N/A	#N/A	#N/A
Major Road Vol.	#N/A	#N/A	#N/A	#N/A
Minor Road Vol.	#N/A	#N/A	#N/A	#N/A

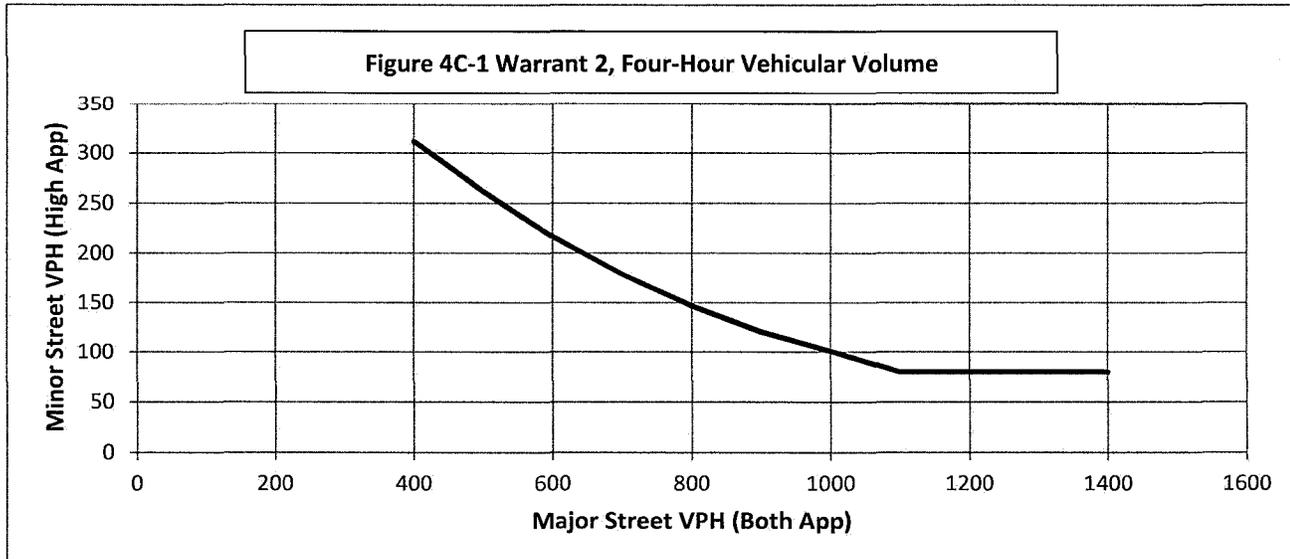
Warrant Evaluated? Yes

Yes

Warrant Satisfied? No

No

Manually Set To:



Warrant 3: Peak Hour Volume

100%

Warrant Evaluated? Yes

Warrant Satisfied? No

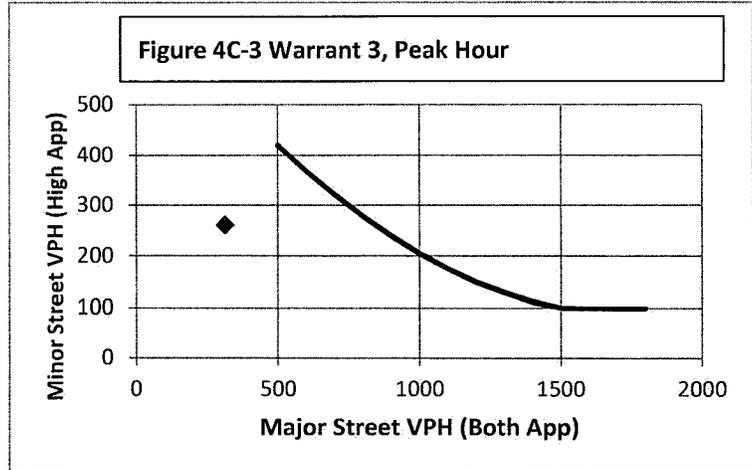
Manually Set To:

Condition justifying use of warrant:

Criteria		Met?
Delay on Minor Approach	4	Yes
Volume on Minor Approach	100	
Total Entering Volume (veh/h)	800	

Manually Set Peak Hour?

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
17:00	313	261



Warrant 4: Pedestrian Volume

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

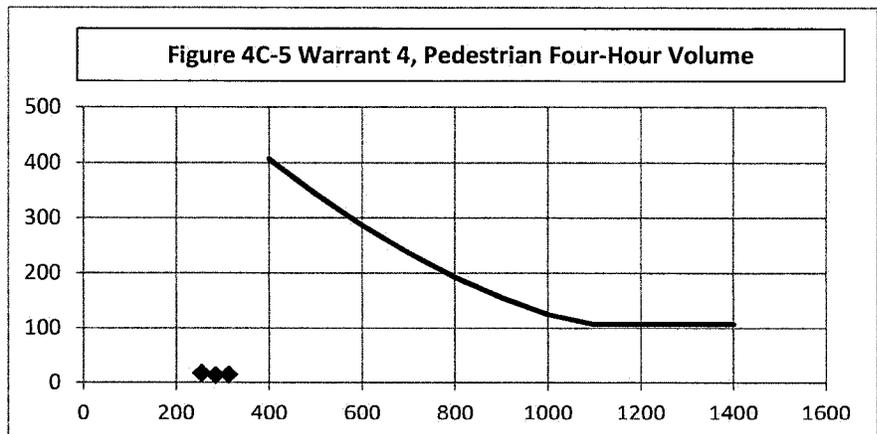
Criterion A: Four Hour

Hour (Start)	Pedestrian Volume	Major Road Vol.
15:00	14	285
16:00	18	254
17:00	15	313
18:00	18	256

Manually Set Major Rd Vol?

Avg. walk speed less than 3.5 ft/s?

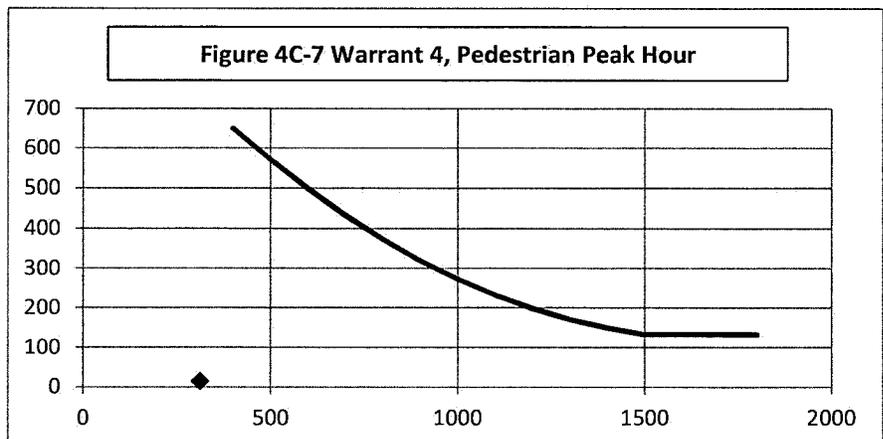
Criterion A Satisfied?



Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
17:00	15	313

Criterion B Satisfied?



Warrant 5: School Crossing

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criteria

Fulfilled?

1	There are a MINIMUM of 20 school children during the highest crossing hour.	
2	There are fewer adequate gaps in the major road traffic stream during the period when the school children are using the crossing than the number of minutes in the same period.	
3	The nearest traffic signal along the major road is located more than 300 ft away. Or, the nearest traffic signal is within 300 ft but the proposed traffic signal will not restrict the progressive movement of traffic.	

Warrant 6: Coordinated Signal System

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criteria

Fulfilled?

1	Signal spacing > 1000 ft	
2	On a one-way road or a road that has traffic predominantly in one direction, the adjacent signals are so far apart that they do not provide the necessary degree of vehicle platooning.	
3	On a two-way road, adjacent signals do not provide the necessary degree of platooning and the proposed and the adjacent signals will collectively provide a progressive operation.	

Warrant 7: Crash Experience

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criteria

Met?

Fulfilled?

1	Adequate trial of other remedial measures has failed to reduce crash frequency.			
	Measures Tried:			
2	Five or more reported crashes, of types susceptible to correction by signal, have occurred within a 12 month period.	# of crashes per 12 months		
3	Warrant 1, Condition A (80%)	No	Yes	
	Warrant 1, Condition B (80%)	No		
	Warrant 4, Criterion A (80%)	No		
	Warrant 4, Criterion B (80%)	Yes		

Warrant 8: Roadway Network

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Criteria

Met?

Fulfilled?

1	Total entering volume of at least 1,000 veh/h during typical weekday peak hour		574	No	No
	Five-year projected volumes that satisfy one or more of Warrants 1, 2, or 3.			No	
2	Total entering vol. of at least 1,000 veh/h for each of any 5 hrs of non-normal business day (Sat. or Sun.)				
	Hour				
	Volume				

Characteristics of Major Routes - Select yes if all intersecting routes have characteristic

Fulfilled?

1	Part of the road or highway system that serves as the principal roadway network for through traffic flow	
2	Rural or suburban highway outside of, entering, or traversing a city	
3	Appears as a major route on an official plan	

Warrant 9: Intersection Near a Grade Crossing

100%

Warrant Evaluated? No

Warrant Satisfied? N/A

Manually Set To:

Adjustment Factors			Manually Set Peak Hour?				
Rail Traffic per Day	% High Occupancy Buses on Minor Road	% Tractor-Trailer Trucks on Minor Road	D	Peak Hour	Major Road Vol.	Minor Road Vol.	Adjusted Minor Vol.
				17:00	313	261	261

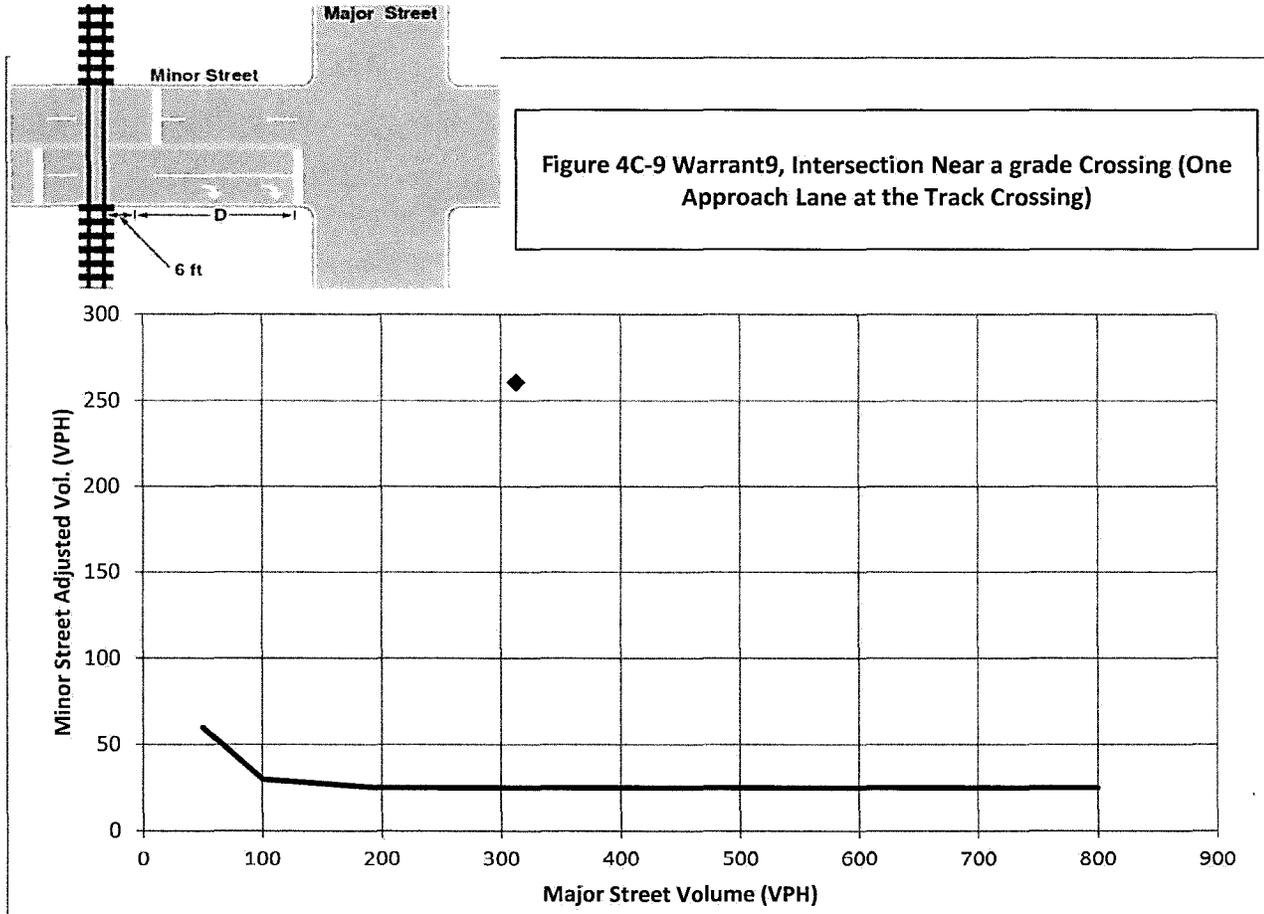


Figure 4C-9 Warrant9, Intersection Near a grade Crossing (One Approach Lane at the Track Crossing)

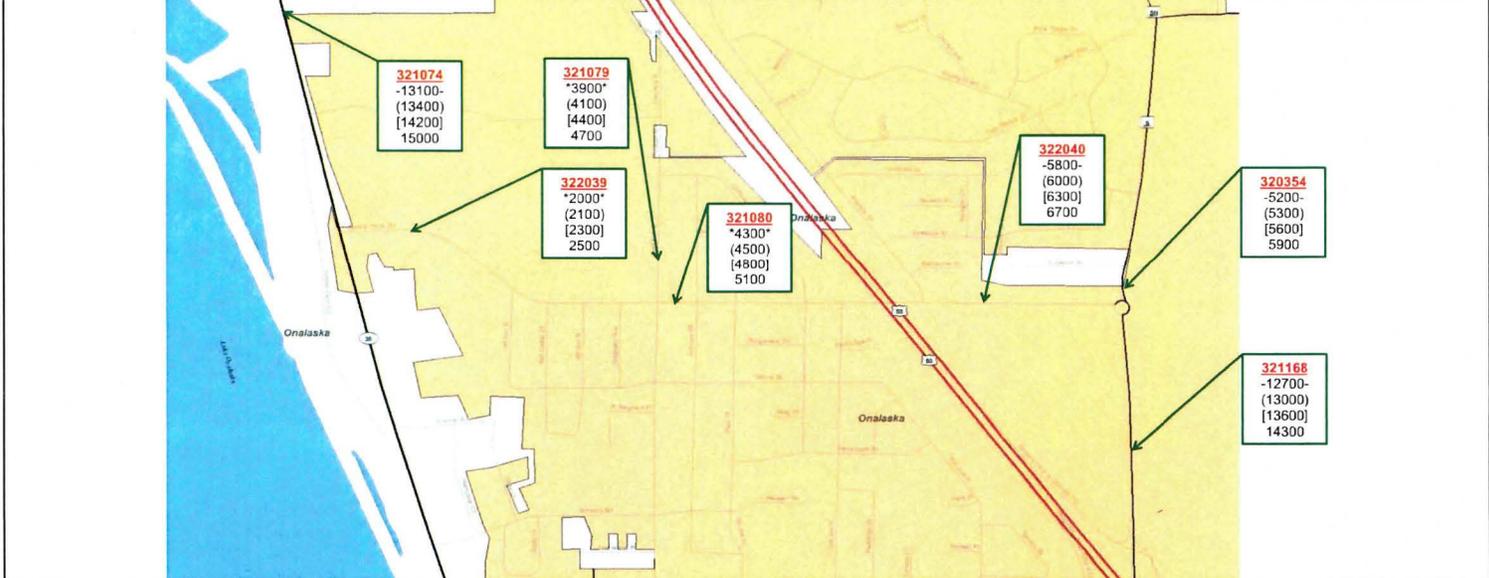
Conclusions/Comments:

Updated: 6/23/2015

APPENDIX C – Traffic Forecast and Traffic Operations Analysis



Site(s)	Route(s)	Volume(s)	Site Growth %	Design Values (%)							Truck Classification						Total %
				K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	
322039	Riders Cl	2500	0.88%	13.1	13.5	14.7	16.1	59/41	2.8	2.5	70	1.3	1.4	0.2	0.3	0.1	3.3%
321080	Riders Cl	5150	0.71%	11.3	11.9	12.7	14.0	59/41	2.8	2.5	140	1.3	1.4	0.2	0.3	0.1	3.3%
322040	Riders Cl	6720	0.65%	10.9	11.6	12.3	13.6	59/41	2.8	2.5	190	1.3	1.4	0.2	0.3	0.1	3.3%



Full Vehicle Classification													
Site(s)	Route(s)	MC	CARS	SU2-4	SU2-6	SU3	SU4+	ST4-	ST5	ST6+	MU5-	MU6	MU7+



NOTES ON THE FORECAST:

- This projection assumes that no major new traffic generators will be added to the development already included in the 2010/2040 La Crosse Travel Demand Model.
- Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.
- Truck classification percentages were taken from observed 2011 Wisconsin Vehicle Classification Data for Site # 322039, 321080 and 2014 Data for Site # 322040
- The 2010/2040 La Crosse Travel Demand Model was used to complete this forecast. Traffic Analysis Forecasting Information System output was used as a comparison tool to check against the model output. Adjustments were made as needed.

Symbol	Count	Symbol	Forecast
-000-	2014 Count	000	2038 AADT
000	2011 Count	[000]	2028 AADT
		(000)	2018 AADT

WisDot Bureau of Planning
 Traffic Forecasting Section
 Forecast by: Asadur Rahman
 Phone: 608-266-3322
 Email: asadur.rahman@dot.wi.gov

Projected AM Design Hour Traffic Volumes

 Indicates roundabout

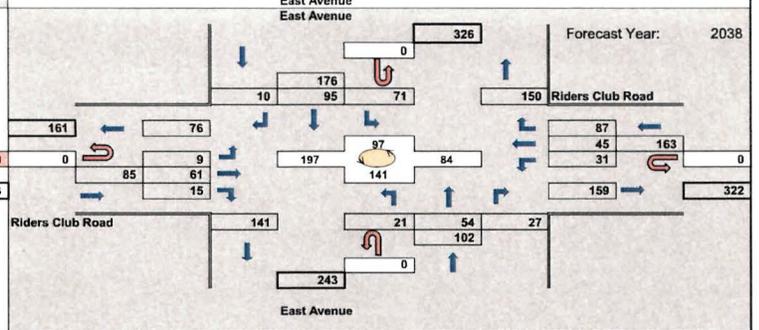
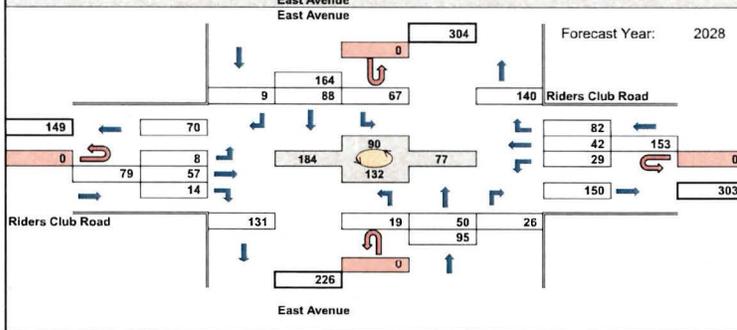
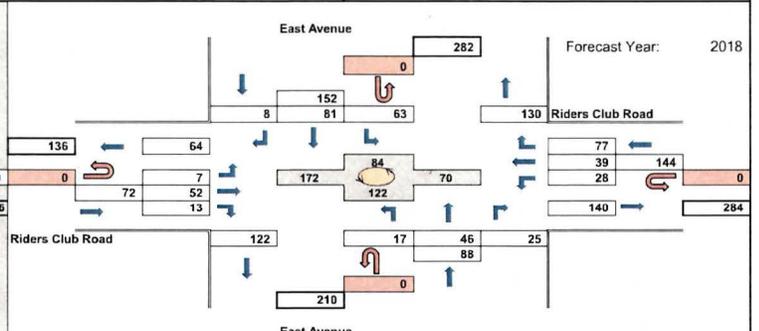
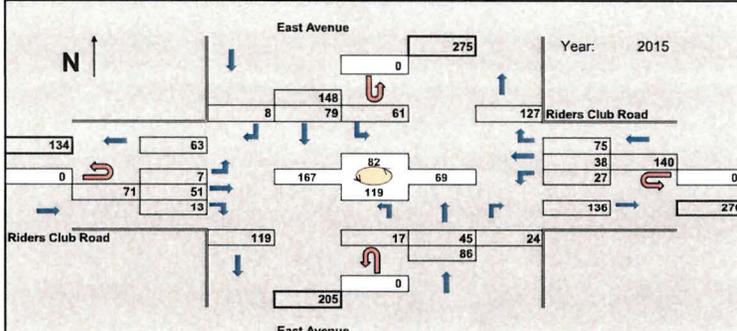
Design Hour: 7:00-8:00am

Forecast Completed: 12/11/2015

Project Description

Project ID(s): 5991-02-56
 Route(s): Riders Club Road
 Region/COUNTY(IES): La Crosse
 Location: Onalaska, STH 35-Sand Lk Rd

Design Hour Turning Movement Data



Intersection

Int Delay, s/veh 7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	9	61	15	31	45	87	21	54	27	71	95	10
Future Vol, veh/h	9	61	15	31	45	87	21	54	27	71	95	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	66	16	34	49	95	23	59	29	77	103	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	454	397	109	423	387	73	114	0	0	88	0	0
Stage 1	263	263	-	119	119	-	-	-	-	-	-	-
Stage 2	191	134	-	304	268	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	516	540	945	541	547	989	1475	-	-	1508	-	-
Stage 1	742	691	-	885	797	-	-	-	-	-	-	-
Stage 2	811	785	-	705	687	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	410	502	945	453	509	989	1475	-	-	1508	-	-
Mov Cap-2 Maneuver	410	502	-	453	509	-	-	-	-	-	-	-
Stage 1	730	653	-	871	784	-	-	-	-	-	-	-
Stage 2	677	772	-	588	649	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	12.4	1.5	3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1475	-	-	533	666	1508	-	-
HCM Lane V/C Ratio	0.015	-	-	0.173	0.266	0.051	-	-
HCM Control Delay (s)	7.5	0	-	13.2	12.4	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	1.1	0.2	-	-

Appendix C1
Peak Hour Traffic Operations Analysis Results Summary (2038 AM - Existing Conditions, SimTraffic)
South Avenue Corridor Traffic Study

Intersection -	Approach	Demand Volumes				Delay (s/veh)						LOS By Approach		LOS By Intersection		Queuing Information (feet)												
		L	T	R	Total	L	LOS	T	LOS	R	LOS	Delay (S/Veh)	LOS	Delay (S/Veh)	LOS	Through			Left Turn			Right Turn						
																	Link Length	Avg.	95%	Max	*Storage	Avg.	95%	Max	*Storage	Avg.	95%	Max
East Avenue and Riders Club Road(Side Street Stop)	NB	21	54	27	102	2	A	1	A	0	A	1	A			1033	3	20	36	0	0	0	0	0	0	0	0	0
	SB	71	95	10	176	2	A	1	A	1	A	1	A			1023	9	35	53	0	0	0	0	0	0	0	0	
	EB	9	61	15	85	5	A	6	A	4	A	6	A	3	A	1305	34	54	60	0	0	0	0	0	0	0	0	
	WB	31	45	87	163	7	A	8	A	5	A	6	A			1871	48	77	92	0	0	0	0	0	0	0	0	

Intersection

Int Delay, s/veh 14

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	16	92	27	28	143	133	27	81	26	125	75	26
Future Vol, veh/h	16	92	27	28	143	133	27	81	26	125	75	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	100	29	30	155	145	29	88	28	136	82	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	678	542	96	593	543	102	110	0	0	116	0	0
Stage 1	367	367	-	161	161	-	-	-	-	-	-	-
Stage 2	311	175	-	432	382	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	366	447	960	417	447	953	1480	-	-	1473	-	-
Stage 1	653	622	-	841	765	-	-	-	-	-	-	-
Stage 2	699	754	-	602	613	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	197	394	960	297	394	953	1480	-	-	1473	-	-
Mov Cap-2 Maneuver	197	394	-	297	394	-	-	-	-	-	-	-
Stage 1	639	560	-	823	749	-	-	-	-	-	-	-
Stage 2	460	738	-	432	552	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.5	24.2	1.5	4.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1480	-	-	394	509	1473	-	-
HCM Lane V/C Ratio	0.02	-	-	0.372	0.649	0.092	-	-
HCM Control Delay (s)	7.5	0	-	19.5	24.2	7.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.7	4.6	0.3	-	-

Appendix C2
Peak Hour Traffic Operations Analysis Results Summary (2038 PM - Existing Conditions, SimTraffic)
South Avenue Corridor Traffic Study

Intersection -	Approach	Demand Volumes				Delay (s/veh)						LOS By Approach		LOS By Intersection		Queuing Information (feet)													
		L	T	R	Total	L	LOS	T	LOS	R	LOS	Delay (S/Veh)	LOS	Delay (S/Veh)	LOS	Through			Left Turn			Right Turn							
																	Link Length	Avg	95%	Max	*Storage	Avg	95%	Max	*Storage	Avg	95%	Max	
East Avenue and Riders Club Road(Side Street Stop)	NB	27	81	26	134	2	A	1	A	0	A	1	A	6	A	1033	5	28	54	0	0	0	0	0	0	0	0	0	0
	SB	125	75	26	226	3	A	1	A	1	A	2	A	6	A	1023	17	48	59	0	0	0	0	0	0	0	0	0	
	EB	16	92	27	135	9	A	7	A	4	A	7	A	6	A	1305	45	71	80	0	0	0	0	0	0	0	0	0	
	WB	26	143	133	304	10	B	11	B	7	A	9	A	6	A	1871	79	137	180	0	0	0	0	0	0	0	0	0	

Intersection

Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	9	61	15	0	31	45	87	0	21	54	27
Future Vol, veh/h	0	9	61	15	0	31	45	87	0	21	54	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	66	16	0	34	49	95	0	23	59	29
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	8.5	8.8	8.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	21%	11%	19%	40%
Vol Thru, %	53%	72%	28%	54%
Vol Right, %	26%	18%	53%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	102	85	163	176
LT Vol	21	9	31	71
Through Vol	54	61	45	95
RT Vol	27	15	87	10
Lane Flow Rate	111	92	177	191
Geometry Grp	1	1	1	1
Degree of Util (X)	0.144	0.123	0.221	0.252
Departure Headway (Hd)	4.676	4.782	4.487	4.738
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	764	747	797	756
Service Time	2.725	2.83	2.529	2.782
HCM Lane V/C Ratio	0.145	0.123	0.222	0.253
HCM Control Delay	8.5	8.5	8.8	9.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.4	0.8	1

Intersection

Intersection Delay, s/veh
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	71	95	10
Future Vol, veh/h	0	71	95	10
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	77	103	11
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	9.4
HCM LOS	A

Lane

SimTraffic
MOE's

SimTraffic MOE Table

Appendix C3
Peak Hour Traffic Operations Analysis Results Summary (2038 AM - Build AWSC, SimTraffic)
South Avenue Corridor Traffic Study

Intersection -	Approach	Demand Volumes				Delay (s/veh)						LOS By Approach		LOS By Intersection		Queing Information (feet)													
		L	T	R	Total	L	LOS	T	LOS	R	LOS	Delay (S/Veh)	LOS	Delay (S/Veh)	LOS	Link Length	Avg.	95%	Max	*Storage	Avg.	95%	Max	*Storage	Avg.	95%	Max		
		East Avenue and Riders Club Road(Side Street Stop)	NB	21	54	27	102	5	A	6	A	4	A	5	A	5	A	1033	39	64	73	0	0	0	0	0	0	0	0
	SB	71	95	10	176	5	A	6	A	4	A	5	A	5	A	1023	44	70	83	0	0	0	0	0	0	0	0	0	
	EB	9	61	15	85	5	A	6	A	3	A	5	A	5	A	1305	34	54	60	0	0	0	0	0	0	0	0	0	
	WB	31	45	87	163	6	A	7	A	4	A	5	A	5	A	1871	47	74	88	0	0	0	0	0	0	0	0	0	

Intersection

Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Traffic Vol, veh/h	0	16	92	27	0	28	143	133	0	27	81	26
Future Vol, veh/h	0	16	92	27	0	28	143	133	0	27	81	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	17	100	29	0	30	155	145	0	29	88	28
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	1	1
HCM Control Delay	10.1	12.3	10.2
HCM LOS	B	B	B

Lane

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	12%	9%	55%
Vol Thru, %	60%	68%	47%	33%
Vol Right, %	19%	20%	44%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	134	135	304	226
LT Vol	27	16	28	125
Through Vol	81	92	143	75
RT Vol	26	27	133	26
Lane Flow Rate	146	147	330	246
Geometry Grp	1	1	1	1
Degree of Util (X)	0.224	0.222	0.461	0.374
Departure Headway (Hd)	5.538	5.446	5.024	5.48
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	647	657	717	656
Service Time	3.585	3.492	3.062	3.52
HCM Lane V/C Ratio	0.226	0.224	0.46	0.375
HCM Control Delay	10.2	10.1	12.3	11.8
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	0.9	0.8	2.4	1.7

Intersection

Intersection Delay, s/veh
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	125	75	26
Future Vol, veh/h	0	125	75	26
Peak Hour Factor	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	136	82	28
Number of Lanes	0	0	1	0

Approach SB

Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	11.8
HCM LOS	B

Lane

Appendix C4
Peak Hour Traffic Operations Analysis Results Summary (2038 PM - Build AWSC, SimTraffic)
South Avenue Corridor Traffic Study

Intersection -	Approach	Demand Volumes				Delay (s/veh)						LOS By Approach		LOS By Intersection		Queuing Information (feet)													
		L	T	R	Total	L	LOS	T	LOS	R	LOS	Delay (S/Veh)	LOS	Delay (S/Veh)	LOS	Through				Left Turn				Right Turn					
																	Link Length	Avg.	95%	Max	*Storage	Avg.	95%	Max	*Storage	Avg.	95%	Max	
East Avenue and Riders Club Road(Side Street Stop)	NB	27	81	26	134	5	A	6	A	4	A	6	A			1033	41	66	76	0	0	0	0	0	0	0	0	0	0
	SB	125	75	26	226	6	A	7	A	5	A	6	A	6	A	1023	53	81	88	0	0	0	0	0	0	0	0	0	
	EB	16	92	27	135	6	A	6	A	4	A	6	A			1305	43	69	60	0	0	0	0	0	0	0	0	0	
	WB	28	143	133	304	8	A	8	A	6	A	7	A	6	A	1871	68	107	131	0	0	0	0	0	0	0	0	0	

MOVEMENT SUMMARY

 Site: Riders Club Rd - East Ave, 2015 AM - Single Lane

New Site
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: NB East Ave											
3	L2	17	3.0	0.084	4.3	LOS A	0.3	6.7	0.21	0.11	33.9
8	T1	45	3.0	0.084	4.3	LOS A	0.3	6.7	0.21	0.11	34.0
18	R2	24	3.0	0.084	4.3	LOS A	0.3	6.7	0.21	0.11	33.3
Approach		86	3.0	0.084	4.3	LOS A	0.3	6.7	0.21	0.11	33.8
East: WB Riders Club Rd											
1	L2	27	3.0	0.131	4.5	LOS A	0.4	11.0	0.16	0.07	33.8
6	T1	38	3.0	0.131	4.5	LOS A	0.4	11.0	0.16	0.07	33.9
16	R2	75	3.0	0.131	4.5	LOS A	0.4	11.0	0.16	0.07	33.2
Approach		140	3.0	0.131	4.5	LOS A	0.4	11.0	0.16	0.07	33.5
North: SB East Ave											
7	L2	61	3.0	0.140	4.7	LOS A	0.5	11.9	0.18	0.09	33.2
4	T1	79	3.0	0.140	4.7	LOS A	0.5	11.9	0.18	0.09	33.4
14	R2	8	3.0	0.140	4.7	LOS A	0.5	11.9	0.18	0.09	32.6
Approach		148	3.0	0.140	4.7	LOS A	0.5	11.9	0.18	0.09	33.3
West: EB Riders Club Rd											
5	L2	7	3.0	0.072	4.3	LOS A	0.2	5.7	0.25	0.15	34.1
2	T1	51	3.0	0.072	4.3	LOS A	0.2	5.7	0.25	0.15	34.2
12	R2	13	3.0	0.072	4.3	LOS A	0.2	5.7	0.25	0.15	33.4
Approach		71	3.0	0.072	4.3	LOS A	0.2	5.7	0.25	0.15	34.1
All Vehicles		445	3.0	0.140	4.5	LOS A	0.5	11.9	0.19	0.10	33.5

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: Riders Club Rd - East Ave, 2015 PM - Single Lane

New Site
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: NB East Ave											
3	L2	22	3.0	0.118	4.9	LOS A	0.4	9.7	0.29	0.19	33.6
8	T1	68	3.0	0.118	4.9	LOS A	0.4	9.7	0.29	0.19	33.7
18	R2	23	3.0	0.118	4.9	LOS A	0.4	9.7	0.29	0.19	33.0
Approach		113	3.0	0.118	4.9	LOS A	0.4	9.7	0.29	0.19	33.5
East: WB Riders Club Rd											
1	L2	25	3.0	0.251	5.9	LOS A	0.9	23.9	0.23	0.13	33.3
6	T1	122	3.0	0.251	5.9	LOS A	0.9	23.9	0.23	0.13	33.4
16	R2	113	3.0	0.251	5.9	LOS A	0.9	23.9	0.23	0.13	32.7
Approach		260	3.0	0.251	5.9	LOS A	0.9	23.9	0.23	0.13	33.1
North: SB East Ave											
7	L2	107	3.0	0.194	5.5	LOS A	0.7	17.2	0.28	0.19	32.5
4	T1	63	3.0	0.194	5.5	LOS A	0.7	17.2	0.28	0.19	32.6
14	R2	20	3.0	0.194	5.5	LOS A	0.7	17.2	0.28	0.19	31.9
Approach		190	3.0	0.194	5.5	LOS A	0.7	17.2	0.28	0.19	32.5
West: EB Riders Club Rd											
5	L2	13	3.0	0.117	4.9	LOS A	0.4	9.6	0.28	0.19	33.7
2	T1	77	3.0	0.117	4.9	LOS A	0.4	9.6	0.28	0.19	33.9
12	R2	22	3.0	0.117	4.9	LOS A	0.4	9.6	0.28	0.19	33.1
Approach		112	3.0	0.117	4.9	LOS A	0.4	9.6	0.28	0.19	33.7
All Vehicles		675	3.0	0.251	5.4	LOS A	0.9	23.9	0.26	0.17	33.1

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

 Site: Riders Club Rd - East Ave, 2038 AM - Single Lane

New Site
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: NB East Ave											
3	L2	21	3.0	0.102	4.5	LOS A	0.3	8.3	0.24	0.14	33.7
8	T1	54	3.0	0.102	4.5	LOS A	0.3	8.3	0.24	0.14	33.9
18	R2	27	3.0	0.102	4.5	LOS A	0.3	8.3	0.24	0.14	33.1
Approach		102	3.0	0.102	4.5	LOS A	0.3	8.3	0.24	0.14	33.7
East: WB Riders Club Rd											
1	L2	31	3.0	0.155	4.8	LOS A	0.5	13.3	0.19	0.09	33.6
6	T1	45	3.0	0.155	4.8	LOS A	0.5	13.3	0.19	0.09	33.8
16	R2	87	3.0	0.155	4.8	LOS A	0.5	13.3	0.19	0.09	33.0
Approach		163	3.0	0.155	4.8	LOS A	0.5	13.3	0.19	0.09	33.3
North: SB East Ave											
7	L2	71	3.0	0.169	5.0	LOS A	0.6	14.7	0.20	0.11	33.1
4	T1	95	3.0	0.169	5.0	LOS A	0.6	14.7	0.20	0.11	33.2
14	R2	10	3.0	0.169	5.0	LOS A	0.6	14.7	0.20	0.11	32.5
Approach		176	3.0	0.169	5.0	LOS A	0.6	14.7	0.20	0.11	33.1
West: EB Riders Club Rd											
5	L2	9	3.0	0.089	4.6	LOS A	0.3	7.1	0.28	0.18	33.9
2	T1	61	3.0	0.089	4.6	LOS A	0.3	7.1	0.28	0.18	34.1
12	R2	15	3.0	0.089	4.6	LOS A	0.3	7.1	0.28	0.18	33.3
Approach		85	3.0	0.089	4.6	LOS A	0.3	7.1	0.28	0.18	33.9
All Vehicles		526	3.0	0.169	4.8	LOS A	0.6	14.7	0.22	0.12	33.4

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Processed: Monday, January 18, 2016 3:54:25 PM

SIDRA INTERSECTION 6.0.20.4660

Project: C:\Users\shotchkin\Onalaska_Riders Club - East_PH - Theatre.sip6

8001546, SEH INC, PLUS / 1PC

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www.sidrasolutions.com

**SIDRA
INTERSECTION 6**

MOVEMENT SUMMARY

 Site: Riders Club Rd - East Ave, 2038 PM - Single Lane

New Site
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: NB East Ave											
3	L2	27	3.0	0.145	5.3	LOS A	0.5	12.1	0.32	0.23	33.4
8	T1	81	3.0	0.145	5.3	LOS A	0.5	12.1	0.32	0.23	33.5
18	R2	26	3.0	0.145	5.3	LOS A	0.5	12.1	0.32	0.23	32.8
Approach		134	3.0	0.145	5.3	LOS A	0.5	12.1	0.32	0.23	33.3
East: WB Riders Club Rd											
1	L2	28	3.0	0.299	6.5	LOS A	1.2	29.9	0.27	0.17	33.0
6	T1	143	3.0	0.299	6.5	LOS A	1.2	29.9	0.27	0.17	33.1
16	R2	133	3.0	0.299	6.5	LOS A	1.2	29.9	0.27	0.17	32.4
Approach		304	3.0	0.299	6.5	LOS A	1.2	29.9	0.27	0.17	32.8
North: SB East Ave											
7	L2	125	3.0	0.237	6.1	LOS A	0.8	21.7	0.32	0.23	32.2
4	T1	75	3.0	0.237	6.1	LOS A	0.8	21.7	0.32	0.23	32.4
14	R2	26	3.0	0.237	6.1	LOS A	0.8	21.7	0.32	0.23	31.7
Approach		226	3.0	0.237	6.1	LOS A	0.8	21.7	0.32	0.23	32.2
West: EB Riders Club Rd											
5	L2	16	3.0	0.145	5.3	LOS A	0.5	12.2	0.32	0.23	33.5
2	T1	92	3.0	0.145	5.3	LOS A	0.5	12.2	0.32	0.23	33.7
12	R2	27	3.0	0.145	5.3	LOS A	0.5	12.2	0.32	0.23	32.9
Approach		135	3.0	0.145	5.3	LOS A	0.5	12.2	0.32	0.23	33.5
All Vehicles		799	3.0	0.299	6.0	LOS A	1.2	29.9	0.30	0.21	32.8

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

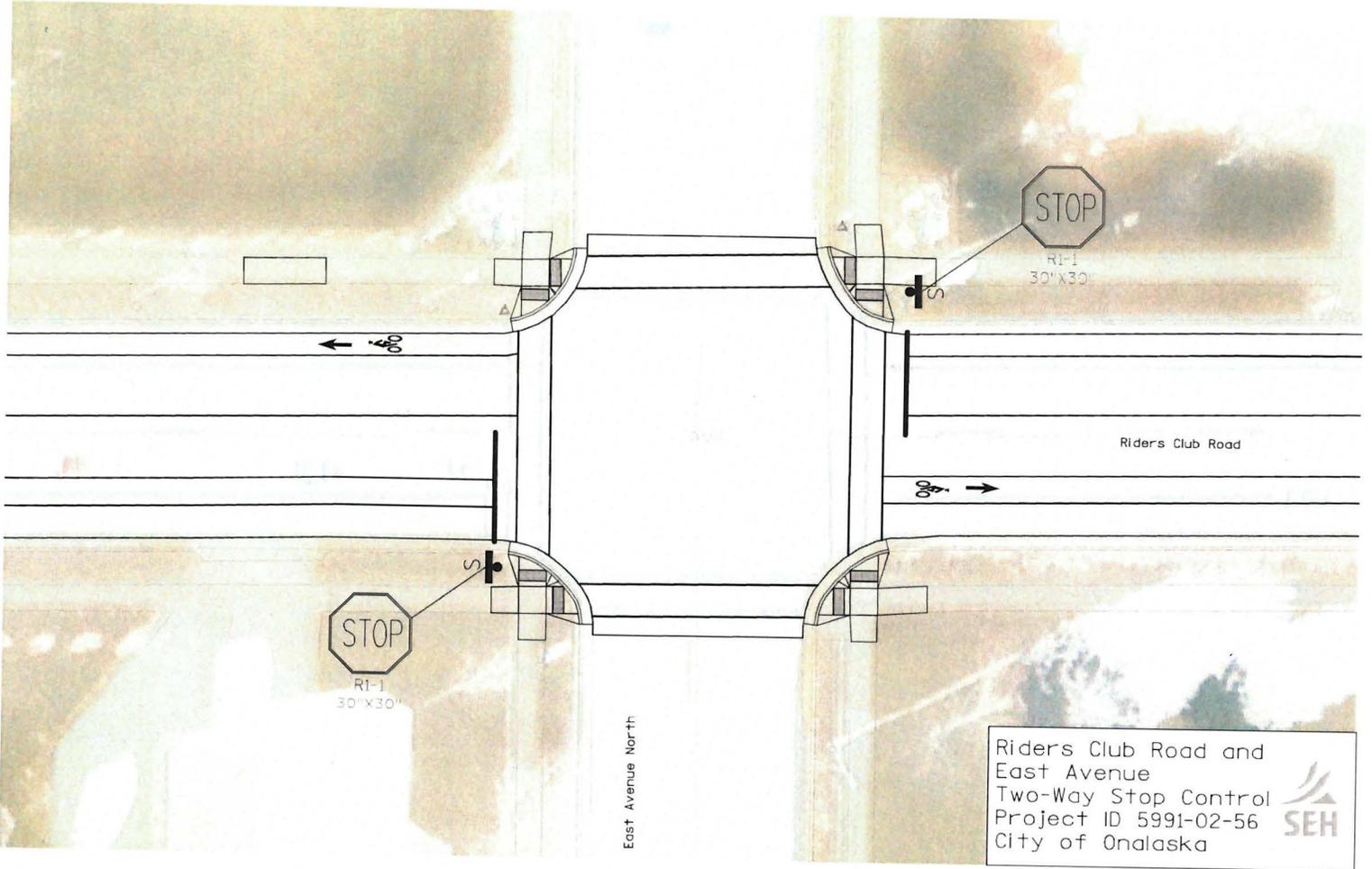
Roundabout Capacity Model: US HCM 2010.

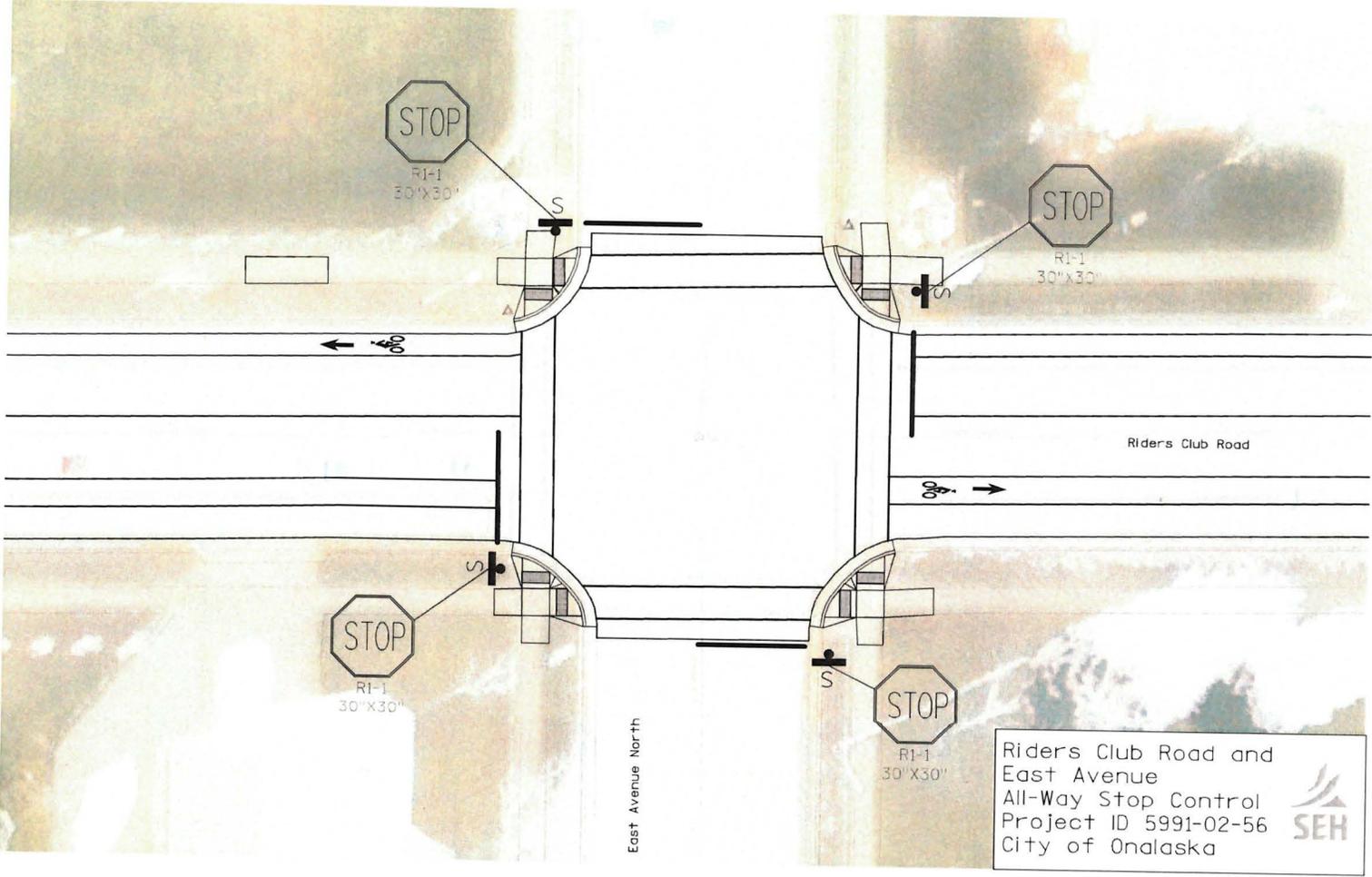
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

APPENDIX D – Proposed Alternative Layouts



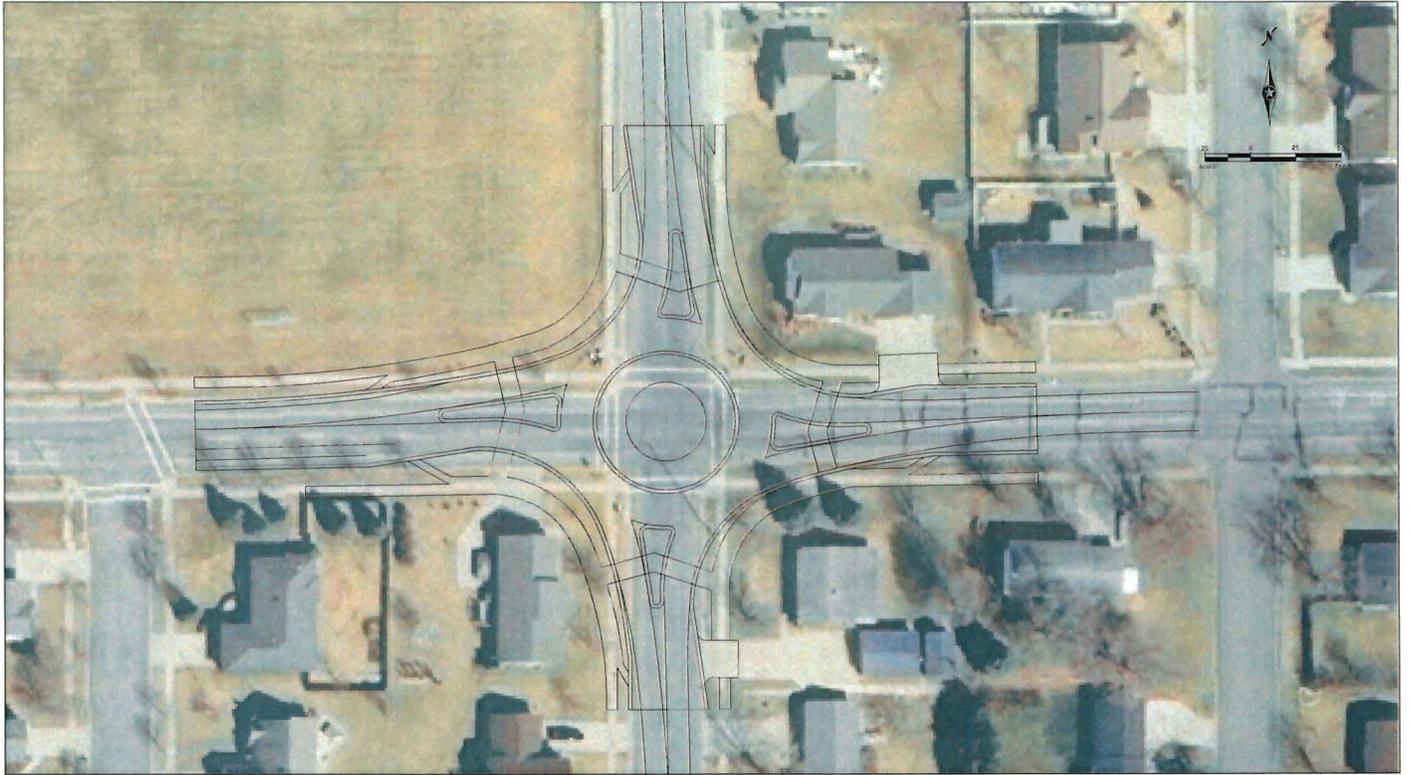


East Avenue North

Riders Club Road

Riders Club Road and
 East Avenue
 All-Way Stop Control
 Project ID 5991-02-56
 City of Onalaska





PROJECT:

DATE:

I.C.E. REPORT
RIDERS CLUB RD. / EAST AVE.
ROUNDBOUT - 120' ICD

FIGURE 3

3

4

APPENDIX E – Cost Estimates

**East Ave N and Riders Club Rd
I.C.E. - Alternative 2 - Roundabout
La Crosse County
Planning Level Real Estate Cost Estimate
12-Apr-16**

Parcel	Description	Zone	Area (sf)		Area (acres)		Bldg Acq?	Property	Value		Cost
		(C/R/O)	R/W	TLE	R/W	TLE	(y/n)	Size (acre)	Land	Improvement	
18-3184-0	Soccer Field	O	2517	1585	0.0578	0.0364	n	2.98	\$ -	\$ -	\$ -
18-5156-0	1412 East Ave	R		140	0.0000	0.0032	n	0.28	\$ 40,100	\$ 171,400	\$ 80.35
18-5157-0**	501 Riders Club	R			0.3100	0.0000	Y	0.31	\$ 45,100	\$ 191,200	\$ 236,300.00
18-5158-0	509 Riders Club	R		206	0.0000	0.0047	n	0.28	\$ 45,100	\$ 218,700	\$ 118.23
18-3176-0	1342 Ridgeway	R		228	0.0000	0.0052	n	0.3	\$ 44,700	\$ 186,300	\$ 130.85
18-3145-0	1333 East Ave	R	1,367	933	0.0314	0.0214	n	0.3	\$ 34,500	\$ 135,100	\$ 4,144.40
18-3144-0	1327 East Ave	R		86	0.0000	0.0020	n	0.24	\$ 34,500	\$ 152,600	\$ 49.36
18-2799-0	1328 East Ave	R		86	0.0000	0.0020	n	0.28	\$ 46,200	\$ 122,000	\$ 49.36
18-2798-0	1332 East Ave	R	860	993	0.0197	0.0228	n	0.3	\$ 44,800	\$ 90,100	\$ 3,518.17
18-2809-0	510 Riders Club	R		238	0.0000	0.0055	n	0.31	\$ 45,300	\$ 102,600	\$ 136.59
					0.4189	0.0977					\$ 244,527.31

* TLE calculated by estimating the slope intercept to be 5 feet from the edge of the new roadway/sidewalk.
Cost of TLE estimated at \$25,000 per acre.

* Zones: C=Commercial, R=Residential, O=Other

** Property at 501 Riders Club, driveway can not be feasibly reconfigured.

East Ave N and Riders Club Rd
I.C.E. - Alternative 2 - Roundabout
La Crosse County
Planning Level Cost Estimate
April 12, 2016

	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL	
	REMOVALS					
	Curb & Gutter	LF	1,410	\$3.90	\$ 5,499	
	Concrete Sidewalk	SY	709	\$6.00	\$ 4,254	
1	Removal Subtotal Costs				\$ 9,753	
	EARTHWORK					
	Excavation Common	CY	2,100	\$11.90	\$ 24,990	
2	Earthwork Subtotal Costs				\$ 24,990	
	PAVING ITEMS					
	Base Aggregate Dense 1-1/4 Inch	TON	2,550	\$14.10	\$ 35,955	
	Concrete Pavement 10-INCH	SY	335	\$52.75	\$ 17,671	
	HMA Pavement (E-3)	TON	825	\$84.30	\$ 69,548	
	4" Concrete Sidewalk (Includes Raised Medians)	SF	12,729	\$3.65	\$ 46,461	
	Concrete Curb and Gutter 30-inch Type D	LF	1,755	\$16.75	\$ 29,396	
	Concrete Curb and Gutter 30-inch Mountable	LF	240	\$14.75	\$ 3,540	
	Concrete Curb & Gutter 18-inch Mountable	LF	140	\$19.00	\$ 2,660	
3	Paving Subtotal Costs				\$ 202,571	
	STRUCTURES (Bridge price includes removals)					
					\$ -	
4	Structures Subtotal Costs				\$ -	
5	Roadway & Structure Subtotal Cost				\$ 237,314	
6	DRAINAGE/STORM SEWER	LS	15	% of Line 2+3	N/A	\$ 34,134
7	TRAFFIC CONTROL	LS	25	% of Line 5	N/A	\$ 59,329
8	EROSION CONTROL	LS	5	% of Line 2+3	N/A	\$ 11,378
9	LIGHTING	LS	5	% of Line 5	N/A	\$ 11,866
10	SIGNING/MARKING	LS	5	% of Line 2+3	N/A	\$ 11,378
11	MOBILIZATION	LS	8	% of Line 2+3	N/A	\$ 18,205
12	Roadway & Structure Subtotal Cost				\$ 383,604	
13	COST ESTIMATE CONTINGENCIES	LS	30	% of Line 13	N/A	\$ 115,081
14	Roadway & Structure Total Construction Cost				\$ 498,685	
	UTILITIES	LS	1	% of Line 15	N/A	\$ 4,987
	REAL ESTATE	LS	1		\$ 244,527.31	\$ 244,527
15	Utilities & Real Estate Total Cost				\$ 249,514	
16	CONSTRUCTION ENGINEERING	LS	8	% of Line 15	N/A	\$ 39,895
17	Construction Engineering Total Cost				\$ 39,895	
TOTAL PROJECT COST					\$ 789,000	

East Avenue at Riders Club Road

- 6 reportable crashes since 01-01-15
- Crashes consisted of 1 property damage crash, 4 personal injury crashes and 1 car/bike crash
- The car/bike crash resulted in injury to the bicyclist

06-10-15 5:10 PM Car/Bike

-Vehicle was west bound on Riders Club and struck bicyclist on East Avenue

06-30-16 4:47 PM Personal Injury

-Failure to yield by west bound car

06-23-17 1:07 PM Personal Injury

-Two vehicles on East Avenue collided head on. Driver of one of these vehicles claimed they were avoiding a west bound car that had run the stop sign on Riders Club Road.

11-30-18 9:28 AM Personal Injury

-Failure to yield by east bound car

06-14-19 1:48 PM Property Damage Crash

-Failure to yield by east bound car

07-19-19 4:58 PM Personal Injury

-Failure to yield by east bound car

*Source: Wisconsin DOT Community Maps

STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#6

Project/Item Name:

Lawrence Place storm sewer

Location:

Kristy Lane & Lawrence Place

Requested Action:

Discussion on storm sewer connection

Staff Report/Description:

The Town of Onalaska Engineer, on behalf of the Town of Onalaska, has requested connection of a storm sewer from Lawrence Place to Kristy Lane. Lawrence Place is a Town road and maintained by the Town. The Town is request would connect a Town installed storm sewer to Kristy Lane to drain Lawrence Place. Currently the area floods after every rain event and in spring during snow melt. The Kristy Lane storm sewer was sized for draining the storm water from this area.

Attachments:

Letter and map

General Engineering Company
P.O. Box 340
916 Silver Lake Drive
Portage, WI 53901



608-742-2169 (Office)
608-742-2592 (Fax)
gec@generalengineering.net
www.generalengineering.net

Engineers • Consultants • Inspectors

June 27, 2019

City of Onalaska
415 Main Street
Onalaska WI 54650
Attn: Jarrod Holter - City Engineer/Director of Public Works

Re: Lawrence Place – Stormwater Issues
Town of Onalaska

Dear Jarrod:

In response to our phone conversation, and on behalf of Town of Onalaska, I would like to start process of the municipal agreement between the two entities to resolve, the stormwater issues at the Lawrence Place.

Lawrence Place is a fully developed residential area that is draining to the lowest spot (at the end of the road) without natural outfall. During heavy rain events and snowmelts, the area is getting flooded with stormwater runoff, which creates dangerous conditions for the residents.

The Town of Onalaska would like to construct a storm sewer that will convey stormwater from the low spot at Lawrence Place into the City storm sewer system at Kristy Lane. The purpose of the proposed sewer is to improve safety and resolve water issues at the site.

If you have any questions regarding this, please contact me.

Yours truly,

GENERAL ENGINEERING COMPANY


Lukasz Lyzwa
Project Engineer

LAL/llg

Portage

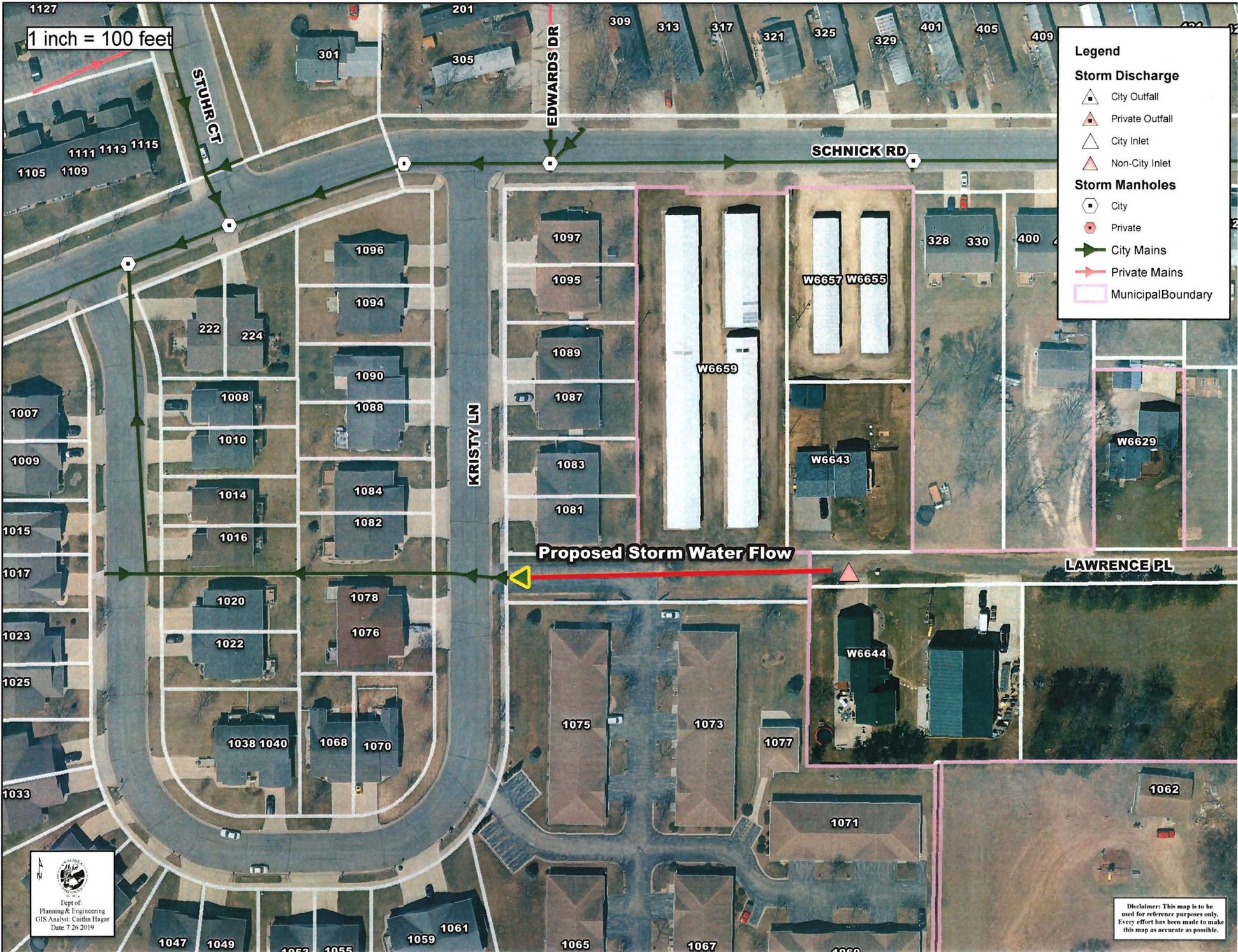
Black River Falls

La Crosse



Consulting Engineering • Structural Engineering • Building Design • Environmental Services • Building Inspection • GIS Services
Grants & Funding Services • Land Surveying • Zoning Administration • Mechanical, Electrical, & Plumbing Services





Legend

Storm Discharge

- ▲ City Outfall
- ▲ Private Outfall
- △ City Inlet
- ▲ Non-City Inlet

Storm Manholes

- ⊙ City
- Private

→ City Mains

→ Private Mains

□ Municipal Boundary


 Dept. of
 Planning & Engineering
 GIS Analyst: Caitlin Hagar
 Date: 7.26.2019

Disclaimer: This map is to be
 used for reference purposes only.
 Every effort has been made to make
 this map as accurate as possible.

STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#7

Project/Item Name:

Post chlorine injection Well #9

Location:

Well #9

Requested Action:

Approval of Engineering services

Staff Report/Description:

Staff has looked worked on ways up ensuring proper chlorine levels are leaving Well #9 for disinfection of the treated water leaving the well. It has been determined that the injection of chlorine after the treatment of the water as it leaves the well is the best alternative. Strand Associates would design the work needed, coordinate work with the Wis. DNR for approval and submit proper permitting for the work.

Attachments:

Task order and e-mail



OWNER REVIEW

Strand Associates, Inc.[®]

910 West Wingra Drive

Madison, WI 53715

(P) 608-251-4843

(F) 608-251-8655

DRAFT

Task Order No. 19-03
City of Onalaska, Wisconsin (OWNER)
and Strand Associates, Inc.[®] (ENGINEER)
Pursuant to Agreement for Technical Services dated December 19, 2014

Project Information

Project Name: Well No. 9 Post-Filtration Chlorine Injection

Services Description: Provide engineering design for modifications at the existing chlorine system to provide for post-filter chlorination.

Scope of Services

ENGINEER will provide the following services to OWNER.

1. Prepare a Request for Proposal (RFP) for OWNER's use in obtaining proposals from a contractor for the modification of the existing gas chlorination system to add a post-filter chlorination injection point at Well No. 9.
2. Prepare the following items for inclusion in the RFP:
 - a. Technical specifications for chlorination system equipment modifications.
 - b. Schematic drawings of proposed modifications to the existing chlorination system.
 - c. Plan drawings, on existing CAD drawings, showing general pipe routing, location of proposed injection point, electrical modifications, and control modifications.
3. Prepare the Wisconsin Department of Natural Resources (WDNR) Chemical Feeder Submittal Checklist. Submit checklist, technical specifications, schematics, and drawings to the WDNR for review and approval.
4. Review contractor's shop drawing for new chemical feed components.
5. Answer OWNER questions during RFP process and construction.
6. Perform one site visit to observe startup and project checkout.

Compensation

OWNER shall compensate ENGINEER for Services under this Task Order on an hourly rate basis plus expenses an estimated fee of \$16,300.

ALM:\nro\R\MAD\Documents\Agreements\O\Onalaska, City of (WI)\TSA.2014\TO\2019\1107.040.19-03.docx

Holter, Jarrod

From: Mullendore, Andy <Andy.Mullendore@strand.com>
Sent: Friday, June 21, 2019 9:14 AM
To: Wiatt, John
Cc: Holter, Jarrod; Zenz, Shane
Subject: Onalaska Well No. 9
Attachments: 1107.040.19-03.(Revised Draft NFS OWNER Review-062119).pdf

John,

Following is a breakdown of the cost opinion to install the second injection point at Well No. 9.

Preliminary Opinion of Probable Cost

Owner: City of Onalaska
Facility: Well No. 9

Description: Add post filter chlorine injection tap. Includes replacement chlorine booster pump, scales, control modifications, injector and piping.

Booster Pump and Power	2500		
Scales and Wiring	4000		
Control Modification/IO	5000		
Taps interior piping injector etc.	10000		
Poly Permanent Install	10000		
			31500
	15 Percent	Contingency	4800
		Total	36300

I also attached a draft of the engineering task order for as requested.

If you have questions please feel free to contact me. You can also contact Shane.



Andy Mullendore, P.E.

Strand Associates, Inc.®

608.251.4843 ext. 1108

andy.mullendore@strand.com | www.strand.com

P.E. (IL, WI)

Excellence in Engineering Since 1946.

File: City of Onalaska
Proj. Ref 1107040

STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#8

Project/Item Name:

City Hall masonry repair

Location:

City Hall

Requested Action:

Approval of masonry repair

Staff Report/Description:

City Hall is in need to tuck pointing of brick and caulking in various locations. This work would also include brick work on the two columns coming into the East door of City Hall. If budget allows tuck pointing of pillars along Main Street would also be performed as part of this work. The 2019 Capital Improvements budget includes this item with a budget of \$50,000. Staff is requesting approval of Fowler & Hammer not to exceed the \$50,000 budget.

Attachments:

e-mail

Holter, Jarrod

From: Alec Schwartz <aschwartz@fowlerhammer.com>
Sent: Monday, July 15, 2019 4:10 PM
To: Holter, Jarrod; Babiash, Brian
Subject: RE: Onalaska City Hall Masonry Budget

Jarro/Brian,

Good afternoon, after speaking with Jarrod a few weeks ago he said you were looking for the info I had sent out last year. Please see below for a recap on the budget pricing sent to you last August. We are in the process of trying to find brick and mortar matches and was thinking possibly next week to come over and look at those with you guys when they come in. Let me know what you guys think.

Thanks,

ALEC SCHWARTZ
PROJECT MANAGER



313 Monitor Street, La Crosse, WI 54603
Office: (608) 782-6849 | Fax: (608) 785-7055
aschwartz@fowlerhammer.com

WWW.FOWLERHAMMER.COM



From: Alec Schwartz
Sent: Tuesday, August 28, 2018 6:19 PM
To: jholter@cityofonalaska.com; bbabiash@cityofonalaska.com
Subject: Onalaska City Hall Masonry Budget

Gentlemen,

Sorry for the delay, please see below for some ideas for masonry repairs discussed and rough budget:

Please see below for a priority list of work on this building, let me know if you think differently, would add things:

1. Remove brick and stone cap at front columns and building sign, re-install new brick with drainage/ventilation mat between veneer and block backup, install brick with weep vents top and bottom, re-install stone caps with stainless steel flashing and anchors under stone caps = \$27,000.00
2. Remove cracked brick at two corners, grind out mortar joints at cracked areas, cut in new EJ at inside corner at wall return, re-install brick, repoint joints, install backer rod and caulk new EJ = \$10,000.00
3. Check lintels for rust jacking, if needed, remove brick, wire wheel, spray cold galvanizing, relay with same flashing/weep system, otherwise grind out mortar at horizontal lintel bearing and replace with backer rod and caulk = \$2,000.00/Window if rust jacking and caulking / \$600.00/Window if just grind out and caulk mortar joint
4. Grind out mortar joint at cast stone sills and replace with backer rod and caulk = \$600.00/Window
5. Replace all EJ caulking – decide if caulk color should change to match brick color = Depending on amount could be \$15.00-20.00/LF to remove and replace caulk

Stone piers along road:

1. Grind out all mortar joints in cast stone and emblem surround, insert back rod and caulk = \$4,000.00/Pier

Let me know if you have any questions.

Thanks,

ALEC SCHWARTZ
PROJECT MANAGER



313 Monitor Street, La Crosse, WI 54603
Office: (608) 782-6849 | Fax: (608) 785-7055
aschwartz@fowlerhammer.com

WWW.FOWLERHAMMER.COM



STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#9

Project/Item Name:

Irvin Street Project

Location:

200 block Irvin Street

Requested Action:

Approval of archeological oversight

Staff Report/Description:

The Irvin Street Project is within the Archeological sensitive area that requires state permits for excavation work. This work also requires an archeologist to be on site during the excavation and paperwork upon completion of the project. This work would be performed by Mississippi Valley Archeology Center at a cost of \$3,594. If artifacts are found this cost would go with the amount found. This portion of the project would be funded from the 2019 Capital Improvements Irvin Street project.

Attachments:

e-mail

Holter, Jarrod

From: Schubert, Kevin
Sent: Wednesday, July 17, 2019 9:08 AM
To: Wendy Holtz-Leith
Cc: Katherine Stevenson; Holter, Jarrod
Subject: RE: Onalaska Irvin Street

Wendy,

The amount listed below should be acceptable. We will take it to our August meeting cycle for formal approval.

Thanks,
Kevin

Kevin Schubert, P.E.
Assistant City Engineer

City of Onalaska
415 Main St.
Onalaska, WI 54650
Cell: 608-769-6061
Office: 608-781-9537
Fax: 608-781-9506

From: Wendy Holtz-Leith [mailto:wholtz-leith@uwlax.edu]
Sent: Tuesday, July 16, 2019 2:47 PM
To: Schubert, Kevin
Cc: Katherine Stevenson
Subject: Re: Onalaska Irvin Street

Hi Kevin,

I ran the numbers for the Irvin Street Paseo project and for the preparation of the request to disturb, monitoring (approximately 30 hours for Erik), and the report write up it will be \$3,594. As usual we will only charge for the hours that the project requires. If that sounds reasonable or you have any questions please let me know.

Thanks,
Wendy

Wendy Holtz-Leith
Senior Research Archaeologist
Mississippi Valley Archaeology Center
University of Wisconsin-La Crosse
1725 State St.
La Crosse, WI 54601
608-785-8455

STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#10

Project/Item Name:

West Avenue parking

Location:

800 block West Avenue

Requested Action:

Discussion on parking

Staff Report/Description:

A public meeting was held with residents of the neighborhood in the vicinity of the West Avenue park in regards to parking and possible solutions. The consensus at the meeting was do not take away the park or use the park lands for parking. The property owners along West Avenue continued to convey problems with parking along West Avenue due to business within the neighborhood. Staff is requesting direction on how to proceed in this area.

Attachments:

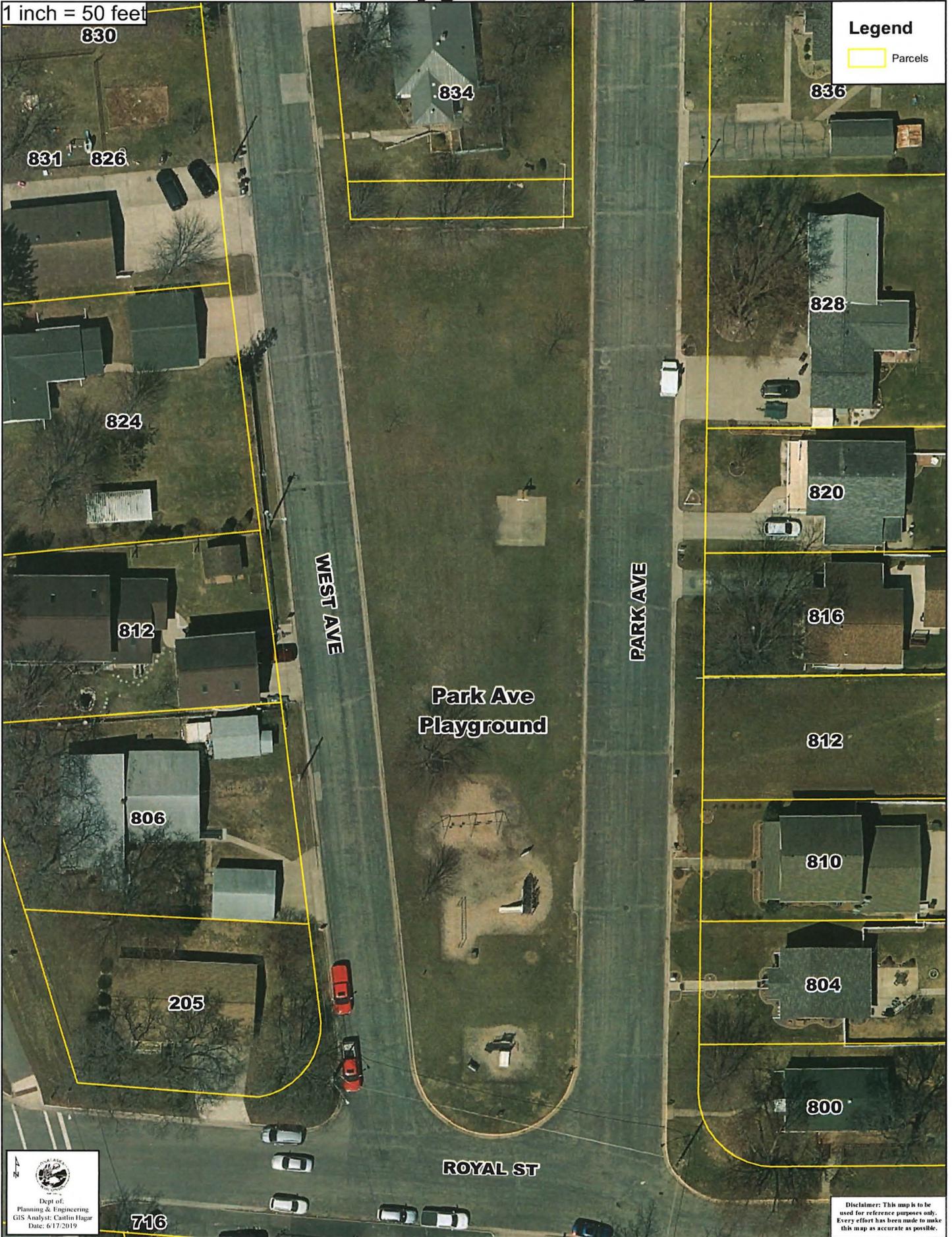
maps

Park Ave Playground Neighbors

1 inch = 50 feet

Legend

Parcels



Dept of:
Planning & Engineering
GIS Analyst: Caitlin Hagar
Date: 6/17/2019

Disclaimer: This map is to be used for reference purposes only. Every effort has been made to make this map as accurate as possible.

1 inch = 50 feet



Dept. of
Planning & Engineering
City of Cambridge
Massachusetts



**No Parking,
Stopping or Standing**

Disclaimer: This map is to be used for reference purposes only. Every effort has been made to make this map as accurate as possible.

STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#11

Project/Item Name:

Well #8 chemical treatment

Location:

Well #8

Requested Action:

Approval of services

Staff Report/Description:

Well #8 chemical treatment was recommended as part of the analysis by Mr. Andrew Jacque. This work would be performed by Municipal Well & Pump, contractor that has been working on City Wells for many years. This work would be funded from the 2019 Water operating budget.

Attachments:

quote



MUNICIPAL
WELL & PUMP
A Division of Midwest Well Services, Inc.

June 6, 2019

City of Onalaska
Attn: Jim Prindle
PO Box 339
Onalaska, WI 54650

RE: Well No. 8 Chemical Treatment

Dear Jim,

This letter is for the treatment work for Well No. 8, as detailed by Water Quality Investigations. The program is rather extensive, but we have been involved with other successful projects with Andy Jacque, on projects like this. Based on the project scope, it would appear the well will be out of service for approximately two weeks.

Please note that in our experience the supplemental treatments are usually used for these types of treatments.

Please review the following scopes and the associated costs for the project:

I: Mobilization/Demobilization

1. Load and mobilize chemical treatment equipment to job site.
2. Disassemble piping and set up treatment equipment.
3. Disassemble treatment equipment and return pump equipment to normal.
4. Install recycle line through well vent piping.
5. Demobilize chemical treatment equipment from job site and unload at shop.

.....**Lump Sum Section I: \$ 9,940**

II: Acid Treatment

1. Provide chemicals per scope supplied in report.
2. Inject chemicals and surge well for 8-hours.
3. Let chemicals stand in well overnight.
4. Surge well for an additional 2 hours the following morning.
5. Pump off acid and neutralize.

.....**Lump Sum Items 1-5: \$ 6,740**

6. Supplemental acid treatment per scope supplied:.....**Lump Sum: \$ 2,110**

.....**Estimated Total Section II (Acid Treatment): \$ 8,850**

III: Chlorine-Based Treatment

1. Provide chemicals per scope supplied in report.
2. Inject chemicals and surge well for 8-hours.
3. Let chemicals stand in well overnight.
4. Surge well for an additional 2 hours the following morning.
5. Pump off chlorine and neutralize.

.....**Lump Sum Items 1-5 (Chlorine-Based Treatment): \$ 5,390**

6. Supplemental chlorine-based treatment per scope supplied:.....**Lump Sum: \$ 2,130**

.....**Estimated Total Section III (Chlorine-Based Treatment): \$ 7,520**

IV: Pump to Waste & Sampling

1. Set up to run well to waste.
2. Run pump to waste for 8-hours.
3. Collect first sample after 8-hours.
4. Collect second sample from well the following morning.
5. Disassemble well testing equipment.
6. Deliver samples to lab.

.....**Lump Sum Section IV: \$ 3,220**

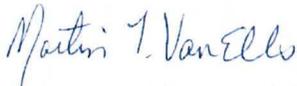
Estimated Total Sections I - IV: \$ 29,530

V: Additional Treatments (if needed)

1. Additional acid treatments- as needed:.....**Lump Sum Each: \$ 5,810**
2. Additional chlorine-based treatments- as needed:.....**Lump Sum Each: \$ 5,070**

We trust you will find this correspondence to your understanding. Should you have any questions or concerns regarding this proposal, or if there is any other way we can be of assistance to your community, please contact our offices at your earliest convenience. We appreciate this opportunity to provide you with this proposal, and look forward to the opportunity to provide the City of Onalaska expert service on this project.

Sincerely,
MUNICIPAL WELL & PUMP



Marty Van Ells
Project Manage

STAFF REVIEW SUMMARY

CITY OF ONALASKA BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#12

Project/Item Name:

Northern Hills School parking

Location:

East Avenue

Requested Action:

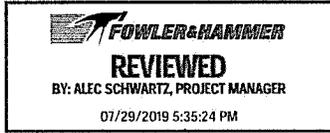
Discussion on parking and school drop off

Staff Report/Description:

Since the new School addition City staff has been working with School staff on drop off and pick up of students at the school. For the last year the use of cones placed in the street has assisted with this function. Staff are proposing the installation of a median on East Avenue to limit left turns into the school drop student drop off area.

Attachments:

map

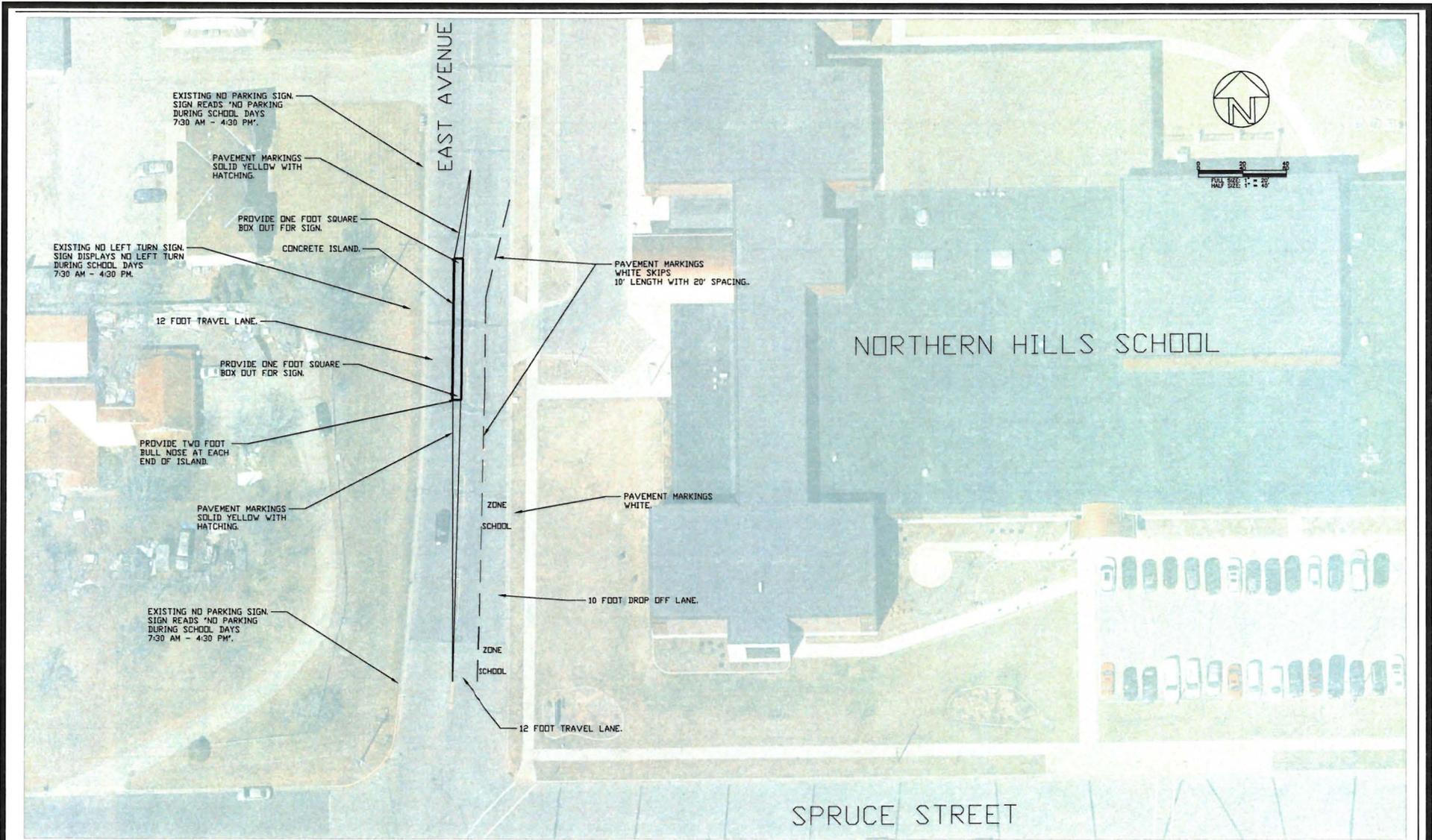


COST PROPOSAL
2019 MISCELLANEOUS CONCRETE
NOTHERN HILLS SCHOOL

7/22/2019

NOTHERN HILLS SCHOOL DROP OFF ZONE

ITEM #	DESCRIPTION	UNIT	TOTAL UNITS	UNIT COST	TOTAL COST
1	18" CURB & GUTTER PLACEMENT (6" Flag, 12" Head)	L.F.	140	\$29.00	\$4,060.00
2	4" MEDIAN ISLAND CONCRETE	S.F.	75	\$9.00	\$675.00
3	PAVEMENT REMOVAL	S.F.	300	\$1.25	\$375.00
4	LANE LINES, SOLID , YELLOW, 4-INCH, EPOXY	L.F.	350	\$13.80	\$4,830.00
5	LANE LINES, SKIP , WHITE, 4-INCH, EPOXY	L.F.	100	\$6.90	\$690.00
6	WORD, WHITE "SCHOOL", EPOXY	EACH	2	\$431.25	\$862.50
7	WORD, WHITE "ZONE", EPOXY	EACH	2	\$431.25	\$862.50
				TOTAL =	\$12,355.00



REVISIONS	REV. DATE	DRAWN	DESIGN	CHECKED
		KJS	KJS	CJH
	7/19/19	7/19/19	7/19/19	

CITY OF ONALASKA
 ENGINEERING DEPARTMENT
 415 MAIN STREET, ONALASKA, WISCONSIN, 54650
 TELEPHONE: (808) 781-8537, FAX: (808) 781-8508

2019 MISCELLANEOUS CONCRETE

NORTHERN HILLS DROP OFF LANE

SHEET
1
1

STAFF REVIEW SUMMARY

CITY OF ONALASKA
BOARD OF PUBLIC WORKS

August 6, 2019

Agenda Item:

#14

Project/Item Name:

2019 Utility Project

Location:

Citywide

Requested Action:

Approval of new completion date

Staff

Report/Description:

The General Contractor Gerke Excavating has requested a time extension for completion of the 2019 Utility Project. The Contractor began the project late due to providing multiple utility crews to the 2019 Abbey Road Reconstruction Project. Impact to residents and school district would remain the same.

Attachments:

E-mail

Schubert, Kevin

From: Thad Rezin <tmr@gerkeexcavating.com>
Sent: Wednesday, July 31, 2019 10:08 AM
To: Schubert, Kevin
Subject: Time Extension
Attachments: 2019 Utility Onalaska CO Project Extension.doc

Kevin ,

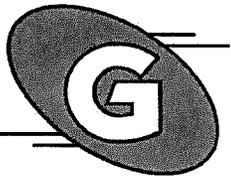
We would like to request a 6 week extension on the 2019 utility project.

Thad



Thad Rezin, Superintendent
Gerke Excavating Inc

15341 State Hwy 131, Tomah, WI 54660
608.372.4203 Office
608.372.4139 Fax
608.343.5855 Cell
tmr@gerkeexcavating.com



Change Order Proposal

Gerke Excavating, Inc
15341 State Hwy 131, S
Tomah, WI 54660
www.gerkeexcavating.com
Phone: 608-372-4203
Fax: 608-372-4139

To:	Project:	Proposal #: 19168
City of Onalaska	2019 Onalaska Utility	Date: 7/30/2019

Details:

Gerke Excavating, Inc is requesting a 6-week project extension for the 2019 Onalaska Utility Project due to forcing multiple utility crews on the Abbey Road project to increase production along with minimizing disruption during the spring school season within the 2019 Onalaska Utility project limits.

Sincerely,

Thad Rezin

Gerke Excavating, Inc

The terms listed hereon are satisfactory and (I)(We) hereby authorize the performance of said work.

Signed: _____ Date: _____

Printed Name: _____ Title: _____

**BOARD OF PUBLIC WORKS
MONTHLY ESTIMATES
August 6, 2019**

#15

<u>Contractor</u>	<u>Original Contract Amount</u>	<u>Change Orders</u>	<u>Paid to Date</u>	<u>Due this Estimate</u>
1. SEH INC. Green Coulee Reservoir Design Estimate #6	\$ 25,000.00	\$ -	\$ 13,483.52	\$ 1,251.41
2. DAVY ENGINEERING French Rd Booster Station/Crestwood Ln Design Estimate #10	\$ 126,490.00	\$ 76,010.00	\$ 198,872.11	\$ 8,303.07
3. SEH INC. Abbey Road Construction Estimate #4	\$ 34,600.00	\$ -	\$ 22,001.15	\$ 1,559.44
4. GERKE EXCAVATING, INC Abbey Road Project Construction Estimate #4	\$ 1,536,651.19	\$ -	\$ 820,690.68	\$ 118,525.89
5. OLYMPIC BUILDERS GENERAL CONTRACTORS 6th & Quincy Pumping Station Construction Estimate #4	\$ 989,678.00	\$ -	\$ 218,420.20	\$ 100,956.50
6. FOWLER & HAMMER INC 2019 Misc. Concrete Construction Estimate #3	\$ 109,838.75	\$ -	\$ 24,160.16	\$ 23,339.84
7. STRAND ASSOCIATES 6th & Quincy Lift Station Construction Estimate #3	\$ 33,000.00	\$ -	\$ 17,174.76	\$ 3,624.16
8. A-1 EXCAVATING Crestwood Lane Utilities Construction Estimate #3	\$ 698,189.75	\$ -	\$ 481,131.30	\$ 151,250.62
9. MATHY CONSTRUCTION 2019 Pavement Project Construction Estimate #2	\$ 1,082,820.45	\$ -	\$ 42,777.61	\$ 585,348.00

**BOARD OF PUBLIC WORKS
MONTHLY ESTIMATES
August 6, 2019**

<u>Contractor</u>	<u>Original Contract Amount</u>	<u>Change Orders</u>	<u>Paid to Date</u>	<u>Due this Estimate</u>
10. HSR ASSOCIATES PWF Addition Design Estimate #3	\$ 81,500.00	\$ -	\$ 40,750.00	\$ 2,785.00
11. MSA PROFESSIONAL SERVICES Green Coulee Intersection Design Estimate #5	\$ 41,728.43	\$ -	\$ 37,537.30	\$ 4,822.79
12. STRAND ASSOCIATES General Engineering Design Estimate #1	\$ 1,000.00	\$ -	\$ -	\$ 278.49
13. FOWLER & HAMMER INC 2019 Irvin St Streetscaping & Paseo Construction Estimate #1	\$ 225,854.00	\$ -	\$ -	\$ 142,500.00
14. GERKE EXCAVATING INC 2019 Utility Project Construction Estimate #1	\$ 1,287,302.00	\$ -	\$ -	\$ 253,214.67