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# Warren County School District

# *Parameters Bond Sale Document*

November 11, 2013

***Prepared by:***

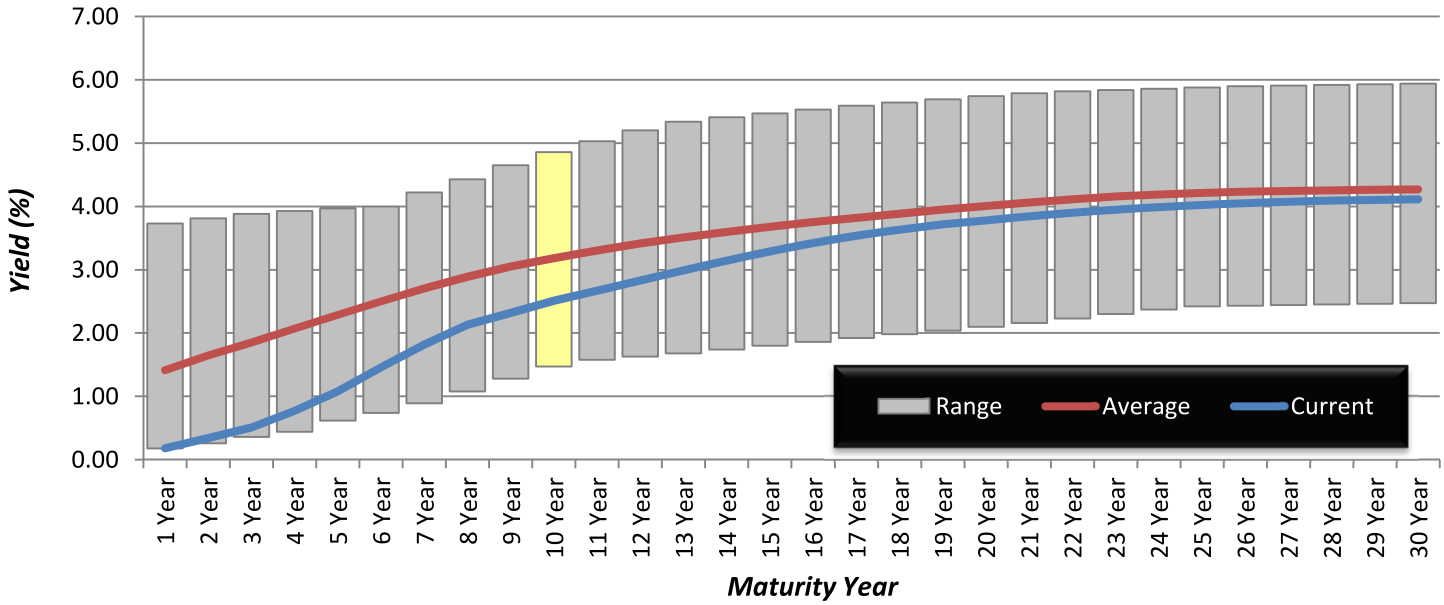
**Jamie Doyle**
*Director*

### MMD YIELD CURVE

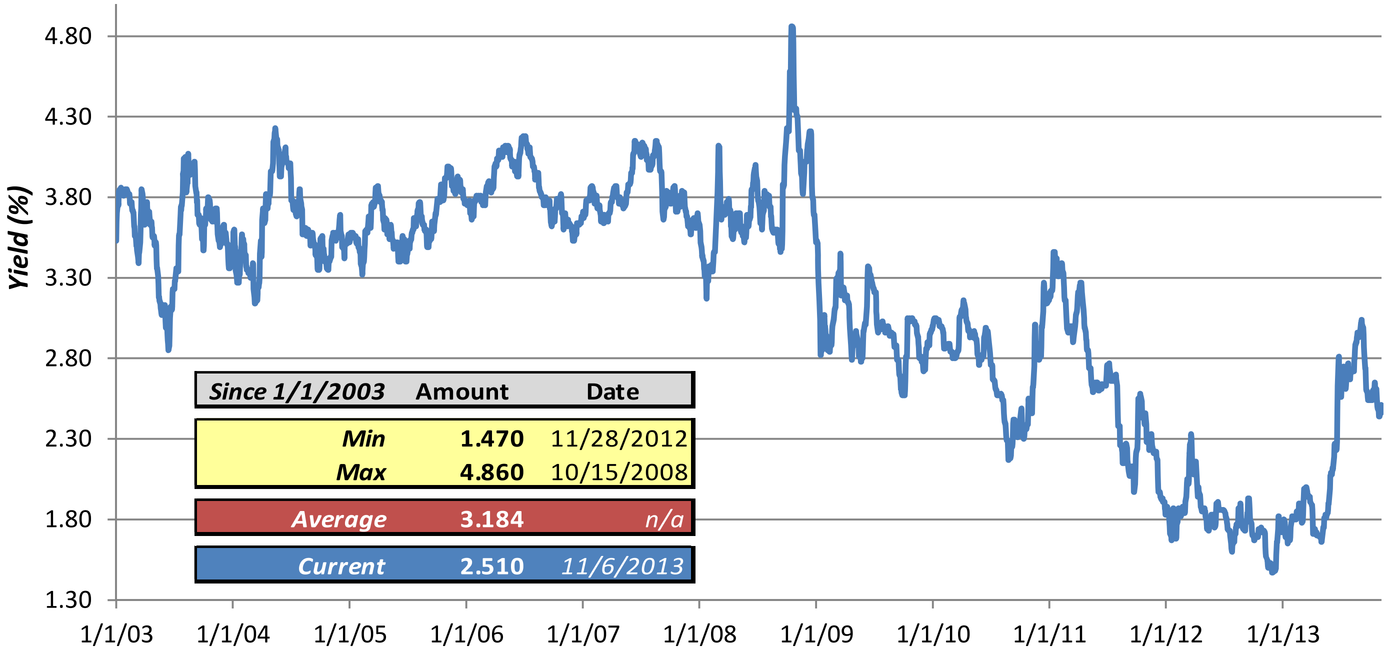
The MMD Yield Curve is a high grade municipal yield curve published daily by Municipal Market Data. It is one of the most commonly used benchmarks in municipal finance. The yields within the curve reflect the current yields for each maturity year at which bondholders would likely to sell high quality (AAA rated) general obligation backed bonds. The yield curve is typically influenced by new issuances in the primary market as well as post-issuance trading in the secondary market.

Municipal bonds typically trade at a "spread to MMD", meaning the difference between the yield in a specific year of a bond issue and the respective yield in the MMD Yield Curve. While these spreads vary over time, they can be a meaningful and powerful tool in trying to compare relative yield levels in a volatile interest rate environment.

### HISTORICAL MMD CURVE ILLUSTRATION - SINCE JANUARY 1, 2003




### SPOT ANALYSIS - 10 YEAR MMD - SINCE JANUARY 1, 2003




| Since 1/1/2003 | Amount | Date |
|---|---|---|
| Min | 1.470 | 11/28/2012 |
| Max | 4.860 | 10/15/2008 |
| Average | 3.184 | n/a |
| Current | 2.510 | 11/6/2013 |

**WARREN COUNTY SCHOOL DISTRICT**
**SUMMARY OF OUTSTANDING INDEBTEDNESS**

## Debt Service Requirements

| 1<br>Fiscal<br>Year<br>Ended | 2<br>G.O. Bonds<br>Series of<br>2008 | 3<br>G.O. Bonds<br>Series of<br>2010 | 4<br>QZAB<br>Series of<br>2011 (1) | 5<br>QZAB<br>Series of<br>2012(2) | 6<br>G.O. Bonds<br>Series of<br>2013 | 7<br>G.O. Bonds<br>Series A of<br>2013 | 8<br>Total<br>Debt<br>Service |
|---|---|---|---|---|---|---|---|
| 6/30/2014 | 1,725,450 | 1,467,156 | 71,072 | 74,846 | 358,922 | 40,407 | 3,737,853 |
| 6/30/2015 | | 1,472,056 | 804,765 | 5,000 | 295,980 | 884,550 | 3,462,351 |
| 6/30/2016 | | 1,223,906 | 994,300 | 40,000 | 295,905 | 868,350 | 3,422,461 |
| 6/30/2017 | | 1,232,706 | 984,100 | 40,000 | 295,830 | 862,875 | 3,415,511 |
| 6/30/2018 | | 1,230,322 | 988,700 | 40,000 | 295,755 | 862,750 | 3,417,527 |
| 6/30/2019 | | 1,230,388 | 1,777,800 | 180,000 | 295,680 | | 3,483,868 |
| 6/30/2020 | | 723,753 | 1,315,700 | 1,215,000 | 295,583 | | 3,550,036 |
| 6/30/2021 | | 716,550 | 762,100 | 1,825,000 | 295,463 | | 3,599,113 |
| 6/30/2022 | | 717,706 | 789,000 | 1,764,254 | 295,343 | | 3,566,302 |
| 6/30/2023 | | 722,381 | 720,000 | 1,802,781 | 295,223 | | 3,540,384 |
| 6/30/2024 | | 716,016 | 702,000 | 1,797,494 | 295,103 | | 3,510,612 |
| 6/30/2025 | | | 684,000 | 2,559,846 | 294,983 | | 3,538,828 |
| 6/30/2026 | | | 666,000 | 2,016,867 | 792,273 | | 3,475,140 |
| 6/30/2027 | | | 648,000 | 639,871 | 1,397,523 | | 2,685,394 |
| 6/30/2028 | | | 630,000 | 599,733 | 1,363,323 | | 2,593,056 |
| 6/30/2029 | | | 612,000 | 559,595 | 1,329,123 | | 2,500,718 |
| 6/30/2030 | | | 594,000 | 514,639 | 1,294,923 | | 2,403,561 |
| 6/30/2031 | | | | 479,501 | 1,260,723 | | 1,740,223 |
| 6/30/2032 | | | | 439,363 | 1,231,448 | | 1,670,810 |
| 6/30/2033 | | | | 399,225 | 1,197,098 | | 1,596,322 |
| 6/30/2034 | | | | 359,087 | 1,162,461 | | 1,521,548 |
| 6/30/2035 | | | | | | | |
| 6/30/2036 | | | | | | | |
| ***TOTAL*** | 1,725,450 | 11,452,941 | 13,743,537 | 17,352,100 | 14,638,658 | 3,518,932 | 62,431,617 |

## Local Effort Requirements

| 9<br>Fiscal<br>Year<br>Ended | 10<br>G.O. Bonds<br>Series of<br>2008 | 11<br>G.O. Bonds<br>Series of<br>2010 | 12<br>QZAB<br>Series of<br>2011 (1) | 13<br>QZAB<br>Series of<br>2012(2) | 14<br>G.O. Bonds<br>Series of<br>2013 | 15<br>G.O. Bonds<br>Series A of<br>2013 | 16<br>Total<br>Local<br>Effort |
|---|---|---|---|---|---|---|---|
| 6/30/2014 | 1,292,218 | 1,112,133 | 51,954 | 52,413 | 257,093 | 30,261 | 2,796,072 |
| 6/30/2015 | | 1,115,847 | 588,285 | 3,501 | 212,008 | 662,454 | 2,582,096 |
| 6/30/2016 | | 927,744 | 726,836 | 28,011 | 211,955 | 650,322 | 2,544,868 |
| 6/30/2017 | | 934,415 | 719,380 | 28,011 | 211,901 | 646,221 | 2,539,928 |
| 6/30/2018 | | 932,608 | 722,743 | 28,011 | 211,847 | 646,128 | 2,541,336 |
| 6/30/2019 | | 932,657 | 1,299,577 | 126,049 | 211,794 | | 2,570,077 |
| 6/30/2020 | | 548,619 | 961,781 | 850,832 | 211,724 | | 2,572,955 |
| 6/30/2021 | | 543,159 | 557,097 | 1,277,998 | 211,638 | | 2,589,892 |
| 6/30/2022 | | 544,035 | 576,761 | 1,235,459 | 211,552 | | 2,567,807 |
| 6/30/2023 | | 547,579 | 526,322 | 1,262,438 | 211,466 | | 2,547,805 |
| 6/30/2024 | | 542,754 | 513,164 | 1,258,736 | 211,380 | | 2,526,034 |
| 6/30/2025 | | | 500,006 | 1,792,591 | 211,294 | | 2,503,891 |
| 6/30/2026 | | | 486,848 | 1,412,357 | 567,499 | | 2,466,705 |
| 6/30/2027 | | | 473,690 | 448,084 | 1,001,036 | | 1,922,810 |
| 6/30/2028 | | | 460,532 | 419,977 | 976,539 | | 1,857,047 |
| 6/30/2029 | | | 447,374 | 391,869 | 952,042 | | 1,791,285 |
| 6/30/2030 | | | 434,216 | 360,388 | 927,544 | | 1,722,148 |
| 6/30/2031 | | | | 335,781 | 903,047 | | 1,238,828 |
| 6/30/2032 | | | | 307,674 | 882,078 | | 1,189,751 |
| 6/30/2033 | | | | 279,566 | 857,473 | | 1,137,039 |
| 6/30/2034 | | | | 251,459 | 832,663 | | 1,084,122 |
| 6/30/2035 | | | | | | | |
| 6/30/2036 | | | | | | | |
| ***TOTAL*** | 1,292,218 | 8,681,548 | 10,046,566 | 12,151,205 | 10,485,572 | 2,635,386 | 45,292,496 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Principal *:** | 0 | 8,945,000 | 16,200,000 | 23,180,000 | 9,700,000 | 3,295,000 | 61,320,000 |
| **PE%:** | 34.48% | 33.23% | 36.94% | 41.16% | 38.96% | 34.48% | |
| **PE% Status:** | Temporary | Temporary | Estimated | Estimated | Estimated | Temporary | |
| **CARF%:** | 72.82% | 72.82% | 72.82% | 72.82% | 72.82% | 72.82% | |
| **Call Date:** | 9/1/2013 | 10/1/2015 | Non-Callable | Non-Callable | 5/15/2018 | Non-Callable | |
| **Purpose:** | Cur Ref 01 & 02 | Cur Ref 03 & 04 | New Money | New Money | New Money | Cur Ref 08 | |

* Outstanding as of November 7, 2013

(1) QZAB debt service is net of Fed. Reimbursement Subsidy 5.138% & est. sinking fund earnings of 2.00%

(1A) Assumes Fed. Reimbursement Subsidy for 9/1/13 payments reduced by 8.70% ($36,207.49 per payment)

(1B) Assumes Fed. Reimbursement Subsidy for 3/1/14 & 9/1/14 payments reduced by 7.20% ($29,964.82 per payment)

(2) QZAB debt service is net of Fed. Reimbursement Subsidy 4.185% & sinking fund earnings of 3.14%

(1A) Assumes Fed. Reimbursement Subsidy for 11/1/13 & 5/1/14 payments reduced by 7.20% ($34,922.99 per payment)

**WARREN COUNTY SCHOOL DISTRICT**
SERIES OF 2014
NEW MONEY

*Settled* 1/9/2014
*Dated* 1/9/2014

| 1<br>Date | 2<br>Principal | 3<br>Rate | 4<br>Interest | 5<br>Semi-Annual<br>Debt Service | 6<br>Proposed<br>Fiscal Year<br>Debt Service | 7<br>*Less:*<br>State Aid | 8<br>Proposed<br>Local<br>Effort | 9<br>Existing<br>Local<br>Effort | 10<br>Total<br>Local<br>Effort | 11<br>Millage<br>Equivalent |
|---|---|---|---|---|---|---|---|---|---|---|
| 5/15/2014 | | | 169,835.75 | 169,835.75 | 169,835.75 | (10,169.04) | 159,666.71 | 2,796,071.75 | 2,955,738.45 | 0.38 |
| 11/15/2014 | | | 242,622.50 | 242,622.50 | | | | | | |
| 5/15/2015 | | | 242,622.50 | 242,622.50 | 485,245.00 | (29,054.41) | 456,190.59 | 2,582,096.31 | 3,038,286.90 | 0.20 |
| 11/15/2015 | 5,000 | 1.680 | 242,622.50 | 247,622.50 | | | | | | |
| 5/15/2016 | | | 242,580.50 | 242,580.50 | 490,203.00 | (29,351.27) | 460,851.73 | 2,544,868.01 | 3,005,719.74 | |
| 11/15/2016 | 5,000 | 1.850 | 242,580.50 | 247,580.50 | | | | | | |
| 5/15/2017 | | | 242,534.25 | 242,534.25 | 490,114.75 | (29,345.99) | 460,768.76 | 2,539,928.31 | 3,000,697.07 | |
| 11/15/2017 | 5,000 | 2.050 | 242,534.25 | 247,534.25 | | | | | | |
| 5/15/2018 | | | 242,483.00 | 242,483.00 | 490,017.25 | (29,340.15) | 460,677.10 | 2,541,336.18 | 3,002,013.28 | |
| 11/15/2018 | 5,000 | 2.350 | 242,483.00 | 247,483.00 | | | | | | |
| 5/15/2019 | | | 242,424.25 | 242,424.25 | 489,907.25 | (29,333.56) | 460,573.69 | 2,570,076.98 | 3,030,650.67 | |
| 11/15/2019 | 5,000 | 2.650 | 242,424.25 | 247,424.25 | | | | | | |
| 5/15/2020 | | | 242,358.00 | 242,358.00 | 489,782.25 | (29,326.08) | 460,456.17 | 2,572,954.57 | 3,033,410.74 | |
| 11/15/2020 | 5,000 | 3.030 | 242,358.00 | 247,358.00 | | | | | | |
| 5/15/2021 | | | 242,282.25 | 242,282.25 | 489,640.25 | (29,317.57) | 460,322.68 | 2,589,891.75 | 3,050,214.43 | |
| 11/15/2021 | 5,000 | 3.360 | 242,282.25 | 247,282.25 | | | | | | |
| 5/15/2022 | | | 242,198.25 | 242,198.25 | 489,480.50 | (29,308.01) | 460,172.49 | 2,567,807.15 | 3,027,979.64 | |
| 11/15/2022 | 5,000 | 3.660 | 242,198.25 | 247,198.25 | | | | | | |
| 5/15/2023 | | | 242,106.75 | 242,106.75 | 489,305.00 | (29,297.50) | 460,007.50 | 2,547,805.20 | 3,007,812.70 | |
| 11/15/2023 | 25,000 | 3.830 | 242,106.75 | 267,106.75 | | | | | | |
| 5/15/2024 | | | 241,628.00 | 241,628.00 | 508,734.75 | (30,460.87) | 478,273.88 | 2,526,033.63 | 3,004,307.50 | |
| 11/15/2024 | 50,000 | 4.000 | 241,628.00 | 291,628.00 | | | | | | |
| 5/15/2025 | | | 240,628.00 | 240,628.00 | 532,256.00 | (31,869.22) | 500,386.78 | 2,503,890.50 | 3,004,277.28 | |
| 11/15/2025 | 90,000 | 4.160 | 240,628.00 | 330,628.00 | | | | | | |
| 5/15/2026 | | | 238,756.00 | 238,756.00 | 569,384.00 | (34,092.29) | 535,291.71 | 2,466,704.79 | 3,001,996.50 | |
| 11/15/2026 | 680,000 | 4.320 | 238,756.00 | 918,756.00 | | | | | | |
| 5/15/2027 | | | 224,068.00 | 224,068.00 | 1,142,824.00 | (68,427.44) | 1,074,396.56 | 1,922,810.30 | 2,997,206.86 | |
| 11/15/2027 | 785,000 | 4.480 | 224,068.00 | 1,009,068.00 | | | | | | |
| 5/15/2028 | | | 206,484.00 | 206,484.00 | 1,215,552.00 | (72,782.08) | 1,142,769.92 | 1,857,047.45 | 2,999,817.37 | |
| 11/15/2028 | 895,000 | 4.630 | 206,484.00 | 1,101,484.00 | | | | | | |
| 5/15/2029 | | | 185,764.75 | 185,764.75 | 1,287,248.75 | (77,074.98) | 1,210,173.77 | 1,791,284.60 | 3,001,458.38 | |
| 11/15/2029 | 1,010,000 | 4.770 | 185,764.75 | 1,195,764.75 | | | | | | |
| 5/15/2030 | | | 161,676.25 | 161,676.25 | 1,357,441.00 | (81,277.79) | 1,276,163.21 | 1,722,147.57 | 2,998,310.78 | |
| 11/15/2030 | 1,585,000 | 4.890 | 161,676.25 | 1,746,676.25 | | | | | | |
| 5/15/2031 | | | 122,923.00 | 122,923.00 | 1,869,599.25 | (111,943.65) | 1,757,655.60 | 1,238,828.40 | 2,996,484.01 | |
| 11/15/2031 | 1,720,000 | 5.010 | 122,923.00 | 1,842,923.00 | | | | | | |
| 5/15/2032 | | | 79,837.00 | 79,837.00 | 1,922,760.00 | (115,126.69) | 1,807,633.31 | 1,189,751.35 | 2,997,384.67 | |
| 11/15/2032 | 1,870,000 | 5.090 | 79,837.00 | 1,949,837.00 | | | | | | |
| 5/15/2033 | | | 32,245.50 | 32,245.50 | 1,982,082.50 | (118,678.66) | 1,863,403.84 | 1,137,039.11 | 3,000,442.95 | |
| 11/15/2033 | 1,245,000 | 5.180 | 32,245.50 | 1,277,245.50 | | | | | | |
| 5/15/2034 | | | 0.00 | 0.00 | 1,277,245.50 | (76,476.02) | 1,200,769.48 | 1,084,121.83 | 2,284,891.31 | |
| 11/15/2034 | | | | | | | | | | |
| TOTALS | **9,995,000** | | 8,243,658.75 | 18,238,658.75 | 18,238,658.75 | (1,092,053.26) | 17,146,605.49 | 45,292,495.74 | 62,439,101.23 | 0.58 |

| | | |
|---|---|---|
| PE%= | 8.22% | Estimated |
| AR%= | 72.82% | |
| 1 MILL= | 420,000 | Estimated |

* Assumes approximately $4,245,000 issued for the clean up of existing projects and approximately $5,750,000 of high school renovation projects

# Maximum Parameters Schedule

**WARREN COUNTY SCHOOL DISTRICT**
SERIES OF 2014 / SERIES OF 2015
NEW MONEY

**MAXIMUM PARAMETERS SCHEDULE**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| Date | Principal | Rate | Interest | Semi-Annual Debt Service | Proposed Fiscal Year Debt Service |
| 5/15/2014 | | | 535,500.00 | 535,500.00 | 535,500.00 |
| 11/15/2014 | 30,000 | 6.000 | 765,000.00 | 795,000.00 | |
| 5/15/2015 | | | 764,100.00 | 764,100.00 | 1,559,100.00 |
| 11/15/2015 | 30,000 | 6.000 | 764,100.00 | 794,100.00 | |
| 5/15/2016 | | | 763,200.00 | 763,200.00 | 1,557,300.00 |
| 11/15/2016 | 30,000 | 6.000 | 763,200.00 | 793,200.00 | |
| 5/15/2017 | | | 762,300.00 | 762,300.00 | 1,555,500.00 |
| 11/15/2017 | 30,000 | 6.000 | 762,300.00 | 792,300.00 | |
| 5/15/2018 | | | 761,400.00 | 761,400.00 | 1,553,700.00 |
| 11/15/2018 | 30,000 | 6.000 | 761,400.00 | 791,400.00 | |
| 5/15/2019 | | | 760,500.00 | 760,500.00 | 1,551,900.00 |
| 11/15/2019 | 30,000 | 6.000 | 760,500.00 | 790,500.00 | |
| 5/15/2020 | | | 759,600.00 | 759,600.00 | 1,550,100.00 |
| 11/15/2020 | 30,000 | 6.000 | 759,600.00 | 789,600.00 | |
| 5/15/2021 | | | 758,700.00 | 758,700.00 | 1,548,300.00 |
| 11/15/2021 | 30,000 | 6.000 | 758,700.00 | 788,700.00 | |
| 5/15/2022 | | | 757,800.00 | 757,800.00 | 1,546,500.00 |
| 11/15/2022 | 30,000 | 6.000 | 757,800.00 | 787,800.00 | |
| 5/15/2023 | | | 756,900.00 | 756,900.00 | 1,544,700.00 |
| 11/15/2023 | 85,000 | 6.000 | 756,900.00 | 841,900.00 | |
| 5/15/2024 | | | 754,350.00 | 754,350.00 | 1,596,250.00 |
| 11/15/2024 | 110,000 | 6.000 | 754,350.00 | 864,350.00 | |
| 5/15/2025 | | | 751,050.00 | 751,050.00 | 1,615,400.00 |
| 11/15/2025 | 150,000 | 6.000 | 751,050.00 | 901,050.00 | |
| 5/15/2026 | | | 746,550.00 | 746,550.00 | 1,647,600.00 |
| 11/15/2026 | 1,165,000 | 6.000 | 746,550.00 | 1,911,550.00 | |
| 5/15/2027 | | | 711,600.00 | 711,600.00 | 2,623,150.00 |
| 11/15/2027 | 1,275,000 | 6.000 | 711,600.00 | 1,986,600.00 | |
| 5/15/2028 | | | 673,350.00 | 673,350.00 | 2,659,950.00 |
| 11/15/2028 | 1,385,000 | 6.000 | 673,350.00 | 2,058,350.00 | |
| 5/15/2029 | | | 631,800.00 | 631,800.00 | 2,690,150.00 |
| 11/15/2029 | 1,510,000 | 6.000 | 631,800.00 | 2,141,800.00 | |
| 5/15/2030 | | | 586,500.00 | 586,500.00 | 2,728,300.00 |
| 11/15/2030 | 2,025,000 | 6.000 | 586,500.00 | 2,611,500.00 | |
| 5/15/2031 | | | 525,750.00 | 525,750.00 | 3,137,250.00 |
| 11/15/2031 | 2,150,000 | 6.000 | 525,750.00 | 2,675,750.00 | |
| 5/15/2032 | | | 461,250.00 | 461,250.00 | 3,137,000.00 |
| 11/15/2032 | 2,290,000 | 6.000 | 461,250.00 | 2,751,250.00 | |
| 5/15/2033 | | | 392,550.00 | 392,550.00 | 3,143,800.00 |
| 11/15/2033 | 2,360,000 | 6.000 | 392,550.00 | 2,752,550.00 | |
| 5/15/2034 | | | 321,750.00 | 321,750.00 | 3,074,300.00 |
| 11/15/2034 | 3,575,000 | 6.000 | 321,750.00 | 3,896,750.00 | |
| 5/15/2035 | | | 214,500.00 | 214,500.00 | 4,111,250.00 |
| 11/15/2035 | 3,740,000 | 6.000 | 214,500.00 | 3,954,500.00 | |
| 5/15/2036 | | | 102,300.00 | 102,300.00 | 4,056,800.00 |
| 11/15/2036 | 3,410,000 | 6.000 | 102,300.00 | 3,512,300.00 | |
| 5/15/2037 | | | 0.00 | 0.00 | 3,512,300.00 |
| 11/15/2037 | | | | | |
| TOTALS | 25,500,000 | | 28,736,100.00 | 54,236,100.00 | 54,236,100.00 |

*** ASSUMES A MAXIMUM INTEREST RATE OF 6.00%**