

## City of Manitowoc

Finance Committee

## Tentative Timeline

- Finance Committee considers financing plan. October 23, 2017
- Common Council considers award resolution for NAN (finalizes terms and interest rates). .April 17, 2018
- NAN Closing (funds available) May 1, 2018
- Common Council considers award resolution for GORB (finalizes terms and interest rates). .July 16, 2018
- GORB Closing/NAN Paid off (funds available)

August 16, 2018
Borrowing Amount / Structure / Purpose

| Estimated Amount: | $\$ 7,005,000$ | $\$ 9,005,000$ |
| :--- | :--- | :--- |
| Issue: | Note Anticipation Note | General Obligation Refunding Bonds |
| Purpose: | Levy Supported Projects | Refund 2017 NAN, 2008B Bonds, 2009 Bonds, a <br> portion of 2011 Notes and a portion of 2011 Bonds |
| Structure: | Matures November 1, 2018 | Matures February 1, 2023-2038 |
| First Interest: | November 1, 2018 | February 1, 2019 |
| Callable: | Callable August 1, 2018 | Callable February 1, 2028 |
| Estimated Interest Rate: | $2.00 \%$ | $3.08 \%$ |
| Detailed Analysis: | Page 5 | Page 3-5 |

Finance Committee
Current \& Advance Refunding Illustration

BEFORE REFINANCING

| Calendar Year | BEFORE REFINANCING |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\$ 5,600,000$ <br> G.O. Corp Purp. Bonds,2008B Dated June 30, 2008 |  |  | $\$ 6,225,000$ <br> G.O. Corporate Purp. Bonds Dated February 17, 2009 |  |  | \$1,605,000 <br> G.O. Promissory Notes Dated April 25, 2011 |  |  | $\$ 3,280,000$ <br> G.O. Corp Purpose Bonds* Dated April 25, 2011 |  |  | OTHER NET G.O. SERVICE | (3) | TOTAL NET G.O. DEBT SERVICE |
|  | PRINCIPAL <br> (2/1) | RATE | INTEREST $(2 / 1 \& 8 / 1)$ | PRINCIPAL <br> (2/1) | RATE | $\begin{aligned} & \text { INTEREST } \\ & (2 / 1 \& 8 / 1) \end{aligned}$ | PRINCIPAL <br> (2/1) | RATE | INTEREST $(2 / 1 \& 8 / 1)$ | $\begin{aligned} & \hline \text { PRINCIPAL } \\ & (2 / 1) \end{aligned}$ | RATE | $\begin{aligned} & \hline \text { INTEREST } \\ & (2 / 1 \& 8 / 1) \end{aligned}$ |  |  |  |
| 2018 | \$410,000 | 4.000\% | \$36,000 | \$425,000 | 4.000\% | \$64,100 | \$190,000 | 2.350\% | \$19,040 | 195,000 | 2.700\% | \$62,953 | \$4,953,888 |  | \$6,355,980 |
| 2019 | \$420,000 | 4.000\% | \$19,400 | \$445,000 | 4.000\% | \$46,700 | \$195,000 | 2.550\% | \$14,321 | 205,000 | 2.750\% | \$57,501 | \$5,546,980 |  | \$6,949,903 |
| 2020 | \$275,000 | 4.000\% | \$5,500 | \$460,000 | 4.000\% | \$28,600 | \$205,000 | 2.700\% | \$9,068 | 210,000 | 3.000\% | \$51,533 | \$5,804,714 |  | \$7,049,414 |
| 2021 | +++ |  |  | \$485,000 | 4.000\% | \$9,700 | \$210,000 | 3.000\% | \$3,150 | \$215,000 | 3.000\% | \$45,158 | \$5,931,823 |  | \$6,899,830 |
| 2022 | +++ |  |  | +++ |  |  |  |  |  | \$230,000 | 3.000\% | \$38,483 | \$5,963,132 |  | \$6,231,614 |
| 2023 |  |  |  | +++ |  |  |  |  |  | \$235,000 | 3.200\% | \$31,273 | \$5,334,759 |  | \$5,601,032 |
| 2024 |  |  |  |  |  |  |  |  |  | \$250,000 | 3.350\% | \$23,325 | \$3,669,362 |  | \$3,942,687 |
| 2025 |  |  |  |  |  |  |  |  |  | \$260,000 | 3.500\% | \$14,588 | \$2,838,071 |  | \$3,112,658 |
| 2026 |  |  |  |  |  |  |  |  |  | \$275,000 | 3.650\% | \$5,019 | \$1,891,946 |  | \$2,171,965 |
| 2027 |  |  |  |  |  |  |  |  |  |  |  |  | \$705,138 |  | \$705,138 |
| 2028 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2029 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | \$1,105,000 |  | \$60,900 | \$1,815,000 |  | \$149,100 | \$800,000 |  | \$45,579 | \$2,075,000 |  | \$329,830 | \$42,639,811 |  | \$49,020,220 |
|  | Maturities callable 2/1/2018 or any date thereafter. |  |  | Maturities callable 2/1/2019 or any date thereafter. |  |  | Maturities callable $2 / 1 / 2019$ or any date thereafter. |  |  | Maturities callable 2/1/2021 or any date thereafter. |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | *General Fund Portion only |  |  |  |  |  |


|  | CALLABLE MATURITIES |
| :--- | :--- |
| Partially refunded with 2015 Bonds |  |
| +++ | Refunded with 2015 Bonds |

(1) This illustration represents a mathematical calculation of potential interest cost savings (cost), assuming hypothetical rates based on current rates +15 bps for municipal bonds as of $10 / 12 / 17$. Actual rates may vary. If actual rates are higher than those assumed, the interest cost savings would be lower. This illustration provides information and is not intended to be a recommendation, proposal or suggestion for a refinancing or otherwise to be considered as advice.
(2) Present value calculated using the All Inclusive Cost (AIC) of $2.79 \%$ as the discount rate.
(3) Includes bid premium offset of $\$ 135,805$ in 2018 from 2017 G.O. Promissory Notes.

| Interest Rate Sensitivity |  |  |  |
| :---: | :---: | :---: | :---: |
| Change | Est. PV \% | Est. PV \$ |  |
| in Rates | Savings | Savings |  |
| $-0.30 \%$ | $2.519 \%$ | $\$ 52,386$ |  |
| $-0.20 \%$ | $1.839 \%$ | $\$ 38,244$ |  |
| $-0.10 \%$ | $1.154 \%$ | $\$ 23,995$ |  |
| $+0.10 \%$ | $-0.207 \%$ | $(\$ 4,300)$ |  |
| $+0.20 \%$ | $-0.892 \%$ | $(\$ 18,561)$ |  |
| $+0.30 \%$ | $-1.574 \%$ | $(\$ 32,747)$ |  |

## City of Manitowoc

Finance Committee
Current \& Advance Refunding Illustration (Cont.)

AFTER REFINANCING

| AFTER REFINANCING |  |  |  |  |  |  |  |  |  |  |  |  |  | POTENTIAL DEBT SERVICE SAVINGS (COSTS) | $\begin{aligned} & \text { Calendar } \\ & \text { Year } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$5,600,000 <br> G.O. Corp Purp. Bonds,2008B Dated June 30, 2008 | \$6,225,000 <br> G.O. Corporate Purp. Bonds Dated February 17, 2009 |  | \$1,605,000 <br> G.O. Promissory Notes <br> Dated April 25, 2011 |  | \$3,280,000 <br> G.O. Corp Purpose Bonds* Dated April 25, 2011 |  |  | $\$ 2,000,000$ <br> G.O. Refunding Bonds (CR/ AR) Dated August 16, $2018{ }^{1}$ |  |  | OTHER <br> NET G.O. <br> SERVICE | (3) | TOTAL NET G.o. new debt SERVICE |  |  |
| PRINCIPAL INTEREST <br> $(2 / 1)$ $(2 / 1 \& 8 / 1)$ | $\begin{aligned} & \text { PRINCIPAL } \\ & (2 / 1) \end{aligned}$ | $\begin{aligned} & \text { INTEREST } \\ & (2 / 1 \& 8 / 1) \end{aligned}$ | $\begin{gathered} \text { PRINCIPAL } \\ (2 / 1) \end{gathered}$ | $\begin{aligned} & \text { INTEREST } \\ & (2 / 1 \& 8 / 1) \end{aligned}$ | $\begin{aligned} & \text { PRINCIPAL } \\ & (2 / 1) \end{aligned}$ | $\begin{aligned} & \text { INTEREST } \\ & (2 / 1 \& 8 / 1) \end{aligned}$ | TOTAL | $\begin{aligned} & \text { PRINCIPAL } \\ & (2 / 1) \end{aligned}$ | INTEREST $(2 / 1 \& 8 / 1)$ TIC= $2.57 \%$ | TOTAL |  |  |  |  |  |
| \$410,000 \$36,000 | \$425,000 | \$64,100 | \$190,000 | \$19,040 | \$195,000 | \$62,953 | \$257,953 |  |  |  | \$4,953,888 |  | \$6,355,980 | \$0 | 2018 |
| *** | \$445,000 | \$8,900 | \$195,000 | \$8,021 | \$205,000 | \$50,601 | \$50,601 |  | \$67,270 | \$67,270 | \$5,546,980 |  | \$6,526,773 | \$423,130 | 2019 |
| *** | *** |  | \$205,000 | \$2,768 | \$210,000 | \$44,633 | \$279,633 |  | \$70,195 | \$70,195 | \$5,804,714 |  | \$6,337,309 | \$712,105 | 2020 |
| +++ | *** |  | *** |  | \$215,000 | \$38,258 | \$288,258 |  | \$70,195 | \$70,195 | \$5,931,823 |  | \$6,255,275 | \$644,555 | 2021 |
| +++ | +++ |  |  |  | *** | \$35,033 | \$295,033 |  | \$70,195 | \$70,195 | \$5,963,132 |  | \$6,068,359 | \$163,255 | 2022 |
| +++ | +++ |  |  |  | \$235,000 | \$31,273 | \$306,273 | \$180,000 | \$67,495 | \$247,495 | \$5,334,759 |  | \$5,848,527 | $(\$ 247,495)$ | 2023 |
|  | +++ |  |  |  | \$250,000 | \$23,325 | \$23,325 | \$295,000 | \$60,370 | \$355,370 | \$3,669,362 |  | \$4,298,057 | $(\$ 355,370)$ | 2024 |
|  |  |  |  |  | \$260,000 | \$14,588 | \$14,588 | \$310,000 | \$51,295 | \$361,295 | \$2,838,071 |  | \$3,473,953 | $(\$ 361,295)$ | 2025 |
|  |  |  |  |  | \$275,000 | \$ $\$ 5,019$ | + ${ }_{\text {\$5,019 }}$ | \$315,000 | \$40,345 | \$355,345 | \$1,891,946 |  | \$2,527,310 | (\$355,345) | 2026 |
|  |  |  |  |  |  |  |  | \$330,000 | \$27,445 | \$357,445 | \$705,138 |  | \$1,062,583 | ( $\$ 357,445$ ) | 2027 |
|  |  |  |  |  |  |  |  | \$340,000 | \$14,045 | \$354,045 |  |  | \$354,045 | $(\$ 354,045)$ | 2028 |
|  |  |  |  |  |  |  |  | \$230,000 | \$3,623 | \$233,623 |  |  | \$233,623 | $(\$ 233,623)$ | 2029 |
| \$410,000 $\$ 36,000$ | \$870,000 | \$73,000 | \$590,000 | \$29,829 | \$1,845,000 | \$305,680 | \$1,520,680 | \$2,000,000 | \$542,473 | \$2,542,473 | \$42,639,811 |  | $\underline{\$ 49,341,793}$ | (\$321,573) |  |

[^0]| ROUNDING AMOUNT.. | \$987 |
| :---: | :---: |
| POTENTIAL GROSS SAVINGS (LOSS). | $(\$ 320,586)$ |
| (2) POTENTIAL PRESENT VALUE SAVINGS POTENTIAL PV SAVINGS \%. $\qquad$ | \$9,846 |
|  | 0.473\% |
| POtential negative arbitrage. | \$16,894 |


|  |  |  |  |  | (Due 11/1/18) | (First interest 2/1/19) |  |  | (First interest 2/1/20) |  |  |  | YEAR DUE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { LEVY } \\ & \text { YEAR } \end{aligned}$ | YEAR DUE | EXISTING DEBT (Levy Supported) <br> (A) | 2017 REFINANCE <br> (Bank Note) | 2018 REFINANCE <br> (CR/AR) <br> (B) | INTEREST (Callable $8 / 1 / 18$ ) RATE= $2.00 \%$ | PRINCIPAL <br> (2/1) | INTEREST <br> (2/1\&8/1) <br> TIC= <br> 3.18\% | $\begin{gathered} \text { BID } \\ \text { PREMIUM } \end{gathered}$ | PRINCIPAL <br> (2/1) | INTEREST <br> (2/1\&8/1) <br> AVG= <br> 3.00\% | $\begin{gathered} \text { BID } \\ \text { PREMIUM } \end{gathered}$ | TOTAL |  |
| 2016 | 2017 | \$6,273,876 |  |  |  |  |  |  |  |  |  |  | 2017 |
| 2017 | 2018 | \$6,950,402 | $(\$ 594,422)$ |  | \$40,863 |  |  |  |  |  |  |  | 2018 |
| 2018 | 2019 | \$7,101,106 | $(\$ 151,203)$ | $(\$ 423,130)$ |  |  | \$231,737 | (\$102,975) |  |  |  |  | 2019 |
| 2019 | 2020 | \$7,032,936 | \$16,478 | $(\$ 712,105)$ |  |  | \$241,813 |  | \$80,000 | \$174,450 | (\$174,450) | \$80,000 | 2020 |
| 2020 | 2021 | \$6,883,352 | \$16,478 | $(\$ 644,555)$ |  |  | \$241,813 |  |  | \$174,450 | $(\$ 15,000)$ | \$159,450 | 2021 |
| 2021 | 2022 | \$6,215,136 | \$16,478 | (\$163,255) |  |  | \$241,813 |  |  | \$174,450 |  | \$174,450 | 2022 |
| 2022 | 2023 | \$5,440,844 | \$160,188 | \$247,495 | principal and interest |  | \$241,813 |  |  | \$174,450 |  | \$174,450 | 2023 |
| 2023 | 2024 | \$3,780,260 | \$162,427 | \$355,370 | refinanced with bonds | \$465,000 | \$234,838 |  | \$955,000 | \$160,125 |  | \$1,115,125 | 2024 |
| 2024 | 2025 | \$2,849,455 | \$263,203 | \$361,295 | on 8/16/18. | \$480,000 | \$220,663 |  | \$895,000 | \$132,375 |  | \$1,027,375 | 2025 |
| 2025 | 2026 | \$2,057,803 | \$114,162 | \$355,345 |  | \$500,000 | \$203,463 |  | \$1,110,000 | \$102,300 |  | \$1,212,300 | 2026 |
| 2026 | 2027 | \$588,700 | \$116,438 | \$357,445 |  | \$520,000 | \$183,063 |  | \$1,865,000 | \$57,675 |  | \$1,922,675 | 2027 |
| 2027 | 2028 |  |  | \$354,045 |  | \$540,000 | \$161,863 |  | \$490,000 | \$22,350 |  | \$512,350 | 2028 |
| 2028 | 2029 |  |  | \$233,623 |  | \$385,000 | \$144,999 |  | \$500,000 | \$7,500 |  | \$507,500 | 2029 |
| 2029 | 2030 |  |  |  |  | \$400,000 | \$132,635 |  |  |  |  |  | 2030 |
| 2030 | 2031 |  |  |  |  | \$410,000 | \$119,365 |  |  |  |  |  | 2031 |
| 2031 | 2032 |  |  |  |  | \$425,000 | \$105,170 |  |  |  |  |  | 2032 |
| 2032 | 2033 |  |  |  |  | \$440,000 | \$89,915 |  |  |  |  |  | 2033 |
| 2033 | 2034 |  |  |  |  | \$455,000 | \$74,719 |  |  |  |  |  | 2034 |
| 2034 | 2035 |  |  |  |  | \$470,000 | \$59,856 |  |  |  |  |  | 2035 |
| 2035 | 2036 |  |  |  |  | \$490,000 | \$43,830 |  |  |  |  |  | 2036 |
| 2036 | 2037 |  |  |  |  | \$505,000 | \$26,915 |  |  |  |  |  | 2037 |
| 2037 | 2038 |  |  |  |  | \$520,000 | \$9,165 |  |  |  |  |  | 2038 |
|  |  | \$55,173,870 | \$120,226 | \$321,573 |  | \$7,005,000 | \$3,009,443 | (\$102,975) | \$5,895,000 | \$1,180,125 | (\$189,450) | \$6,885,675 |  |

(A) Includes bid premium offset of $\$ 120,869$ in 2017 from 2016 G.O. Promissory Notes \& $\$ 135,805$ in 2018 from 2017 G.O. Promissory Notes.
(B)This information is provided for information purposes only. It does not recommend any future issuances and is not intended to be, and should not be regarded as, advice.

Finance Committee
Financing Plan (Cont.)

(B)This information is provided for information purposes only. It does not recommend any future issuances and is not intended to be, and should not be regarded as, advice.
(C) Assumes $\$ 5,000,000$ issued annually. 10 year repayment at $3.00 \%$ interest rate.


[^0]:    ***
    REFINANCED WITH 2018 ISSUE

