



# CITY OF MANITOWOC

WISCONSIN, USA

[www.manitowoc.org](http://www.manitowoc.org)



**Date:** April 16, 2020

**To:** Mayor and Common Council

**From:** Dan Koski, P.E. 

**RE:** Evaluation of Concrete & Asphalt Bids for S. 13<sup>th</sup> and S. 29<sup>th</sup> St. (WS-20-7 & WS-20-13)

The bids we received for both the asphalt and concrete paving projects on the above referenced streets were very good. The concrete pavement bid for both streets including the storm sewer was \$575,933. The asphalt paving bid for both streets including the storm sewer was \$522,736, which is a total difference of \$53,197. The total budget for these 2 streets is \$700,000.

The asphalt pavement option for South 13<sup>th</sup> St. was \$19,515 less than concrete pavement. The asphalt pavement option for South 29<sup>th</sup> St. was \$33,663 less than concrete pavement.

For the sake of balancing the total contract amount, there is a total of \$156,644 in costs that will be billed to the MPU and WWTF.

According to our Municipal Code, concrete pavement has a life expectancy of 40 years and hot mix asphalt pavement has a life expectancy of 20 years.

We would like to remind the Committee/Council that asphalt typically has a higher long term maintenance cost than concrete pavement. Typical asphalt maintenance would include crack filling, seal coating and ultimately a mill and overlay.

We believe that the cost to perform a 2" mill and 2" overlay in the future would easily exceed \$53,000.

So, while the initial cost of asphalt is cheaper, we feel that the long term maintenance cost of the asphalt street will exceed the initial cost of the concrete pavement.

Therefore, based on a life cycle cost, we believe the concrete pavement is the preferred option and is also what we originally recommended for these 2 streets.



Item #	Item Description	UOM	Qty	Unit Price	Extension	Company
1	Mobilization	LS	1	\$75,000.00	\$75,000.00	Wilson Construction
2	Traffic Control	LS	1	\$2,000.00	\$2,000.00	Wilson Construction
3	Intert Protection Type "D"	EA	10	\$900.00	\$9,000.00	Wilson Construction
4	Sediment Log	LF	240	\$108.00	\$25,920.00	Wilson Construction
5	Clearing	LF	240	\$3,600.00	\$864,000.00	Wilson Construction
6	Grubbing	ID	314	\$4,210.00	\$1,320,940.00	Wilson Construction
7	Unclassified Excavation (Includes Pavement, Curb, Topsoil, Concrete/Asphalt)	CY	285	\$4,960.00	\$1,412,400.00	Wilson Construction
8	Concrete Pavement w/Integral Curb (Downslew)	SR	2957	\$125,217.66	\$370,145,663.42	Wilson Construction
9	Driveway Pavement Cap	EA	1	\$1,000.00	\$1,000.00	Wilson Construction
10	Crushed Aggregate Base Course	SR	3277	\$16,385.00	\$53,710,005.00	Wilson Construction
11	Breaker Run Stone Material ("and down")	SR	2777	\$5,000.00	\$13,885,000.00	Wilson Construction
12	Rebar Coated Trench Bars (Includes Drilling)	EA	223	\$1,024.50	\$228,463.50	Wilson Construction
13	3/4" Epoxy Coated Dowel Bars (Includes Drilling)	EA	68	\$1,544.00	\$105,008.00	Wilson Construction
14	1-1/2" Epoxy Coated Dowel Bars (Includes Drilling)	EA	91	\$4,934.00	\$449,354.00	Wilson Construction
15	Sawing Asphalt Pavement, Partial Depth	LF	568	\$3,000.00	\$1,704,000.00	Wilson Construction
16	Concrete Sidewalk (Removed & Replaced)	SR	568	\$3,955.50	\$2,246,624.00	Wilson Construction
17	Concrete Sidewalk (New)	SR	568	\$3,777.00	\$2,145,116.00	Wilson Construction
18	Concrete Sidewalk (New)	SR	1994	\$13,559.20	\$27,032,864.80	Wilson Construction
19	Concrete Sidewalk (Removed & Replaced)	SR	1126	\$2,673.90	\$2,999,331.10	Wilson Construction
20	Concrete Sidewalk/Driveway (Removed & Replaced)	SR	320	\$8,355.35	\$2,693,732.00	Wilson Construction
21	Concrete Sidewalk/Driveway (Removed & Replaced)	SR	30	\$1,200.00	\$36,000.00	Wilson Construction
22	2" H.M.A. Pavement (Type 41 S-285)	SR	40	\$2,448.00	\$97,920.00	Wilson Construction
23	Decorative Warning Flats	SR	30	\$2,000.00	\$60,000.00	Wilson Construction
24	Tack Coat	GAU	25	\$3.85	\$96.25	Wilson Construction
25	3" Pulverized Topsoil	SR	825	\$6.00	\$4,950.00	Wilson Construction
26	Sod, Fertilizer & Water	SR	825	\$4,950.00	\$4,083,750.00	Wilson Construction
27	Utility Line Opening	EA	1	\$525.00	\$525.00	Wilson Construction
28	Removing Existing Storm Sewer Pipe	LF	31	\$13.00	\$403.00	Wilson Construction
29	Abandon Existing Storm Sewer Pipe	LF	15	\$200.00	\$3,000.00	Wilson Construction
30	Remove Storm Concrete Box Structure (Approx. Size 3x15)	LS	1	\$500.00	\$500.00	Wilson Construction
31	Remove Storm Manhole	EA	2	\$216.00	\$432.00	Wilson Construction
32	Remove 12" PVC (SDR-35) Storm Sewer	LF	99	\$18.00	\$1,782.00	Wilson Construction
33	Remove 18" PVC (SDR-35) Storm Sewer	LF	316	\$14.00	\$4,424.00	Wilson Construction
34	Remove 15" PVC (SDR-35) Storm Sewer	LF	10	\$47.00	\$470.00	Wilson Construction
35	Remove 12" PVC (SDR-35) Storm Sewer	LF	260	\$4,660.00	\$1,213,600.00	Wilson Construction
36	Remove 18" PVC (SDR-35) Storm Sewer	LF	41	\$2,015.00	\$82,615.00	Wilson Construction
37	Remove Storm Manhole, Type 4 - Storm	LF	41	\$2,180.00	\$89,420.00	Wilson Construction
38	Remove Storm Manhole, Type 4 - Storm	VF	1327	\$64.00	\$85,952.00	Wilson Construction
39	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	9	\$1,362.00	\$12,258.00	Wilson Construction
40	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$6,690.00	\$6,690.00	Wilson Construction
41	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
42	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
43	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
44	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
45	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
46	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
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48	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
49	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
50	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
51	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
52	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
53	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
54	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
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63	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
64	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
65	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
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69	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
70	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
71	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
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73	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
74	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
75	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
76	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
77	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
78	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
79	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
80	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
81	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
82	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
83	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
84	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
85	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
86	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
87	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
88	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
89	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
90	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
91	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
92	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
93	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
94	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
95	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
96	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
97	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
98	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
99	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction
100	Remove Storm Manhole, Type 3 Inlet (2' X 3')	EA	1	\$4,908.00	\$4,908.00	Wilson Construction

Handwritten note: *Consignment to Union*