

Aspen Business Park 414 South 17th Street, Suite 107 Ames, Iowa 50010

Wings East Pavement Improvements **Design Memo**

DATE: February 24, 2020

TO: Mayor & City Council City of Oelwein 20 2nd Ave SW Oelwein, IA 50662

FOX P.N. 1022-18A.420

PROJECT SUMMARY

FOX Engineering has been tasked by the City of Oelwein to investigate pavement and drainage improvements for the Wings East Subdivision. In April of 2019, FOX submitted five preliminary design options for staff and council consideration. The option of doing a Special Assessment for the project was also discussed. FOX was recently given a budget of \$650,000 for the Wings East Improvements project.

FOX Engineering met with City staff and developed a proposed improvement plan that is discussed in the Proposed Improvements section of this memo. It has been determined that this project will move forward with a preliminary plat and schedule for a Special Assessment. The purpose of a preliminary assessment is to set a maximum cost that may be assessed for the project. The project will be preliminarily assessed 50% as a Special Benefit to be paid for by property owners, and 50% as a General Benefit to be paid for by the City. Council will determine if the project will be Final Assessed after final completion of the project. The proposed project has an estimated cost of \$650,000.

SCHEDULE

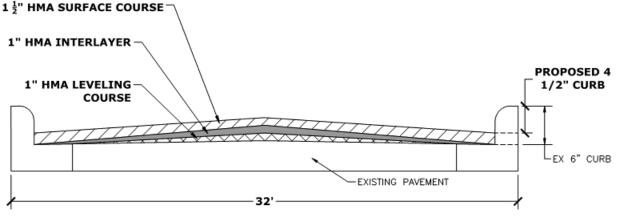
2.24.2020	Council Meeting (Approval of Preliminary Design Concept)
4.13.2020	Council Meeting (Preliminary Resolution of Necessity, Review of Final Design, Set Public Hearing & Bid Date)
5.05.2020	Bid Date
5.11.2020	Council Meeting (Public Hearing, Resolution of Necessity, & Award Contract)
10.16.2020	Substantial Completion
11.20.2020	Final Completion

PROPOSED IMPROVEMENTS

The proposed improvement for the Wings East subdivisions has four main components, as shown on the attached Exhibit A – Wings East Pavement Improvements:

- 1. Completely remove the north portion of 12th Ave NE and replace it with greenspace.
- 2. Remove and replace severely damaged pavement areas of 3rd St NE (270 liner feet).
- 3. Remove and replace undermined pavement areas on 13th Ave NE (2nd St NE to 3rd St NE).
- 4. Install minimal storm sewer and subdrain to help convey water away from the existing pavement.
- 5. Overlay portions of 3rd St NE, 2nd St NE, 12th Ave NE, and 13th Ave NE with hot mix asphalt (HMA).

Figure 1 shows the proposed cross section for the areas of the project that have existing curb and gutter. Replacing adjacent sidewalk ramps to meet ADA compliance is also included in the project.



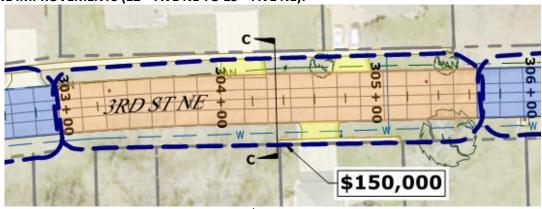
HMA OVERLAY-SECTION A-A

Figure 1 – Proposed HMA Overlay Section for Curbed Pavement

A 1-inch leveling course will be placed on the existing pavement in order to smooth out any cracks and re-shape any crown that has been lost when the pavement deteriorated. A 1-inch interlayer will be placed over the leveling course in order to prevent any reflective cracking from the existing pavement impacting the proposed HMA surface course. A 1 1/2 -inch surface course will be placed over the interlayer. The surface course of HMA will provide added strength to the pavement and act as the driving surface for vehicle traffic. At existing driveway locations, the HMA will be feathered to meet existing pavement slopes.

Adding the overlay to the existing pavement will reduce the existing 6-inch curb to 4-inches. The life expectancy for the proposed design is approximately 20 years. If the City desires, there is an option to crack and seat the existing pavement prior to the HMA overlay which will increase the project cost by approximately \$80,000 and add 5 years to the expected design life of the pavement.

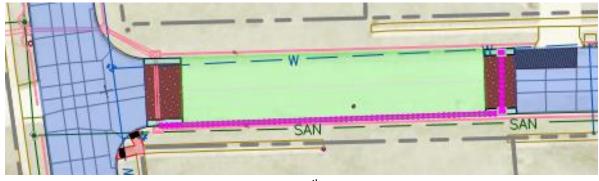
IMPROVEMENT DETAILS



3rd St NE IMPROVEMENTS (12TH AVE NE TO 13TH AVE NE):

Figure 2 – Proposed 3rd St NE Full Replacement Area

While analyzing this potion of roadway, FOX initially considered panel replacement of the shifted panels that created drainage issues and ponding. It was determined that the number of panels required to be replaced to get proper drainage was too high to warrant panel replacement, and would be more cost effective as a total replacement. We acknowledge that there is concern over the need for replacement in this area. In reviewing the profile of the existing curbs, we found multiple areas of ponding. This portion of the project is estimated conservatively as a total removal and replacement area. Once in the Final Design stage, we can look at additional cost saving measures for this area. Constructing this area in HMA is also an option if the City desires a cohesive look throughout the subdivision.



12th Ave NE IMPROVEMENTS (2ND ST NE to 3RD ST NE):

Figure 3 – Proposed 12th Ave NE Full Removal Area

The City has expressed the desire for a full pavement removal of the north portion of 12th Ave NE. The removed pavement area will be replaced as greenspace. Storm sewer is proposed in order to more effectively drain the water conveyed north to the storm sewer outlet. Rock is proposed in the transition areas between the proposed greenspace and pavement. There will be ROAD CLOSED signs placed at each end of the greenspace. The City will need to determine who is responsible for the maintenance of the greenspace area.

13th Ave NE (2ND ST NE to 3RD ST NE)

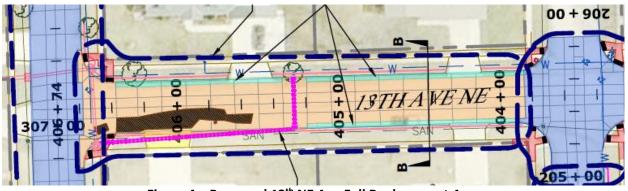


Figure 4 – Proposed 13th NE Ave Full Replacement Area

This area of 13th Ave NE has been previously patched. Water has eroded the subgrade and left a hollow space under the existing pavement. The void space will be filled with rock prior to placing pavement. The proposed improvement in this area salvages the existing curb where possible. Minimal storm sewer is proposed in this area due to the large amount of the existing drainage area not being collected in the storm sewer system. Collecting the stormwater in this area will convey water away from the pavement thereby reducing the chances of water undermining the proposed pavement. Constructing this area in HMA is also an option if the City desires a cohesive look throughout the subdivision.

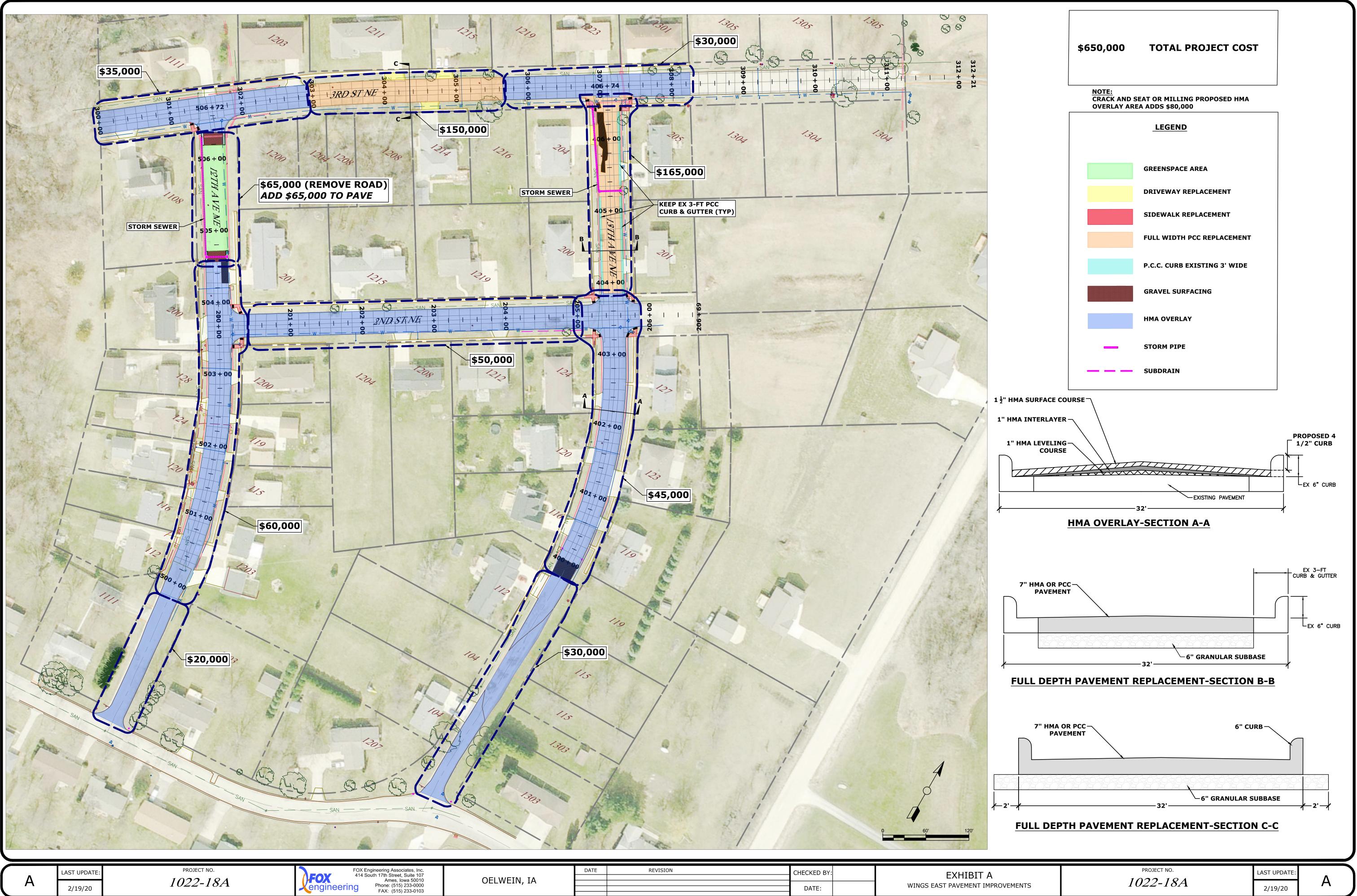
Please contact us if you have any questions or comments regarding this project.

FOX Engineering Associates, Inc.

John Gade, P.E.

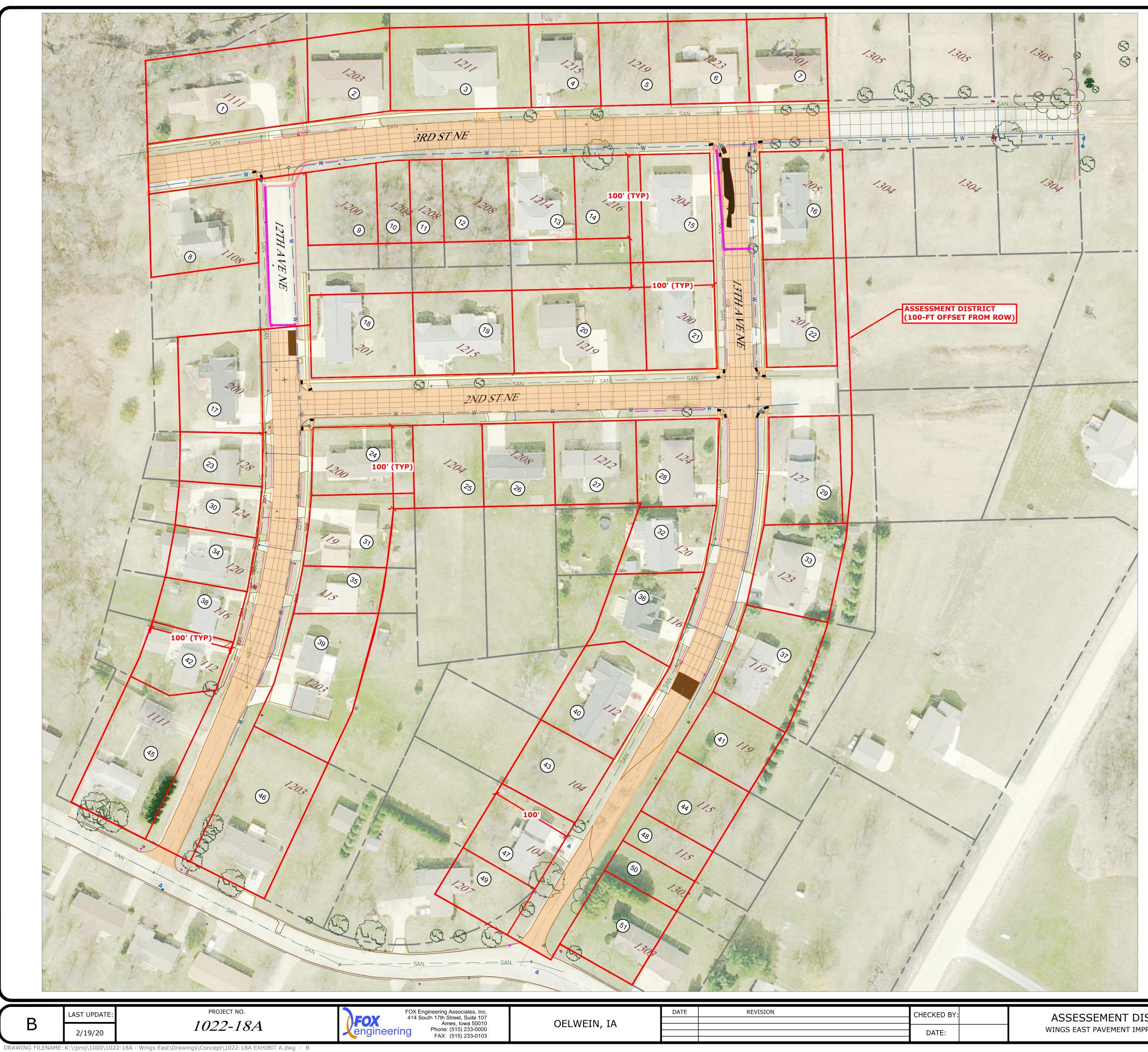
Attachments:

Exhibit A – Wings East Pavement Improvements Figure B – Assessment District Preliminary Assessment Schedule Preliminary Design Opinion of Probable Construction Cost



	DATE	REVISION	CHECKED BY	:	
OFI WEIN, TA					
OLLVVLIN, IA					WINGS EAST PAVEMENT IMPROVEMENT
			DATE:	ATE:	WINGS EAST TAVENENT INTROVEMENT

DRAWING FILENAME: K:\!proj\1000\1022-18A - Wings East\Drawings\Concept\1022-18A EXHIBIT A.dwg : A



OELWEIN, IA	DATE	TE REVISION (ASSESSEMENT DISTR			
			CHECKED BY	ASSESSEMENT DISTRICT			
				WINGS EAST PAVEMENT IMPROVEMEN			
			DATE:	WINGS EAST FAVENENT IN ROVEMEN			

ESTIMATE OF TOTAL PROJECT COST

\$650,000

LEGEND
ASSESSMENT AREA - 50% GENERAL BENEFIT - 50% SPECIAL BENEFIT
 STORM PIPE
 SUBDRAIN

0	60'	120

Т	PROJECT NO.	LAST UPDATE:	D
NTS	1022-18A	2/19/20	D

Wing East Paving Improvements

50% General & Special Benefit

HMA Overlay and Partial Street Reconstruction

City of Oelwein, Iowa

2/20/2020 FOX PN 1022-18A.460

Total Project Cost:

General Benefit (Oelwein) Portion: \$325,000.00

50%

\$650,000.00

									According	Accordent			Street	Doroont of	Conditional		Total
ificate nber	Parcel No.	Parcel ID	Current Title Holder	Mail To Address	Legal Description	Lot Frontage, Feet	Corner Lot Frontage, Feet	Lot Area, Square Feet	Assessment Frontage Length, Feet	Assessment Area, Square Feet	Council Valuation ¹	25% Valuation	Improvemente	Percent of Total Project Cost	Conditional Deficiency Assessment		Total Preliminar Ssessmer
	1	1822126009	Thomas W. & Dorothy L. Gerstenberger	1111 3RD ST. NE	LOTS 8 & 9 BLK 1 WINGS EAST FIRST ADD	196.0	0.0	24,245	196.0	19,596	\$ 189,160.00	\$ 47,290.00	\$ 11,944.17	1.8%	\$-	\$	11,944
	2	1822126010	Matthew W. & Jodi A. Casper	1203 3RD ST. NE	LOT 7 BLK 1 WINGS EAST FIRST ADD	100.1	0.0	16,947	100.1	10,011	\$ 167,100.00	\$ 41,775.00	\$ 6,101.91	0.9%	\$-	\$	6,101
	3	1822126012	Larry E. Recker, Revocable Trust	1211 3RD ST. NE	LOTS 5 &6, BLK 1 WINGS EAST FIRST ADD	170.0	0.0	30,600	170.0	17,000	\$ 307,430.00	\$ 76,857.50	\$ 10,361.86	1.6%	\$-	\$	10,361
	4	1822126013	Karen A Tharaldson	1215 3RD ST. NE	LOT 4 BLK 1 WINGS EAST FIRST ADD	85.0	0.0	15,300	85.0	8,500	\$ 183,560.00	\$ 45,890.00	\$ 5,180.93	0.8%	\$ -	\$	5,180
	5	1822126014	George A & Barbara L	1219 3RD ST. NE	LOT 3 BLK 1 WINGS EAST FIRST ADD	85.0	0.0	15,300	85.0	8,500	\$ 34,425.00 ²	\$ 8,606.25		0.8%	\$ -	\$	5,18
	6	1822126015	Jamison Gorge A & Barbara L.	1223 3RD ST. NE	LOT 2 BLK 1 WINGS EAST FIRST ADD	95.0	0.0	17,100	95.0	9,500	\$ 193,940.00	\$ 48,485.00		0.9%	\$ -	\$	5,79
	7	1822126016	Jamison Randall D. & Linda M.	1301 3RD ST. NE	LOT 1 BLK 1 WINGS EAST FIRST ADD	95.0	0.0	17,100	95.0	9,500	\$ 168,800.00	\$ 42,200.00		0.9%	\$ -	\$	5,7
	8	1822176046	Gloede Rodger A. Schulz, Revocable Trust C/O	1108 3RD ST. NE	LOTS 1 & 2 BLK 2 WINGS EAST FIRST ADD	177.6	130.2	23,111	130.2	13,016	\$ 170,590.00	\$ 42,647.50		1.2%	\$ -	\$	7,9
	9	1822176030	Gwendolyn Wilson Bonnie Schulz	1200 3RD ST. NE	LOT 6 BLK 3 WINGS EAST FIRST ADD	118.6	85.5	10,489	85.5	8,147	\$ 20,978.00	\$ 5,244.50	\$ 5,083.17	0.8%	\$-	\$	5,0
	40	4000470000	Rodger A. Schulz,		W 1/2 LOT 5, BLK 3 WINGS EAST FIRST	40.4		5 4 5 0	10.1	4.000	.		* • • • • • • • • • • • • • • • • • • •	0.404			
	10	1822176029	Revocable Trust C/O Gwendolyn Wilson	1204 3RD ST. NE	ADD	40.1	0.0	5,159	40.1	4,000	\$ 11,607.75 ²	\$ 2,901.94	\$ 2,441.90	0.4%	\$ -	*	2,4
	11	1822176005	Kenneth A. & Marcia Woodraska	N/A	E 1/2 LOT 5, BLK 3 WINGS EAST FIRST ADD	40.0	0.0	5,200	40.0	4,000	\$ 11,700.00 ²	\$ 2,925.00	\$ 2,438.08	0.4%	\$-	\$	2,4
	12	1822176028	Kenneth A. & Marcia Woodraska	1208 3RD ST. NE	LOT 4 BLK 3 WINGS EAST FIRST ADD	80.0	0.0	10,400	80.0	8,000	\$ 23,400.00 2	\$ 5,850.00	\$ 4,876.17	0.8%	\$-	\$	4,8
	13	1822176027	Richard A & Loretta A Suckow	1214 3RD ST. NE	LOT 3 BLK 3 WINGS EAST FIRST ADD	80.0	0.0	10,400	80.0	8,000	\$ 222,880.00	\$ 55,720.00	\$ 4,876.17	0.8%	\$-	\$	4,8
	14	1822176026	Richard A & Loretta A Suckow	1216 3RD ST. NE	LOT 2 BLK 3 WINGS EAST FIRST ADD	80.0	0.0	10,400	80.0	9,950	\$ 23,400.00 ²	\$ 5,850.00	\$ 5,492.78	0.8%	\$-	\$	5,4
	15	1822176025	Gerald E. & Mary F. Chase	204 13TH AVE. NE	LOT 1 BLK 3 WINGS EAST FIRST ADD	130.0	85.0	11,050	215.0	11,050	\$ 177,350.00	\$ 44,337.50	\$ 9,800.27	1.5%	\$-	\$	9,8
	16	1822126024	Charles H. & Barbara J Geilenfeld	205 13TH AVE. NE	LOT 1 BLK 4 WINGS EAST FIRST ADD	130.0	85.0	11,050	215.0	11,050	\$ 252,970.00	\$ 63,242.50	\$ 9,800.27	1.5%	\$-	\$	9,8
	17	1822176060	Timothy W. & Catherine Gilson	200 12TH AVE. NE	LOT 3, LOT 4 EX PARCEL 8 BLK 2 WINGS EAST FIRST ADD	128.7	0.0	15,809	128.7	11,927	\$ 183,600.00	\$ 45,900.00	\$ 7,547.07	1.2%	\$-	\$	7,
	18	1822176031	Urban & Floraine Kuennen	201 12TH AVE. NE	LOT 7, & W 40' LOT 8 BLK 3, WINGS EAST FIRST ADD	130.0	125.0	16,250	190.0	12,350	\$ 228,080.00	\$ 57,020.00	\$ 9,478.08	1.5%	\$-	\$	9,4
	19	1822176033	Kenneth A. & Marcia	1215 2ND ST. NE	E 40' LOT 8 & LOT 9, BLK 3, WINGS	120.0	0.0	15,600	120.0	13,200	\$ 317,560.00	\$ 79,390.00	\$ 7,693.71	1.2%	\$ -	\$	7,
	20	1822176035	Woodraska James E. & Connie K.	1219 2ND ST.NE	EAST 1ST ADD LOTS 10 & 11, BLK 3 WINGS EAST	160.0	0.0	20,800	160.0	16,450	\$ 205,500.00	\$ 51,375.00	\$ 9,894.63	1.5%	\$-	\$	9,8
	21	1822176036	Mueller Paul E. & Julene Fox	200 13TH AVE. NE	FIRST ADD	130.0	85.0	11,050	215.0	11,050	\$ 176,960.00	\$ 44,240.00		1.5%	\$ -		9,
	22	1822126023	Ronald Winter, Security Storage	201 13TH AVE. NE	LOT 2 BLK 4 & N 14' PRL TO C/L FORMERLY VAC 2ND ST. NE, LOCATED BTN BLKS 4 & 5, ALL IN WING'S EAST	130.0	0.0	12,240	130.0	12,240	\$ 103,970.00	\$ 25,992.50			\$ -	\$	7,
			Kevin E & Mary Beth		FIRST ADDN PARCEL 8 & PRT OF LOT 4 BLK 2							• • • • • • • • •	•				
	23	1822176059	Steggall	128 12TH AVE. NE	WINGS EAST FIRST ADD LOT 7 EX S 33' BLK 6 WINGS EAST	63.5	0.0	8,363	63.5	6,350	\$ 90,200.00	\$ 22,550.00		0.6%	\$ -	\$	3,
	24	1822176043	Jeffrey W. Dehaven	1200 2ND ST. NE	FIRST ADD	82.1	120.0	10,141	202.1	10,141	\$ 164,750.00	\$ 41,187.50	\$ 9,133.88	1.4%	\$ -	\$	9
	25	1822176042	Bonnie L. Schulz	1204 2ND ST. NE	LOT 6 BLK 6 WINGS EAST FIRST ADD	85.0	0.0	24,110	85.0	8,500	\$ 54,247.50 ²	\$ 13,561.88	\$ 5,180.93	0.8%	\$-	\$	5,
	26	1822176041	James E. & Teresa L. Tuecke	1208 2ND ST. NE	LOT 5 BLK 6 WINGS EAST FIRST ADD	85.0	0.0	23,444	85.0	8,500	\$ 148,240.00	\$ 37,060.00	\$ 5,180.93	0.8%	\$-	\$	5
	27	1822176040	Jay A. Melchert	1212 2ND ST. NE	LOT 2 BLK 6 WINGS EAST FIRST ADD	100.0	0.0	10,500	100.0	10,000	\$ 159,990.00	\$ 39,997.50	\$ 6,095.21	0.9%	\$-	\$	6
	28	1822176039	Christopher Brunscheon	124 13TH AVE. NE	LOT 1 BLK 6 WINGS EAST FIRST ADD	100.0	105.1	10,080	205.1	10,000	\$ 215,590.00	\$ 53,897.50	\$ 9,177.87	1.4%	\$-	\$	9
	29	1822176022	Susan K. Schlitter	127 13TH AVE. NE	LOT 1 BLK 5 WINGS EAST FIRST ADD	130.2	0.0	11,798	130.2	11,798	\$ 209,470.00	\$ 52,367.50	\$ 7,548.38	1.2%	\$-	\$	7
	30	1822176053	Tiffany M. Vande Vorde	124 12TH AVE. NE	PARCEL 7 BEING PRTS OF LOT 4 & 5 BLK 2 WINGS EAST FIRST ADD	63.5	0.0	8,897	63.5	6,350	\$ 145,810.00	\$ 36,452.50	\$ 3,870.46	0.6%	\$-	\$	3
	31	1822176044	Dawn M. & Adam D. Novak	123 12TH AVE. NE	PARCEL 1 BEING PART OF LOT 8 & S 33' LOT 7 BLK 6 WINGS EAST FIRST ADD	97.0	0.0	12,115	97.0	11,212	\$ 111,670.00	\$ 27,917.50	\$ 6,390.60	1.0%	\$-	\$	6
	32	1822176038	Curtis J. & Joetta L Solsma, Living Trust	120 13TH AVE. NE	LOT 3 BLK 6 WINGS EAST FIRST ADD	85.1	0.0	15,086	85.1	8,506	\$ 293,550.00	\$ 73,387.50	\$ 5,184.59	0.8%	\$-	\$	5
	33	1822176021	Marie M. Stevens	123 13TH AVE. NE	LOT 2 BLK 5 WINGS EAST FIRST ADD	104.1	0.0	16,122	104.1	11,810	\$ 214,510.00	\$ 53,627.50	\$ 6,787.52	1.0%	\$-	\$	6
	34	1822176054	Timothy J. & Melissa A. Kane	120 12TH AVE. NE	PARCEL 6 OF LOT 5 BLK 2 WINGS EAST FIRST ADD	63.5	0.0	9,224	63.5	6,350	\$ 175,200.00	\$ 43,800.00	\$ 3,870.46	0.6%	\$ -	\$	3
	35	1822176057	Travis D. & Lynn M.	119 12TH AVE. NE	PARCEL 2 BEING PART OF LOTS 8 & 9	64.0	0.0	8,811	64.0	6,400	\$ 123,840.00	\$ 30,960.00	\$ 3,900.93	0.6%	\$ -	\$	3
	36	1822176037	Voshell Leo V. Walz, Jr.	116 13TH AVE. NE	BLK 6 WINGS EAST FIRST ADD	78.0	0.0	14,172	78.0	10,629	\$ 233,180.00	\$ 58,295.00	\$ 5,648.80	0.9%	\$ -	\$	5
	37	1822176020	Margaret A. Fox	119 13TH AVE. NE	LOT 3 BLK 5 WINGS EAST FIRST ADD	105.0	0.0	18,160	105.0	13,801	\$ 162,790.00	\$ 40,697.50		1.1%	\$ -	\$	7
	38	1822176055	Travis & Stephanie Phillips	116 12TH AVE. NE	PARCEL 5 OF LOTS 5 & 6 BLK 2 WINGS	63.5	0.0	9,462	63.5	5,652	\$ 88,130.00	\$ 22,032.50		0.6%	\$ <u>-</u>	\$	3
	39	1822176058	Andrew & Amy Gates	115 12TH AVE. NE	EAST FIRST ADD PARCEL 3 BEING PART OF LOT 9 BLK 6 WINGS EAST 1ST ADD & LOT 48 1ST		0.0	33,613	125.2	12,521	\$ 161,040.00	\$ 40,260.00		1.2%	\$ -	\$	7,
	40	1822176016	Nick J. & Rhonda A. Cue	112 13TH AVE. NE	ADD FAIRACRES LOT 49 1ST ADD TO FAIRACRES	122.0	0.0	25,856	122.0	16,046	\$ 311,320.00	\$ 77,830.00	\$ 8,652.28	1.3%	\$-	\$	8,
	41	1822176015	Margaret A. Fox	N/A	LOT 56 1ST ADD TO FAIRACRES	84.0	0.0	14,532	84.0	8,400	\$ 32,697.00 2	\$ 8,174.25	\$ 5,119.98	0.8%	\$-	\$	5,
	42	1822176056	Troy A. & Jennifer L.	112 12TH AVE. NE	PARCEL 4 WINGS EAST FIRST ADD	60.0	0.0	12,548	60.0	6,774	\$ 106,810.00	\$ 26,702.50		0.6%	\$ -	\$	3,
	43	1822176017	Fitzpatrick Michael J. & Sharon	104 13TH AVE. NE	(BEING PART OF LOT 6 BLK 2) LOT 50 1ST ADD TO FAIRACRES	90.0	0.0	20,367	90.0	9,000	\$ 45,825.75 ²	\$ 11,456.44		0.8%	\$	\$	5,
			Rettinger												Ψ -	Ψ •	
	44		Brian R. & Wendy K. Irvine		LOT 55 FAIRACRES 1ST ADD, OELWEIN	84.0	0.0	14,532	84.0	8,400	\$ 32,697.00 ²	\$ 8,174.25		0.8%	φ -	Þ	5,
	45		Eric A. & Rebekah J. Pryor Travis H. & Jackie J.	1111 1ST ST. NE	LOT 45 1ST ADD TO FAIRACRES	120.0	0.0	21,803	120.0	17,216	\$ 119,900.00	\$ 29,975.00		1.4%	ъ -	\$	8
	46	1822176006	Larson Michael J. & Sharon	1203 1ST ST. NE	LOTS 46 & 47 1ST ADD TO FAIRACRES	180.0	0.0	32,400	180.0	18,000	\$ 197,090.00	\$ 49,272.50		1.7%	\$-	\$	10
	47	1822176018	Rettinger	104 13TH AVE. NE	LOT 51 1ST ADD TO FAIRACRES	90.0	0.0	19,898	90.0	9,000	\$ 142,320.00	\$ 35,580.00	\$ 5,485.69	0.8%	\$-	\$	5
	48	1822176065	Brian R. & Wendy K. Irvine	N/A	N 36' LOT 54, FAIRACRES 1ST ADD TO OELWEIN	36.0	0.0	6,228	36.0	3,600	\$ 14,013.00 ²	\$ 3,503.25	\$ 2,194.28	0.3%	\$-	\$	2
	49	1822176007	Timothy R. Benter	1207 1ST ST NE	LOT 52 1ST ADD TO FAIRACRES	67.0	0.0	27,599	67.0	6,700	\$ 173,720.00	\$ 43,430.00	\$ 4,083.79	0.6%	\$-	\$	4
	50	182217613	Nelma F. Chase	N/A	S 48' LOT 54, FAIRACRES 1ST ADD TO OELWEIN	48.0	0.0	8,304	48.0	4,800	\$ 18,684.00 ²	\$ 4,671.00	\$ 2,925.70	0.5%	\$-	\$	2,
	51	1822176011	Nelma F. Chase	1303 1ST ST. NE	LOT 53 1ST ADD TO FAIRACRES	104.0	0.0	17,992	104.0	10,400	\$ 150,260.00	\$ 37,565.00	\$ 6,339.02	1.0%	\$ -	\$	6,
]						

PRELIMINARY ASSESSMENT SCHEDULE

Type 01 BOND#

1 Council Valuation Explanation: Based on Fayette Co Assessed Value of the lot and building.

2 Council Valuation Empty Lots: Lot Value was set at \$2.25 per square foot.

3 Deficiency is between the amount proposed to be assessed and the proportion of the estimated total cost of the improvement allocated to each lot (25% Valuation).

\$2.25

City of Oelwein, IowaLast Update2/19/2020FOX PN:1022-18A

					VINION OF PROBABLE
TEM NO.	BID ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
	DIVISION 1 - GENERAL				
1.01	MOBILIZATION	LS	1	\$25,000.00	\$25,000.00
1.02	TRAFFIC CONTROL & STAGING	LS	1	\$5,000.00	\$5,000.00
1.03	REMOVE/REINSTALL SIGNS	LS	1	\$2,000.00	\$2,000.00
1.04	TEMPORARY MAILBOX	LS	1	\$1,000.00	\$1,000.00
	DIVISION 2 - EARTHWORK				
2.01	TOPSOIL, STRIP, SALVAGE, SPREAD	CY	80	\$20.00	\$1,600.00
2.02	TOPSOIL, FURNISH AND SPREAD	CY	145	\$26.00	\$3,770.00
2.03	CLASS 10 - EXCAVATION FOR ROADWAY	CY	425	\$20.00	\$8,500.00
2.04	MODIFIED SUBBASE, 6-INCH	SY	1,955	\$8.50	\$16,617.50
2.05	BELOW GRADE EXCAVATION (CORE OUT FOR ROADWAY)	TON	150	\$25.00	\$3,750.00
2.06	SUBGRADE TREATMENT (CONTINGENCY)	SY	100	\$20.00	\$2,000.00
2.07	EARTHWORK COMPACTION TESTING	LS	1	\$2,500.00	\$2,500.00
	DIVISION 3 - TRENCH AND TRENCHLESS CONSTRUCTION (NOT USED)				
	DIVISION 4 - SEWERS AND DRAINS				
4.01	CONNECT TO EXISTING STRUCTURE	EA	3	\$1,500.00	\$4,500.00
4.01	STORM INTAKE, SW-501	EA EA	4	\$3,500.00	\$4,500.00
			355		
4.03 4.04	STORM SEWER, TRENCHED, 15-INCH, AS SUBDRAIN SUBDRAIN, 4-INCH	LF LF	100	\$70.00 \$20.00	\$24,850.00 \$2,000.00
4.04	SUBDRAIN, 4-INCH	LI	100	\$20.00	\$2,000.00
	DIVISION 5 - WATER MAIN AND APPURTENANCES				
5.01	ADJUSTMENT OF FIXTURES	EA	5	\$350.00	\$1,750.00
	DIVISION 6 - STRUCTURES FOR SANITARY AND STORM SEWERS				
6.01	MANHOLE ADJUSTMENT	EA	2	\$1,000.00	\$2,000.00
	DIVISION 7 - PAVEMENT AND APPURTENANCES				
7.01	PAVEMENT REMOVAL AND DISPOSITION	SY	2,733	\$10.00	\$27,326.67
7.02	MILLING, PCC PAVEMENT	SY	83	\$40.00	\$3,306.67
7.02	HMA LEVELING COURSE, 1/2" MIX, 1" DEPTH	SY	8,355	\$5.25	\$43,863.75
7.04	HMA INTERLAYER, 3/8" MIX, 1" DEPTH	SY	8,355	\$7.00	\$58,485.00
7.05	HMA OVERLAY (ST), 1/2" MIX, 1-1/2" DEPTH	SY	8,355	\$7.50	\$62,662.50
7.05	PAVING, HANDWORK, 7-INCH HMA OR PCC	SY	1,857	\$65.00	\$120,683.33
7.00	GRANULAR SURFACING, CLASS A	TON	44	\$40.00	
7.07		SY	114	\$80.00	\$1,760.00
	DRIVEWAY, PAVED, PCC, 6-INCH		1 1		\$9,155.56
7.09	PAVING, SIDEWALK	SY ST	140	\$65.00	\$9,100.00
7.10	DETECTABLE WARNINGS	SF	180	\$65.00	\$11,700.00
7.11 7.12	SAW CUTS PAVEMENT SAMPLES AND TESTING	LF LS	734	\$5.00 \$2,500.00	\$3,670.00 \$2,500.00
7.12	FAVEMENT SAMPLES AND TESTING	LS		\$2,300.00	\$2,300.00
	DIVISION 8 - TRAFFIC SIGNALS (NOT USED)				
	DIVISION 9 - SITE WORK AND LANDSCAPING				
9.01	SEEDING, FERTILIZING, AND MULCHING - TYPE 1	AC	0.5	\$4,000.00	\$2,000.00
9.02	FILTER SOCK INSTALL & REMOVAL	LF	200	\$5.00	\$1,000.00
	Construction Subtotal				\$478,050.97
	3% Contingency				\$14,341.53
	Assessments & Meetings Engineering, Bidding, Admin, Staking, & Observation				\$17,000.00 \$140,000.00
	Total Project Cost				\$650,000.00

