



STAFF REPORT

DATE: November 20, 2018

PUBLIC HEARING

Item #: 14

AGENDA ITEM: 2019 Street and Utility Improvements – Public Improvement Hearing; Resolution Ordering the Preparation of Plans and Specifications; Approve Engineering Services Contract

SUBMITTED BY: Jack Griffin, City Engineer

REVIEWED BY: Kristina Handt, City Administrator
Sue Iverson, Finance Director
Sarah Sonsalla, City Attorney
Chad Isakson, Assistant City Engineer

ISSUE BEFORE COUNCIL: The City Council is respectfully requested to open the Public Improvement Hearing for the 2019 Street and Utility Improvements; and following the Hearing, consider adopting a Resolution Ordering the Preparation of Plans and Specifications; and awarding a Professional Engineering Design and Construction Support Services Contract.

BACKGROUND: Pursuant to Minnesota Statutes, Section 429.011 to 429.111, a Public Improvement Hearing was noticed for November 20, 2018, to consider making the improvements necessary to reconstruct approximately 1.5 miles of local streets including 36th Street North, from Jamaca Avenue to Irwin Avenue, 37th Street North, from Jamaca Avenue to Irwin Avenue, Irwin Avenue North, from 36th Street to 37th Street, 38th Street North, from Innsdale Avenue to Ideal Avenue (CSAH 13), 39th Street North, from Innsdale Avenue to Ideal Avenue (CSAH 13), and Innsdale Avenue North, from 38th Street to 39th Street.

The attached notice was published in the official newspaper and individual notifications were sent to each address that will be wholly or partially assessed for the improvements.

A feasibility report was adopted by the City Council on October 16, 2018 in order to ready these improvements for 2019 construction. The feasibility report is needed to meet state statutory requirements if any portion of the project is to be assessed. The report identifies the necessary improvements, the estimated project costs, the assessment methodology and preliminary assessment amounts to be levied against benefitting properties.

PROPOSAL DETAILS/ANALYSIS: The total estimated project cost is \$3,674,500. The street and drainage improvements are estimated to be \$2,317,100 and the watermain improvements are estimated to be \$1,357,400. The improvements would be partially assessed against the benefitting properties consistent with the City's Special Assessment Policy. Residential street improvements are assessed 30% of the total project costs while watermain improvements are assessed 100% to the benefitting properties after deducting City oversize costs. The City's general tax levy is used to cover the bond payments for the remaining street improvements. The Water Enterprise Fund is used to cover the watermain oversize or trunk costs. A lateral benefit assessment would be levied against properties along the proposed trunk watermain on Ideal Avenue. Residential properties along 36th Street North, 37th Street North, Irwin Avenue North, 38th Street North, 39th Street North, and Innsdale Avenue North with direct access to the street are included as benefitting properties. Each property is assessed one unit unless the property has the ability to be subdivided using the

current underlying land use and zoning regulations. The planning department reviews larger parcels to determine if a parcel can be subdivided and the number of lots that could be obtained.

The preliminary assessment rolls detailing each property's proposed assessment amount are included in the Appendix of the report and are attached to this agenda report. Assessments for street and drainage improvements are levied over 15 years while assessments for watermain improvements are levied over 20 years. Assessments are charged an interest rate of 1% over the bond rate for the project.

To complete the engineering design, the City Engineer prepared and sent out a Request for Proposal (RFP) for the Engineering Support Services that include topographic survey, the preparation of plans and specifications; plan printing, distribution and bidding services; construction administration support to the City Engineer, and construction staking. FOCUS Engineering will provide council communication, project management, and construction administration and observation services for the project. FOCUS will also oversee the project design standards and documents to be incorporated with the project plans and specifications.

The RFP was sent to three firms from the city's Engineering Consultant Pool, including Bolton and Menk, TKDA and SEH. Proposals were received on November 8, 2018 and were ranked as follows:

- Project Team Qualifications with a focus on a Project Manager capable of leading and delivering a cost effective street reconstruction and utility improvement project.
- Demonstrated understanding and experience with the project and understanding of the critical success factors.
- Understanding the scope of work and roles and responsibilities of the Consultant.
- Collaboration of skills and responsiveness demonstrated during the RFP submittal process and:
- Engineering Fees, indicating a detailed breakdown that is consistent with the Consultant's written proposal and the needs for delivery of a successful project.

The attached exhibit provides the Proposal Fee Summary as received by the responding consultants. The Proposal Fees ranged from \$128,775 to \$162,926 for the full scope of the proposed improvements. Engineering Fees are subtotaled for each project phase including project management, plans and specifications, bidding, and construction support services including construction staking.

The City Engineer is recommending a contract be awarded to SEH, Inc. They have assigned a qualified team appropriate for the level of work required for this project and have previous work experience on similar projects. SEH also identified a thorough understanding of the work to be performed, they are aware of key issues related to the project and assigned the appropriate level of work effort required for construction staking services.

FISCAL IMPACT: The 2019 Street and Utility Improvements is an estimated \$3,674,500 infrastructure project that will be partially assessed against the benefitting properties consistent with the City's Special Assessment Policy. The project is funded through the issuance of general obligation bonds and special assessments. Authorizing the preparation of plans and specifications commits the City to incur the engineering costs necessary to complete detailed design and receive contractor bids to ready the project for construction in 2019. The Council will be asked to order the improvements and award a contract for construction in April 2019, at which time the City would be asked to commit to the remaining project costs.

OPTIONS:

1. Adopt the Resolution and motions as presented to proceed with the preparation of plans and specifications for the 2019 Street and Utility Improvements as outlined in the Feasibility Report approved on October 16, 2018.

2. Following public input, amend any portion of the recommended improvements or recommendations of the Feasibility Report and adopt an amended Feasibility Report along with an amended Resolution and/or motions accordingly.
3. Take no action thereby cancelling the 2019 Street and Utility Improvements and direct staff for reprogramming these improvements within the Capital Improvement Plan.

RECOMMENDATION: Staff is recommending that the City Council adopt a Resolution Ordering the Preparation of Plans and Specifications for the 2019 Street and Utility Improvements. The recommended motion for this action is as follows:

“Move to adopt Resolution No. 2018-131 Ordering the Preparation of Plans and Specifications for the 2019 Street and Utility Improvements.”

Staff is also recommending that the City Council award a Professional Engineering Design and Construction Support Services Contract for the 2019 Street and Utility Improvements. Staff is recommending **SEH, Inc.** be awarded the contract in a not to exceed amount of \$162,926, or \$150,200 if no watermain is authorized for the Bordners Garners Farmettes neighborhood. The recommended motion for this action is as follows:

“Move to approve a Professional Engineering Design and Construction Support Services Contract to SEH, Inc. for the 2019 Street & Utility Improvements in the not to exceed amount of \$ _____.”

ATTACHMENTS:

1. Resolution Ordering the Improvements and the Preparation of Plans and Specifications.
2. Notice of Hearing on Improvement.
3. Preliminary Assessment Roll.
4. Location Map.
5. Project Schedule.
6. Engineering Proposal Fee Summary Worksheet.

**CITY OF LAKE ELMO
WASHINGTON COUNTY
STATE OF MINNESOTA**

RESOLUTION NO. 2018-131

**A RESOLUTION ORDERING THE OF PLANS AND SPECIFICATIONS
FOR THE 2019 STREET AND UTILITY IMPROVEMENTS**

WHEREAS, pursuant to City Council authorization, adopted on October 16, 2018, the Council ordered a hearing on improvement for the 2019 Street and Utility Improvements; and

WHEREAS, ten days mailed notice and two weeks published notice of the hearing was given, and the hearing was held thereon on the 20th day of November 2018, at which all persons desiring to be heard were given the opportunity to be heard thereon; and

WHEREAS, the feasibility report prepared by FOCUS Engineering, Inc., and dated October 2018 states that the project is necessary, cost-effective, and feasible.

NOW, THEREFORE, BE IT RESOLVED,

1. Such improvement is deemed necessary, cost-effective, and feasible as detailed in the Feasibility Report dated October 2018.
2. The City Engineer is hereby designated as the engineer for making this improvement. The engineer, and his consultants, shall oversee the preparation of the Plans and Specifications for the making of such improvement.
3. The City Engineer shall retain the services of a consulting engineering firm to assist, where needed, to prepare Plans and Specifications for the making of such improvement and to assist the City Engineer during the construction phase of the improvement as requested.

**ADOPTED BY THE LAKE ELMO CITY COUNCIL ON THE TWENTIETH DAY OF
NOVEMBER, 2018.**

CITY OF LAKE ELMO

By: _____

Mike Pearson
Mayor

(Seal)
ATTEST:

Julie Johnson
City Clerk

**CITY OF LAKE ELMO
NOTICE OF HEARING ON IMPROVEMENT
2019 STREET AND UTILITY IMPROVEMENTS**

Notice is hereby given that the City Council of Lake Elmo will meet in the council chambers of the city hall at or approximately after 7:00 P.M. on **Tuesday, November 20, 2018**, to consider the making of the following improvements, pursuant to Minnesota Statutes, Sections 429.011 to 429.111;

The improvements consist of the reconstruction of the existing streets, drainage and storm sewer improvements, and watermain improvements within the Bordners Garner Farnettes and Kenridge Addition neighborhoods, along the following street segments:

- 36th Street North, from Jamaca Avenue to Irwin Avenue.
- 37th Street North, from Jamaca Avenue to Irwin Avenue.
- Irwin Avenue North, from 36th Street to 37th Street.
- 38th Street North, from Innsdale Avenue to Ideal Avenue (CSAH 13).
- 39th Street North, from Innsdale Avenue to Ideal Avenue (CSAH 13).
- Innsdale Avenue North, from 38th Street to 39th Street.

The area proposed to be assessed for these improvements include properties abutting the above referenced streets or properties that gain direct driveway access from the above referenced streets. The estimated total cost of the street and drainage improvements is \$2,317,100 and the estimated total cost of the watermain improvements is \$1,357,400. A reasonable estimate of the impact of the assessment will be available at the hearing. Such persons as desiring to be heard with reference to the proposed improvements will be heard at this meeting.

DATED: October 16, 2018

BY ORDER OF THE LAKE ELMO CITY COUNCIL

Mike Pearson, Mayor

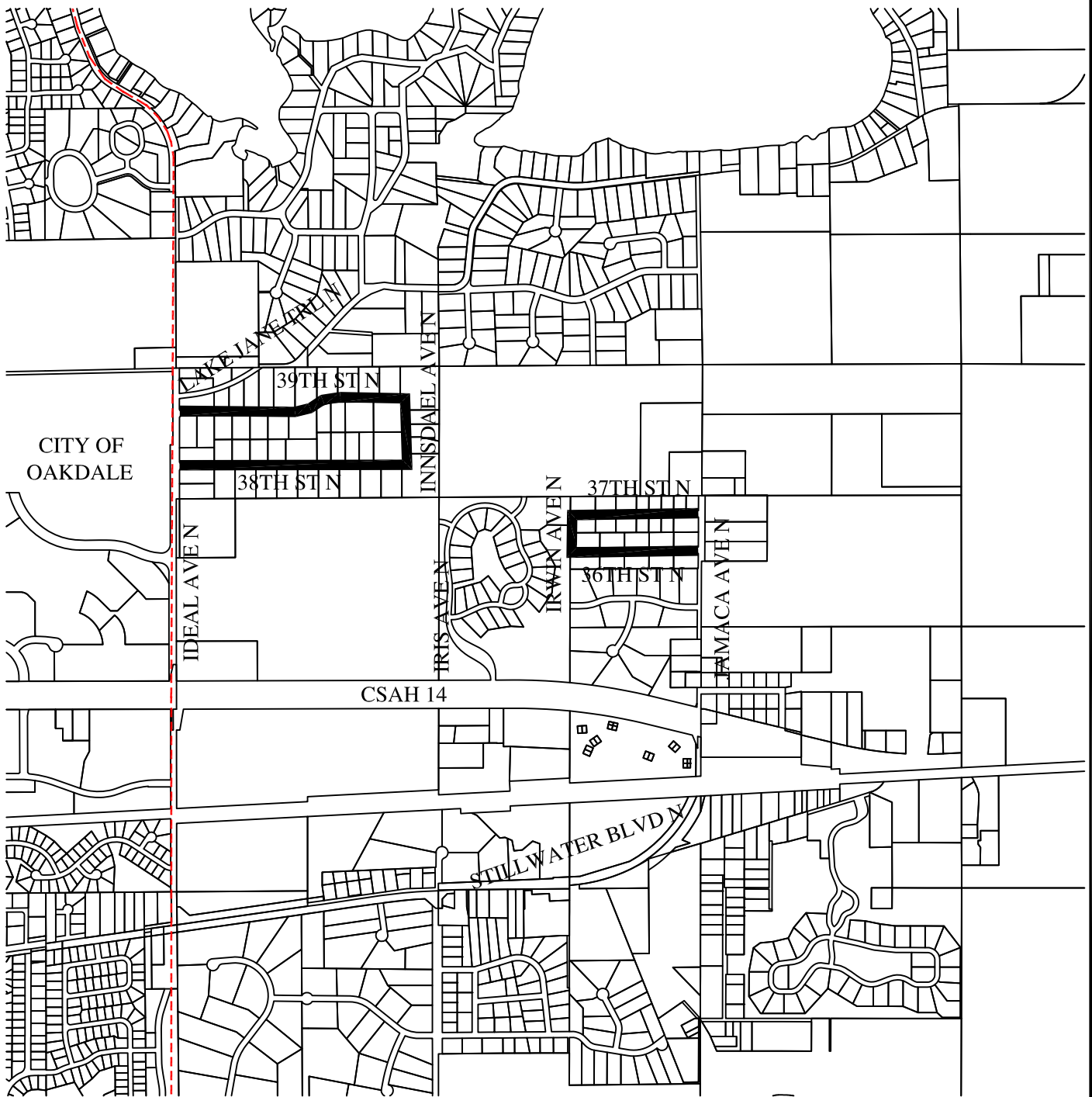
(Published in the Oakdale/Lake Elmo Review on October 24, 2018 and October 31, 2018)

2019 STREET IMPROVEMENTS
BORDNERS GARNER FARMETTES NEIGHBORHOOD
PRELIMINARY ASSESSMENT ROLL
STREET AND WATERMAIN IMPROVEMENTS

NO.	NAME	ADDRESS			MAILING ADDRESS					PID	TOTAL	STREET AND	WATERMAIN	
											ASSESSMENT	DRAINAGE	ASSESSMENT	
											AMOUNT	ASSESSMENT	ASSESSMENT	
1	JOHNSON DONALD J & SHIRLEY E	8050	39TH	ST N	8050	39TH	ST N	LAKE ELMO	MN	55042	1602921220005	\$22,400.00	\$9,600.00	\$12,800.00
2	PAULSON LAWRENCE W	8080	39TH	ST N	8080	39TH	ST N	LAKE ELMO	MN	55042	1602921220006	\$22,400.00	\$9,600.00	\$12,800.00
3	SPREEMAN DOUGLAS P & LISA M	8120	39TH	ST N	8120	39TH	ST N	LAKE ELMO	MN	55042	1602921220007	\$22,400.00	\$9,600.00	\$12,800.00
4	COUGHLIN WILFRED L & CHERIE L	8140	39TH	ST N	8140	39TH	ST N	LAKE ELMO	MN	55042	1602921220008	\$22,400.00	\$9,600.00	\$12,800.00
5	BLOSSOM SUSAN M	8170	39TH	ST N	8170	39TH	ST N	LAKE ELMO	MN	55042	1602921220009	\$22,400.00	\$9,600.00	\$12,800.00
6	BROMBACK KATHRYN M & ERIK D HULS	8234	39TH	ST N	8234	39TH	ST N	LAKE ELMO	MN	55042	1602921220011	\$22,400.00	\$9,600.00	\$12,800.00
7	SCHMIDT RYAN M	8268	39TH	ST N	8268	39TH	ST N	LAKE ELMO	MN	55042	1602921210001	\$22,400.00	\$9,600.00	\$12,800.00
8	BARKWELL MICHAEL E & JENNIFER M SEEBACK	8320	39TH	ST N	8320	39TH	ST N	LAKE ELMO	MN	55042	1602921210002	\$22,400.00	\$9,600.00	\$12,800.00
9	LAU PATRICIA	8370	39TH	ST N	8370	39TH	ST N	LAKE ELMO	MN	55042	1602921210003	\$22,400.00	\$9,600.00	\$12,800.00
10	SMITH TAYLOR B & ANGELA M	8390	39TH	ST N	8390	39TH	ST N	LAKE ELMO	MN	55042	1602921210004	\$22,400.00	\$9,600.00	\$12,800.00
11	JACKLE MARLIES A & ARLENE A FISHER	8420	39TH	ST N	8420	39TH	ST N	LAKE ELMO	MN	55042	1602921210005	\$22,400.00	\$9,600.00	\$12,800.00
12	DEMKO JAMES T & PENNY J	3929	INNSDALE	AVE N	3929	INNSDALE	AVE N	LAKE ELMO	MN	55042	1602921210007	\$22,400.00	\$9,600.00	\$12,800.00
13	FRID KEVIN D & KATIE J	3909	INNSDALE	AVE N	3909	INNSDALE	AVE N	LAKE ELMO	MN	55042	1602921210008	\$22,400.00	\$9,600.00	\$12,800.00
14	LAMBERT ROBERT A & LYNN C	3889	INNSDALE	AVE N	3889	INNSDALE	AVE N	LAKE ELMO	MN	55042	1602921210006	\$22,400.00	\$9,600.00	\$12,800.00
15	JOHN H JACK ZWICKEY REV TRS	3817	INNSDALE	AVE N	3817	INNSDALE	AVE N	LAKE ELMO	MN	55042	1602921210009	\$22,400.00	\$9,600.00	\$12,800.00
16	BREHEIM BARRY B & GERALDINE	8415	38TH	ST N	8415	38TH	ST N	LAKE ELMO	MN	55042	1602921210010	\$22,400.00	\$9,600.00	\$12,800.00
17	VANG ROGER & MAI XIONG	8375	38TH	ST N	8375	38TH	ST N	LAKE ELMO	MN	55042	1602921210011	\$22,400.00	\$9,600.00	\$12,800.00
18	MESSNER LISA A	8321	38TH	ST N	8321	38TH	ST N	LAKE ELMO	MN	55042	1602921210012	\$22,400.00	\$9,600.00	\$12,800.00
19	PINZ DONALD & BARBARA	8309	38TH	ST N	8309	38TH	ST N	LAKE ELMO	MN	55042	1602921210013	\$22,400.00	\$9,600.00	\$12,800.00
20	GORMLEY ADAM R & MEGAN M	8261	38TH	ST N	8261	38TH	ST N	LAKE ELMO	MN	55042	1602921210014	\$22,400.00	\$9,600.00	\$12,800.00
21	ANDERSON MICHAEL R & DEBRA A	8229	38TH	ST N	8229	38TH	ST N	LAKE ELMO	MN	55042	1602921220012	\$22,400.00	\$9,600.00	\$12,800.00
22	MILLER DAVID R & CONSTANCE L	8171	38TH	ST N	8171	38TH	ST N	LAKE ELMO	MN	55042	1602921220013	\$22,400.00	\$9,600.00	\$12,800.00
23	MILLER GREGORY & PAMELA	8139	38TH	ST N	2685	BARCLAY	ST N	MAPLEWOOD	MN	55109	1602921220014	\$9,600.00	\$9,600.00	\$0.00
24	OLSON DAVID J & KAY	8089	38TH	ST N	8089	38TH	ST N	LAKE ELMO	MN	55042	1602921220015	\$22,400.00	\$9,600.00	\$12,800.00
25	MORIS RICHARD W	3797	IDEAL	AVE N	3797	IDEAL	AVE N	LAKE ELMO	MN	55042	1602921220017	\$22,400.00	\$9,600.00	\$12,800.00
26	DISSLIN ZACHARY J	8030	38TH	ST N	8030	38TH	ST N	LAKE ELMO	MN	55042	1602921220018	\$22,400.00	\$9,600.00	\$12,800.00
27	BERNSTETTER DENNIS P & LYNN	8001	39TH	ST N	8001	39TH	ST N	LAKE ELMO	MN	55042	1602921220032	\$22,400.00	\$9,600.00	\$12,800.00
28	SWANSON ROGER D & DEBORAH R	8011	39TH	ST N	8011	39TH	ST N	LAKE ELMO	MN	55042	1602921220021	\$22,400.00	\$9,600.00	\$12,800.00
29	GLANTZ JERALD & DEBRA CASPERS	8085	39TH	ST N	8085	39TH	ST N	LAKE ELMO	MN	55042	1602921220022	\$22,400.00	\$9,600.00	\$12,800.00
30	MARKUSON JUDY M	8121	39TH	ST N	8121	39TH	ST N	LAKE ELMO	MN	55042	1602921220023	\$22,400.00	\$9,600.00	\$12,800.00
31	SCHMITT ALFRED J & SANDRA A	8173	39TH	ST N	8173	39TH	ST N	LAKE ELMO	MN	55042	1602921220024	\$22,400.00	\$9,600.00	\$12,800.00
32	WHITAKER FRANKLIN D & YVONNE	8193	39TH	ST N	8193	39TH	ST N	LAKE ELMO	MN	55042	1602921220025	\$22,400.00	\$9,600.00	\$12,800.00
33	WRIGHT LIVING TRS	8225	39TH	ST N	8225	39TH	ST N	LAKE ELMO	MN	55042	1602921220026	\$22,400.00	\$9,600.00	\$12,800.00
34	WILKES DENNIS F & MARY M	8271	39TH	ST N	8271	39TH	ST N	LAKE ELMO	MN	55042	1602921210015	\$22,400.00	\$9,600.00	\$12,800.00
35	TANEY LEONARD J	8309	39TH	ST N	8309	39TH	ST N	LAKE ELMO	MN	55042	1602921210016	\$22,400.00	\$9,600.00	\$12,800.00
36	VAN AMPTING ANDREA & DANIEL	8367	39TH	ST N	8367	39TH	ST N	LAKE ELMO	MN	55042	1602921210017	\$22,400.00	\$9,600.00	\$12,800.00
37	ADAMS PAULA D	3948	INNSDALE	AVE N	3948	INNSDALE	AVE N	LAKE ELMO	MN	55042	1602921210018	\$22,400.00	\$9,600.00	\$12,800.00
38	PETERSON GREGORY LAWRENCE	8388	38TH	ST N	8388	38TH	ST N	LAKE ELMO	MN	55042	1602921210019	\$22,400.00	\$9,600.00	\$12,800.00
39	RASSETT JESSE	8350	38TH	ST N	8350	38TH	ST N	LAKE ELMO	MN	55042	1602921210020	\$22,400.00	\$9,600.00	\$12,800.00
40	HOFF GARY W & PATRICIA J	8332	38TH	ST N	8332	38TH	ST N	LAKE ELMO	MN	55042	1602921210021	\$22,400.00	\$9,600.00	\$12,800.00
41	RASMUSSEN CARISA & ANDREW	8312	38TH	ST N	8312	38TH	ST N	LAKE ELMO	MN	55042	1602921210022	\$22,400.00	\$9,600.00	\$12,800.00
42	ANDERSON RICHARD A & JANICE	8290	38TH	ST N	8290	38TH	ST N	LAKE ELMO	MN	55042	1602921210023	\$22,400.00	\$9,600.00	\$12,800.00
43	FELDKAMP MARK W & KAREN M	8254	38TH	ST N	8254	38TH	ST N	LAKE ELMO	MN	55042	1602921220027	\$22,400.00	\$9,600.00	\$12,800.00
44	WULFING DONNAMARIE E	8196	38TH	ST N	8196	38TH	ST N	LAKE ELMO	MN	55042	1602921220028	\$22,400.00	\$9,600.00	\$12,800.00
45	CONLIN PATRICK & KRISTIN M	8160	38TH	ST N	8160	38TH	ST N	LAKE ELMO	MN	55042	1602921220029	\$22,400.00	\$9,600.00	\$12,800.00
46	VUE SEE	8110	38TH	ST N	8110	38TH	ST N	LAKE ELMO	MN	55042	1602921220030	\$22,400.00	\$9,600.00	\$12,800.00
47	LY KOU & JOUA Y	8080	38TH	ST N	8080	38TH	ST N	LAKE ELMO	MN	55042	1602921220031	\$22,400.00	\$9,600.00	\$12,800.00
48	FRIEDRICH STEVEN & FARRAH D ALEXANDER	3765	IDEAL	AVE N	3765	IDEAL	AVE N	LAKE ELMO	MN	55042	1602921220016	\$5,800.00	\$0.00	\$5,800.00
TOTAL											\$1,045,800.00	\$451,200.00	\$594,600.00	

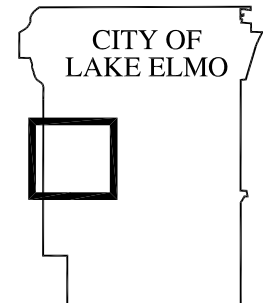
2019 STREET IMPROVEMENTS
KENRIDGE ADDITION NEIGHBORHOOD
PRELIMINARY ASSESSMENT ROLL

NO.	NAME	ADDRESS	MAILING ADDRESS				PID	TOTAL ASSESSMENT AMOUNT	STREET AND DRAINAGE ASSESSMENT AMOUNT
1	JOHNSON GORDON G & MARGARET	8804 37TH ST N	8804	37TH	ST N	LAKE ELMO MN 55042	1602921140013	\$10,300.00	\$10,300.00
2	HARTUNG TIMOTHY & LINDSEY	8834 37TH ST N	8834	37TH	ST N	LAKE ELMO MN 55042	1602921140012	\$10,300.00	\$10,300.00
3	SKRIEN DOUGLAS S	8862 37TH ST N	8862	37TH	ST N	LAKE ELMO MN 55042	1602921140011	\$10,300.00	\$10,300.00
4	OHRT JOANN R	8894 37TH ST N	841	RICE CREEK	TERR NE	FRIDLEY MN 55432	1602921140006	\$10,300.00	\$10,300.00
5	AMERICAN'S GOT TALENT LLC	8914 37TH ST N	985	HILLWIND	RD NE	FRIDLEY MN 55432	1602921140005	\$10,300.00	\$10,300.00
6	MCCLELLAN LYNN J	8938 37TH ST N	8938	37TH	ST N	LAKE ELMO MN 55042	1602921140004	\$10,300.00	\$10,300.00
7	HARRINGTON DELBERT A & CAROL S	3740 JAMACA AVE N	3740	JAMACA	AVE N	LAKE ELMO MN 55042	1602921140002	\$10,300.00	\$10,300.00
8	BOCHE RAYMOND M & VICKI	8801 37TH ST N	8801	37TH	ST N	LAKE ELMO MN 55042	1602921140019	\$10,300.00	\$10,300.00
9	WELTER LARRY & LISA	8831 37TH ST N	8831	37TH	ST N	LAKE ELMO MN 55042	1602921140020	\$10,300.00	\$10,300.00
10	WILLIAMSON GLEN A & LINDA L	8861 37TH ST N	8861	37TH	ST N	LAKE ELMO MN 55042	1602921140021	\$10,300.00	\$10,300.00
11	SANNER LISA M	8891 37TH ST N	8891	37TH	ST N	LAKE ELMO MN 55042	1602921140010	\$10,300.00	\$10,300.00
12	DRAGER STEVEN & CHRISTY	8909 37TH ST N	8909	37TH	ST N	LAKE ELMO MN 55042	1602921140009	\$10,300.00	\$10,300.00
13	BELAK SHARON L	8939 37TH ST N	8939	37TH	ST N	LAKE ELMO MN 55042	1602921140008	\$10,300.00	\$10,300.00
14	TERRI L FRANZWA LIVING TRS	8961 37TH ST N	8961	37TH	ST N	LAKE ELMO MN 55042	1602921140007	\$10,300.00	\$10,300.00
15	STREGE RAYMOND M & GLENDA L	8808 36TH ST N	8808	36TH	ST N	LAKE ELMO MN 55042	1602921140018	\$10,300.00	\$10,300.00
16	WALDO MARK	8838 36TH ST N	8838	36TH	ST N	LAKE ELMO MN 55042	1602921140017	\$10,300.00	\$10,300.00
17	RANTILA REINO J & JOHANNA H	8890 36TH ST N	8890	36TH	ST N	LAKE ELMO MN 55042	1602921140016	\$10,300.00	\$10,300.00
18	FLEISCHMAN ROBERT E & NATASHA	8928 36TH ST N	8928	36TH	ST N	LAKE ELMO MN 55042	1602921140015	\$10,300.00	\$10,300.00
19	GREISING RICK M	8968 36TH ST N	8968	36TH	ST N	LAKE ELMO MN 55042	1602921140014	\$10,300.00	\$10,300.00
20	WINTER ROBERT C & SANFRA M	8809 36TH ST N	8809	36TH	ST N	LAKE ELMO MN 55042	1602921140026	\$10,300.00	\$10,300.00
21	MANN JOSEPH & MARK G	8839 36TH ST N	8839	36TH	ST N	LAKE ELMO MN 55042	1602921140025	\$10,300.00	\$10,300.00
22	SCHIMEROWSKI DAVID A & MARTINA U JOHNTZ	8879 36TH ST N	8879	36TH	ST N	LAKE ELMO MN 55042	1602921140024	\$10,300.00	\$10,300.00
23	QUINN RICHARD K & DIANE L	8929 36TH ST N	8929	36TH	ST N	LAKE ELMO MN 55042	1602921140023	\$10,300.00	\$10,300.00
24	POSEL RICHARD L & SUSAN M	8969 36TH ST N	8969	36TH	ST N	LAKE ELMO MN 55042	1602921140022	\$10,300.00	\$10,300.00
TOTAL								\$247,200.00	\$247,200.00



LEGEND

 PROPOSED STREET & UTILITY IMPROVEMENT LIMITS



FOCUS
ENGINEERING

2019 STREET
IMPROVEMENTS
PROJECT NO. 2018.130

FIGURE NO. 1
LOCATION MAP
KENRIDGE & BORDNERS GARNER
FARMETTES NEIGHBORHOODS

PROJECT SCHEDULE
CITY OF LAKE ELMO

FOCUS ENGINEERING, inc.

Cara Geheren, P.E. 651.300.4261
Jack Griffin, P.E. 651.300.4264
Ryan Stempki, P.E. 651.300.4267
Chad Isakson, P.E. 651.300.4283

2019 STREET AND UTILITY IMPROVEMENTS
PROJECT NO. 2018.130

OCTOBER 2018

AUGUST 21, 2018	Council orders preparation of Feasibility Report.
OCTOBER 16, 2018	Presentation of Feasibility Report. Council accepts Report and calls for Improvement Hearing.
NOVEMBER 20, 2018	Public Improvement Hearing. Council orders the preparation of Plans and Specifications.
MARCH 5, 2019	Council approves Plans and Specifications and orders Advertisement for Bids; Declares Costs to be Assessed and Calls for Hearing on Assessment.
APRIL 2, 2019	Receive Contractor Bids.
APRIL 16, 2019	Final Assessment Hearing. Council <u>Orders the Improvement (4/5th vote)</u> ; accepts Bids and awards Contract; and adopts the Final Assessment Roll.
MAY 15, 2019	Conduct Pre-Construction Meeting and issue Notice to Proceed. <ul style="list-style-type: none">• SEPTEMBER 28, 2019 Substantial Completion.• NOVEMBER 2, 2019 Final Completion.

CITY OF LAKE ELMO, MINNESOTA
2019 STREET AND UTILITY IMPROVEMENTS
PROJECT NO. 2018.130
DATE RECEIVED: NOVEMBER 8, 2018

PROPOSAL FEE SUMMARY						
Consulting Firm		Total Engineering	Project Management	P&S	Bidding	Construction
Bolton & Menk, Inc.	Without Bordners watermain	\$163,091	\$3,576	\$89,326	\$2,395	\$67,794
	With Bordners watermain	\$182,811	\$3,576	\$101,482	\$2,395	\$75,358
TKDA, Inc.	Without Bordners watermain	\$117,700	\$3,900	\$88,000	\$1,900	\$23,900
	With Bordners watermain	\$128,800	\$3,900	\$98,210	\$1,900	\$24,790
SEH, Inc.	Without Bordners watermain	\$150,200	\$4,100	\$94,600	\$3,100	\$48,400
	With Bordners watermain	\$162,925	\$4,100	\$100,654	\$3,100	\$55,071

2019
36th and 37th Streets North, Irwin Avenue
Improvements
Lake Elmo, Minnesota

Public Hearing Written Comments



November 13, 2018

Ray & Glenda Strege
8808 36th St N
Lake Elmo MN 55042


The 36th and 37th Streets North pavements have reached the end of their useful life. If replaced, removal and replacement in kind is recommended, adhering to the Valley Branch Watershed District's (VBWD) Best Management Practices (BMP).

The Feasibility Report recommended solution for the decades-old storm water problem at 8929 36th Street North appears to be feasible.

Other parts of the project need further evaluation. Too many “red flags” currently remain.

City Council **authorization of additional preliminary engineering without authorizing detailed plans and specifications is recommended** in order to address basic, unresolved issues before proceeding with the most expensive phase of preconstruction—detailed design.

If some of these issues remain after proceeding into the design phase, correction could be more expensive than if addressed sooner.

 Implementing the Feasibility Report proposed development will cause the neighborhood to negatively, and substantially, deviate from the VBWD Best Management Practices that follows.

For 45 years the Kenridge Addition has complied with the Valley Branch Watershed District's (VBWD) Best Management Practices (BMP):

Encourage stormwater infiltration through the use of curbless road designs and overland drainage conveyance systems. On low-traffic streets, narrow the pavement and allow grass shoulders to function as an occasional parking lane.



Implementing the Feasibility Report recommendations will cause **flooding worse than that which was experienced from 1975 to 1995 to the four private properties on the west end of 36th and 37th Streets.**

Between 1975 and 1995, the homes at 8808 36th Street and 8801 37th Street were flooded seven times during spring thaws or heavy rains. This included flooding of the septic systems on some occasions, which caused sewage to back up into the lower levels of the homes.



Flooding between 36th and 37th Streets at Irwin Avenue.

The flooding situation was alleviated in 1995 when three apron inlets were piped into the Valley Branch Watershed District Storm Sewer manholes at the Irwin Avenue 36th & 37th Street intersections manholes.

The Feasibility Report recommended channeling storm and spring thaw runoff through a series of curbs, gutters, and storm sewers, and then retarding the water flow in an artificial infiltration area in the 8808 36th Street right-of-way. This will bring a larger area of water, faster, into the artificial infiltration area, where it will be retarded. This will cause the water to overflow onto private property. As stated previously, this will cause flooding worse than that which was experienced from 1975 to 1995.

Correction of the resulting **private property flooding** after construction is completed will be expensive and time consuming. The obvious correction would be to return to that which worked previously—curbless roads, overland drainage, narrow pavements and grass shoulders functioning as occasional parking lanes. The correction would require removal of curb, gutter, storm sewers, and artificial infiltration areas—an expensive correction.

Neither the 5-year storm nor the 100-year storm has resulted in the worst flooding to the properties on the west end of 36th and 37th Streets. Rather, it has been the **spring thaws** that have caused the worst flooding.

A computer model will likely not provide as accurate of a prognostication of flooding to private properties as historical information. Multiple factors affect the amount and rate of spring thaw runoff:

- Soil moisture
- Snow depth and water content
- Rate and duration of temperature rise about freezing
- Amount of concurrent sunshine
- Amount of rainfall occurring concurrently with the above

The best case study available for the 36th and 37th Streets project is the 45-year Kenridge history.

Past behavior is the best predictor of future behavior. Author unknown.

Removing a natural turf infiltration area and replacing it with an artificial infiltration area is basically flawed. The Feasibility Report recommends channeling several acres of runoff into an artificial infiltration area of less than 0.1 acre and retarding the outflow. This will result in the flooding of the adjacent private properties.

No infiltration area has been in use in Lake Elmo for more than three years.

Infiltration areas can be especially problematic. While they make sense in concept, they have not been around long enough for engineers to determine how they function in the long term. What I've seen on the projects we've designed is that major storm events, ones that carry higher levels sediment in their run off, will clog the bio material or geofabric that is installed within the basin. I've personally seen several projects where we've had to correct initial designs as the basins simply failed to drain. (Problem at airports when geese and ducks congregate in pond areas.) Most of those problem projects have had clayey soil. For infiltration basins, there is no way to "maintain" those areas when performance degrades. Only way to improve is to excavate and reinstall. — Paul R. Strege, P.E.



**Infiltration area in use for 4 years
(Note sediment build-up)**


Without adequate and timely preventative maintenance, a 50-year pavement life expectancy is a **myth**. There has not been adequate, consistent, and timely pavement maintenance within the Kenridge Addition during the past 43 years. In addition to pavement crack sealing and seal coating, the proposed project will also require maintenance of the curb and gutter, storm sewer, subdrain systems, and artificial infiltration areas, adding significantly to the City's preventative maintenance costs.

Deer Pond Trail and Court demonstrate that needed preventive maintenance is not occurring. These two streets have received no preventative maintenance since they were constructed in 2014. Cracks have not been sealed, water has run into these cracks compromising both the bituminous pavement and aggregate base. Debris accumulates in the gutters and catch basins. Maintenance of the storm drain and pavement subdrain systems is also questionable.

Without preventative maintenance, the proposed Feasibility Report pavement system could deteriorate faster than the simple VBWD Best Management Practices for low traffic streets infrastructure. Curb and gutters, along with partially clogged catch basins, storm sewers, and artificial infiltration areas, will hold water on the pavement surface longer, allowing more water to enter the aggregate base and subbase. This will cause an erosion of the base course aggregate, followed by pavement cupping and secondary cracking, leading to pavement raveling between the cracks. A saturated subbase would also reduce pavement structure strength.



Deer Pond Court 2014 (Less than 1-month old)

 The City needs to determine if it truly desires a “50-year pavement.” If so, a major pavement maintenance program and budget needs to be established and perpetuated each year. A “50-year pavement life” will only be wishful thinking without adequate pavement and ancillary infrastructure maintenance **every** year.



Deer Pond Court 2018 (4 years old)
Random cracking. Sinking pavement.



Deer Pond Court 2018 (4-years old)
Random Bituminous Cracking Along Concrete Curb




Deer Pond Trail & Court Intersection 2018 (4 years old)
Debris on catch basin. Random cracking not sealed.



Deer Pond Trail 2018 (4-year old pavement) Looking Uphill
Random crack is not sealed.

Damp pavement (darker color) on uphill side of crack, dry pavement (lighter color) on downhill side, indicating that water is running into the crack.

 A pavement subdrain system is **not** needed and could actually accelerate deterioration of the pavement structure if the subdrains are not adequately maintained in a timely manner.

The Feasibility Report states:

Due to the presence of frost susceptible subgrade soils, the geotechnical report further recommends the placement of a sand subbase drainage layer.

The geotechnical report actually stated:

*Local subgrade correction could be done as needed, or **subgrade strength limitations could be offset with thicker pavement sections**, but the confidence level of performance success would be reduced versus the sand subbase improvement approach.*

I have not observed any frost heaves in the 36th Street pavement in 43 years and in more than 30,000 trips over the pavement.

Three elements must be present for frost heave to occur:

Frost susceptible materials
Freezing temperatures
Water

The 2014 American Engineering Testing Geotechnical Exploration and Review stated that four test borings were drilled to a 6-foot depth and one boring was drilled to an 11-foot depth. The **water level was not reached in any of the borings.**

Without water, frost heaves cannot occur. This historical pavement performance information should enhance the confidence level, thereby allowing consideration of less complex pavement substructures.

In general, **the simpler, the better.** **Increasing the aggregate base depth could be more cost effective** than constructing a more complex sand subbase and pavement subdrain system. The **simpler design** would also require **less future maintenance expenditure.**

The original 36th and 37th Streets construction and preventative maintenance was minimal, yet the pavements have served the residents for 45 years. To the extent possible, this same simplicity should be incorporated into the current project.

“Red flag” items should be addressed and/or resolved before entering into detailed design.