# Manchester Essex Regional School District FY 2023 Capital Budget 

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Amortization of Reserve for \$5MM Bonds** Long Term Debt Schedule \$1.964MM Bonds Principal Assessment \$1.964MM Bonds Interest Assessment \$1.964MM Bonds Amortization of Reserve for $\$ 1.964 \mathrm{MM}$ Bonds Long Term Debt Schedule \$32.29MM Bonds Principal Assessment $\$ 32.29 \mathrm{MM}$ Bonds Interest Assessment \$32.29MM Bonds Long Term Debt Schedule \$3.23MM Bonds Principal Assessment \$3.23MM Bonds Interest Assessment \$3.23MM Bonds Interest Assessment, \$1.3MM Short-Term BANs


| BREAKDOWN BY DUE DATE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Due Date | Issue Type | Manchester | Essex | Premium Amortization | Total |
| 7/15/22 | \$14.853 LTD Interest | \$116,142.57 | \$56,866.96 | \$4,484.22 | \$177,493.75 |
|  | 7/15/22 Total | \$116,142.57 | \$56,866.96 | \$4,484.22 | \$177,493.75 |
| 8/1/22 | \$32M LTD Interest | \$414,211.37 | \$204,538.63 |  | \$618,750.00 |
| 8/1/22 | \$3.232M LTD Principal | \$109,964.95 | \$55,035.05 |  | \$165,000.00 |
| 8/1/22 | \$3.232M LTD Interest | \$50,643.95 | \$25,346.19 |  | \$75,990.14 |
|  | 8/1/22 Total | \$574,820.27 | \$284,919.87 | \$0.00 | \$859,740.14 |
| 8/15/22 | \$2.155M LTD Interest | \$26,830.38 | \$13,254.31 | \$2,040.31 | \$42,125.00 |
| 8/15/22 | \$1.964M LTD Interest | (\$182.08) | (\$91.17) | \$2,223.24 | \$1,950.00 |
| 8/15/22 | \$1.964M LTD Principal | \$129,939.98 | \$65,060.02 |  | \$195,000.00 |
|  | 8/15/22 Total | \$156,588.28 | \$78,223.17 | \$4,263.55 | \$239,075.00 |
| 1/15/23 | \$14.853 LTD Interest | \$116,142.57 | \$56,866.96 | \$4,484.22 | \$177,493.75 |
| 1/15/23 | \$14.853 LTD Principal | \$671,203.84 | \$328,796.16 |  | \$1,000,000.00 |
|  | 1/15/23 Total | \$787,346.41 | \$385,663.11 | \$4,484.22 | \$1,177,493.75 |
| 2/1/23 | \$32M LTD Interest | \$414,211.37 | \$204,538.63 |  | \$618,750.00 |
| 2/1/23 | \$32M LTD Principal | \$722,987.12 | \$357,012.88 |  | \$1,080,000.00 |
| 2/1/23 | \$3.23M LTD Interest | \$50,643.95 | \$25,346.19 |  | \$75,990.14 |
|  | 2/1/23 Total | \$1,187,842.44 | \$586,897.70 | \$0.00 | \$1,774,740.14 |
| 2/15/23 | \$2.155M LTD Interest | \$26,830.38 | \$13,254.31 | \$2,040.31 | \$42,125.00 |
| 2/15/23 | \$2.155M LTD Principal | \$140,580.83 | \$69,419.17 |  | \$210,000.00 |
| 2/15/23 | \$1.964M LTD Interest | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
|  | 2/15/23 Total | \$167,411.21 | \$82,673.49 | \$2,040.31 | \$252,125.00 |
| 3/3/2023 | \$1.3MM BAN Interest | \$17,279.68 | \$8,648.10 |  | \$25,927.78 |
|  | FY-23 Total Assessments | \$3,007,430.86 | \$1,483,892.39 |  | \$4,491,323.25 |
|  | +Premium Amortization | \$10,204.25 | \$5,068.06 |  | \$15,272.31 |
|  | Total FY-23 Debt Service | \$3,017,635.10 | \$1,488,960.46 |  | \$4,506,595.56 |


| BREAKDOWN BY ISSUE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Issue | Manchester | Essex | Total | +Premium Amortization | Total Debt Service |
| \$14.853 LTD | \$903,488.98 | \$442,530.07 | \$1,346,019.06 | \$8,968.44 | \$1,354,987.50 |
| \$2.155M LTD | \$194,241.58 | \$95,927.80 | \$290,169.38 | \$4,080.62 | \$294,250.00 |
| \$1.964M LTD | \$129,757.90 | \$64,968.85 | \$194,726.76 | \$2,223.24 | \$196,950.00 |
| \$32M LTD | \$1,551,409.85 | \$766,090.15 | \$2,317,500.00 | \$0.00 | \$2,317,500.00 |
| \$3.23M LTD | \$211,252.86 | \$105,727.42 | \$316,980.28 | \$0.00 | \$316,980.28 |
| \$1.3M BAN | \$17,279.68 | \$8,648.10 | \$25,927.78 | \$0.00 | \$25,927.78 |
| FY-23 Total | \$3,007,430.86 | \$1,483,892.39 | \$4,491,323.25 | \$15,272.31 | \$4,506,595.56 |
| BREAKDOWN BY PAYMENT TYPE |  |  |  |  |  |
| Town | Principal | Interest | Total | +Premium Amortization | Total Debt Service |
| Manchester | \$1,774,676.72 | \$1,232,754.14 | \$3,007,430.86 | \$10,204.25 | \$3,017,635.10 |
| Essex | \$875,323.28 | \$608,569.11 | \$1,483,892.39 | \$5,068.06 | \$1,488,960.46 |
| FY-23 Total | \$2,650,000.00 | $\begin{array}{r} \hline \$ 1,841,323.25 \\ \$ 15,272.31 \\ \$ 1,856,595.56 \end{array}$ | $\$ 4,491,323.25$ | \$15,272.31 | \$4,506,595.56 |

Manchester Essex RSD, Massachusetts
\$25,000,000 General Obligation School Bonds Dated January 15, 2008
Ch. 71 s. 16(d), Auth. 12/19/2005
New High School/Middle School
Debt Service Schedule

| Date Due <br> $7 / 15 / 2008$ | Principal Due Coupon | Interest Due <br> $\$ 509,375$ | Total Due <br> $\$ 509,375$ | Fiscal Year Total |  |
| ---: | ---: | :--- | :--- | ---: | ---: |
| $1 / 15 / 2009$ | $\$ 1,000,000$ | $3.500 \%$ | $\$ 509,375$ | $\$ 1,509,375$ | $\$ 2,018,750$ |
| $7 / 15 / 2009$ |  |  | $\$ 491,875$ | $\$ 491,875$ |  |
| $1 / 15 / 2010$ | $\$ 1,000,000$ | $3.500 \%$ | $\$ 491,875$ | $\$ 1,491,875$ | $\$ 1,983,750$ |
| $7 / 15 / 2010$ |  |  | $\$ 474,375$ | $\$ 474,375$ |  |
| $1 / 15 / 2011$ | $\$ 1,000,000$ | $3.500 \%$ | $\$ 474,375$ | $\$ 1,474,375$ | $\$ 1,948,750$ |
| $7 / 15 / 2011$ |  |  | $\$ 456,875$ | $\$ 456,875$ |  |
| $1 / 15 / 2012$ | $\$ 1,000,000$ | $5.000 \%$ | $\$ 456,875$ | $\$ 1,456,875$ | $\$ 1,913,750$ |
| $7 / 15 / 2012$ |  |  | $\$ 431,875$ | $\$ 431,875$ |  |
| $1 / 15 / 2013$ | $\$ 1,000,000$ | $5.000 \%$ | $\$ 431,875$ | $\$ 1,431,875$ | $\$ 1,863,750$ |
| $7 / 15 / 2013$ |  |  | $\$ 406,875$ | $\$ 406,875$ |  |
| $1 / 15 / 2014$ | $\$ 1,000,000$ | $3.500 \%$ | $\$ 406,875$ | $\$ 1,406,875$ | $\$ 1,813,750$ |
| $7 / 15 / 2014$ |  |  | $\$ 389,375$ | $\$ 389,375$ |  |
| $1 / 15 / 2015$ | $\$ 1,000,000$ | $3.500 \%$ | $\$ 389,375$ | $\$ 1,389,375$ | $\$ 1,778,750$ |
| $7 / 15 / 2015$ |  |  | $\$ 371,875$ | $\$ 371,875$ |  |
| $1 / 15 / 2016$ | $\$ 1,000,000$ | $5.000 \%$ | $\$ 371,875$ | $\$ 1,371,875$ | $\$ 1,743,750$ |
| $7 / 15 / 2016$ |  |  | $\$ 35,625$ | $\$ 35,625$ |  |
| $1 / 15 / 2017$ | $\$ 1,000,000$ | $3.500 \%$ | $\$ 35,625$ | $\$ 1,035,625$ | $\$ 1,071,250$ |
| $7 / 15 / 2017$ |  |  | $\$ 18,125$ | $\$ 18,125$ |  |
| $1 / 15 / 2018^{*}$ | $\$ 1,000,000$ | $3.625 \%$ | $\$ 18,125$ | $\$ 1,018,125$ | $\$ 1,036,250$ |
|  |  |  |  |  |  |
| Total* | $\$ 10,000,000$ |  | $\$ 7,172,500$ | $\$ 17,172,500$ | $\$ 17,172,500$ |

*Remaining \$15MM of bonds owed after 1/15/18 were refunded via the \$14.835MM issuance

## Manchester Essex RSD, Massachusetts

\$14,835,000 General Obligation Refunding Bonds Dated April 12, 2016
Adv Ref of January 152008
New High School/Middle School, Ch. 71 s. 16(d), Auth. 12/19/2005
Debt Service Schedule

| Date Due | Principal Due Coupon | Interest Due | Total Due | Fiscal Year Total |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $7 / 15 / 2016$ |  |  | $\$ 133,968$ | $\$ 133,968$ |  |
| $1 / 15 / 2017$ | $\$ 130,000$ | $2.000 \%$ | $\$ 259,294$ | $\$ 389,294$ | $\$ 523,262$ |
| $7 / 15 / 2017$ |  |  | $\$ 257,994$ | $\$ 257,994$ |  |
| $1 / 15 / 2018$ | $\$ 10,000$ | $2.000 \%$ | $\$ 257,994$ | $\$ 267,994$ | $\$ 525,988$ |
| $7 / 15 / 2018$ |  |  | $\$ 257,894$ | $\$ 257,894$ |  |
| $1 / 15 / 2019$ | $\$ 1,010,000$ | $4.000 \%$ | $\$ 257,894$ | $\$ 1,267,894$ | $\$ 1,525,788$ |
| $7 / 15 / 2019$ |  |  | $\$ 237,694$ | $\$ 237,694$ |  |
| $1 / 15 / 2020$ | $\$ 1,010,000$ | $4.000 \%$ | $\$ 237,694$ | $\$ 1,247,694$ | $\$ 1,485,388$ |
| $7 / 15 / 2020$ |  |  | $\$ 217,494$ | $\$ 217,494$ |  |
| $1 / 15 / 2021$ | $\$ 1,000,000$ | $4.000 \%$ | $\$ 217,494$ | $\$ 1,217,494$ | $\$ 1,434,988$ |
| $7 / 15 / 2021$ |  |  | $\$ 197,494$ | $\$ 197,494$ |  |
| $1 / 15 / 2022$ | $\$ 1,000,000$ | $4.000 \%$ | $\$ 197,494$ | $\$ 1,197,494$ | $\$ 1,394,988$ |
| $7 / 15 / 2022$ |  |  | $\$ 177,494$ | $\$ 177,494$ |  |
| $1 / 15 / 2023$ | $\$ 1,000,000$ | $4.000 \%$ | $\$ 177,494$ | $\$ 1,177,494$ | $\$ 1,354,988$ |
| $7 / 15 / 2023$ |  |  | $\$ 157,494$ | $\$ 157,494$ |  |
| $1 / 15 / 2024$ | $\$ 1,000,000$ | $4.000 \%$ | $\$ 157,494$ | $\$ 1,157,494$ | $\$ 1,314,988$ |
| $7 / 15 / 2024$ |  |  | $\$ 137,494$ | $\$ 137,494$ |  |
| $1 / 15 / 2025$ | $\$ 1,000,000$ | $4.000 \%$ | $\$ 137,494$ | $\$ 1,137,494$ | $\$ 1,274,988$ |
| $7 / 15 / 2025$ |  |  | $\$ 117,494$ | $\$ 117,494$ |  |
| $1 / 15 / 2026$ | $\$ 1,000,000$ | $4.000 \%$ | $\$ 117,494$ | $\$ 1,117,494$ | $\$ 1,234,988$ |
| $7 / 15 / 2026$ |  |  | $\$ 97,494$ | $\$ 97,494$ |  |
| $1 / 15 / 2027$ | $\$ 1,000,000$ | $2.500 \%$ | $\$ 97,494$ | $\$ 1,097,494$ | $\$ 1,194,988$ |
| $7 / 15 / 2027$ |  |  | $\$ 84,994$ | $\$ 84,994$ |  |
| $1 / 15 / 2028$ | $\$ 980,000$ | $2.750 \%$ | $\$ 84,994$ | $\$ 1,064,994$ | $\$ 1,149,988$ |
| $7 / 15 / 2028$ |  |  | $\$ 71,519$ | $\$ 71,519$ |  |
| $1 / 15 / 2029$ | $\$ 965,000$ | $2.750 \%$ | $\$ 71,519$ | $\$ 1,036,519$ | $\$ 1,108,038$ |
| $7 / 15 / 2029$ |  |  | $\$ 58,250$ | $\$ 58,250$ |  |
| $1 / 15 / 2030$ | $\$ 950,000$ | $3.000 \%$ | $\$ 58,250$ | $\$ 1,008,250$ | $\$ 1,066,500$ |
| $7 / 15 / 2030$ |  |  | $\$ 44,000$ | $\$ 44,000$ |  |
| $1 / 15 / 2031$ | $\$ 940,000$ | $3.000 \%$ | $\$ 44,000$ | $\$ 984,000$ | $\$ 1,028,000$ |
| $7 / 15 / 2031$ |  |  | $\$ 29,900$ | $\$ 29,900$ |  |
| $1 / 15 / 2032$ | $\$ 925,000$ | $3.250 \%$ | $\$ 29,900$ | $\$ 954,900$ | $\$ 984,800$ |
| $7 / 15 / 2032$ |  |  | $\$ 14,869$ | $\$ 14,869$ |  |
| $1 / 15 / 2033$ | $\$ 915,000$ | $3.250 \%$ | $\$ 14,869$ | $\$ 929,869$ | $\$ 944,738$ |
|  |  |  | $\$ 79,400$ | $\$ 19,547,400$ | $\$ 19,547,400$ |

Final Budget for Adoption 3/1/22

## \$14,835,000 Long Term Debt Principal - Construction New MS/HS

| Amount Due 1/15/23 | \$1,000,000.00 |  |
| :---: | :---: | :---: |
|  |  | \% of Total |
| FY 2014 Manchester EQV: | \$2,276,185,500 | 74.79632\% |
| FY 2014 Essex EQV: | \$766,992,800 | 25.20368\% |
| Total: | \$3,043,178,300 | 100.00000\% |
| US 2010 Manchester Pop: | 5136 | 59.44444\% |
| US 2010 Essex Pop: | 3504 | 40.55556\% |
| Total: | 8640 | 100.00000\% |
| Manchester EQV Proportion: | \$373,981.62 | (\$1,000,000 x . $5 \times .7479632$ ) |
| Essex EQV Proportion: | \$126,018.38 | (\$1,000,000 x . $5 \times .2520368$ ) |
| Manchester Pop. Proportion: | \$297,222.22 | (\$1,000,000 x . $5 \times .5944444$ ) |
| Essex Pop. Proportion: | \$202,777.78 | (\$1,000,000 x . $5 \times .4055556$ ) |
| Manchester Total: | \$671,203.84 | 67.12\% |
| Essex Total: | \$328,796.16 | 32.88\% |
|  | \$1,000,000.00 | 100.00\% |

## \$14,835,000 Long Term Debt Interest - Construction New MS/HS

| Amount Due $7 / 15 / 22$ | $\$ 177,493.75$ |
| :--- | :--- |
| Amount Due 1/15/23 | $\$ 177,493.75$ |
| Total Due: | $\$ 354,987.50$ |


*Unamortized premium from \$25MM advance refunded bond applied to interest payments on \$14.835MM replacement bond

## Amortization of Reserve for Reduction of Future Excluded Debt

| Premium Received on $\$ 25,000,000$ Bond Issue: Issuance costs: | $\begin{gathered} \$ 331,690.00 \\ (\$ 107,478.89) \end{gathered}$ |  |
| :---: | :---: | :---: |
| Net Proceeds: | \$224,211.11 |  |
| Term: | 25 years |  |
| Annual Amortization: | \$8,968.44 | *applied to \$14.835M refunding bonds |
| Net Due: | \$8,968.44 |  |
| FY 2006 Manchester EQV: | \$2,124,611,400.00 | 0.7189984 |
| FY 2006 Essex EQV: | \$830,348,600.00 | 0.2810016 |
| Total: | \$2,954,960,000.00 |  |
| US 2000 Manchester Pop: | 5228 | 0.6154208 |
| US 2000 Essex Pop: | $\underline{3267}$ | 0.3845792 |
| Total: | 8495 |  |
| Manchester EQV Proportion: | \$3,224.15 | (\$8,968.44 $\times .5 \times .719)$ |
| Essex EQV Proportion: | \$1,260.07 | (\$8,968.44 x . $5 \times .281$ ) |
| Manchester Pop. Proportion: | \$2,759.68 | (\$8,968.44 $\times .5 \times .6154$ ) |
| Essex Pop. Proportion: | \$1,724.54 | (\$8,968.44 x . $5 \times .3846$ ) |
| Manchester Total: | \$5,983.83 | 66.72\% |
| Essex Total: | \$2,984.61 | 33.28\% |
|  | \$8,968.44 | 100.00\% |


| FY | Beg. Balance | Amortization | Ending Balance |
| :---: | :---: | :---: | :---: |
| 1 FY-09 | $\$ 224,211.11$ | $(\$ 8,968.44)$ | $\$ 215,242.67$ |
| 2 FY-10 | $\$ 215,242.67$ | $(\$ 8,968.44)$ | $\$ 206,274.22$ |
| 3 FY-11 | $\$ 206,274.22$ | $(\$ 8,968.44)$ | $\$ 197,305.78$ |
| 4 FY-12 | $\$ 197,305.78$ | $(\$ 8,968.44)$ | $\$ 188,337.33$ |
| 5 FY-13 | $\$ 188,337.33$ | $(\$ 8,968.44)$ | $\$ 179,368.89$ |
| 6 FY-14 | $\$ 179,368.89$ | $(\$ 8,968.44)$ | $\$ 170,400.44$ |
| 7 FY-15 | $\$ 170,400.44$ | $(\$ 8,968.44)$ | $\$ 161,432.00$ |
| 8 FY-16 | $\$ 161,432.00$ | $(\$ 8,968.44)$ | $\$ 152,463.55$ |
| 9 FY-17 | $\$ 152,463.55$ | $(\$ 8,968.44)$ | $\$ 143,495.11$ |
| 10 FY-18 | $\$ 143,495.11$ | $(\$ 8,968.44)$ | $\$ 134,526.67$ |
| 11 FY-19 | $\$ 134,526.67$ | $(\$ 8,968.44)$ | $\$ 125,558.22$ |
| 12 FY-20 | $\$ 125,558.22$ | $(\$ 8,968.44)$ | $\$ 116,589.78$ |
| 13 FY-21 | $\$ 116,589.78$ | $(\$ 8,968.44)$ | $\$ 107,621.33$ |
| 14 FY-22 | $\$ 107,621.33$ | $(\$ 8,968.44)$ | $\$ 98,652.89$ |
| 15 FY-23 | $\$ 98,652.89$ | $(\$ 8,968.44)$ | $\$ 89,684.44$ |
| 16 FY-24 | $\$ 89,684.44$ | $(\$ 8,968.44)$ | $\$ 80,716.00$ |
| 17 FY-25 | $\$ 80,716.00$ | $(\$ 8,968.44)$ | $\$ 71,747.56$ |
| 18 FY-26 | $\$ 71,747.56$ | $(\$ 8,968.44)$ | $\$ 62,779.11$ |
| 19 FY-27 | $\$ 62,779.11$ | $(\$ 8,968.44)$ | $\$ 53,810.67$ |
| 20 FY-28 | $\$ 53,810.67$ | $(\$ 8,968.44)$ | $\$ 44,842.22$ |
| 21 FY-29 | $\$ 44,842.22$ | $(\$ 8,968.44)$ | $\$ 35,873.78$ |
| 22 FY-30 | $\$ 35,873.78$ | $(\$ 8,968.44)$ | $\$ 26,905.33$ |
| 23 FY-31 | $\$ 26,905.33$ | $(\$ 8,968.44)$ | $\$ 17,936.89$ |
| 24 |  |  |  |
| 24 FY-32 | $\$ 17,936.89$ | $(\$ 8,968.44)$ | $\$ 8,968.44$ |
| 25 FY-33 | $\$ 8,968.44$ | $(\$ 8,968.44)$ | $(\$ 0.00)$ |


| $\$ 25 \mathrm{M}$ | $\$ 8,968.44$ |
| ---: | ---: |
| $\$ 5 \mathrm{M}$ | $\$ 4,080.62$ |
| $\$ 1.964 \mathrm{M}$ | $\$ 2,223.24$ |
|  | $\$ 15,272.31$ |

## Long Term Debt Schedule MS/HS Project \$5,000,000 Bonds

| Date Due | Principal | Coupon | Interest | Total | Fiscal Year Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8/15/2010 |  |  | \$111,667 | \$111,667 |  |
| 2/15/2011 | \$250,000 | 2.00\% | \$83,750 | \$333,750 | \$445,417 |
| 8/15/2011 |  |  | \$81,250 | \$81,250 |  |
| 2/15/2012 | \$250,000 | 2.00\% | \$81,250 | \$331,250 | \$412,500 |
| 8/15/2012 |  |  | \$78,750 | \$78,750 |  |
| 2/15/2013 | \$250,000 | 2.00\% | \$78,750 | \$328,750 | \$407,500 |
| 8/15/2013 |  |  | \$76,250 | \$76,250 |  |
| 2/15/2014 | \$250,000 | 2.00\% | \$76,250 | \$326,250 | \$402,500 |
| 8/15/2014 |  |  | \$73,750 | \$73,750 |  |
| 2/15/2015 | \$250,000 | 2.00\% | \$73,750 | \$323,750 | \$397,500 |
| 8/15/2015 |  |  | \$71,250 | \$71,250 |  |
| 2/15/2016 | \$250,000 | 3.00\% | \$71,250 | \$321,250 | \$392,500 |
| 8/15/2016 |  |  | \$67,500 | \$67,500 |  |
| 2/15/2017 | \$250,000 | 3.00\% | \$67,500 | \$317,500 | \$385,000 |
| 8/15/2017 |  |  | \$63,750 | \$63,750 |  |
| 2/15/2018 | \$250,000 | 3.00\% | \$63,750 | \$313,750 | \$377,500 |
| 8/15/2018 |  |  | \$60,000 | \$60,000 |  |
| 2/15/2019 | \$250,000 | 4.00\% | \$60,000 | \$310,000 | \$370,000 |
| 8/15/2019 |  |  | \$55,000 | \$55,000 |  |
| 2/15/2020* | \$250,000 | 4.00\% | \$55,000 | \$305,000 | \$360,000 |
| Total | \$2,500,000 |  | \$1,450,417 | \$3,950,417 | \$3,950,417 |

*Remaining $\$ 2.5 \mathrm{MM}$ of bonds due after 2/15/20 were refunded via the $\$ 2.155 M M$ issuance

Manchester Essex Regional School District, Massachusetts
General Obligation Refunding Bonds of July 2020
(Refunding General Obligation Bonds of December 2009)
Original Issue \$5,000,000
Refunding Amount $\$ 2,155,000$
Dated Date: $30-J u l-20$

| Date | Fiscal Year | General Obligation Refunding Bonds of 2020 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Principal <br> Payment | Coupon | Interest <br> Payment | Principal <br> \& Interest | Fiscal Year <br> Debt Service |
| 8/15/20 |  | - |  | - | - |  |
| 2/15/21 | FY 2021 | 260,000.00 | 5.00\% | 58,364.58 | 318,364.58 | 318,364.58 |
| 8/15/21 |  | - |  | 47,375.00 | 47,375.00 |  |
| 2/15/22 | FY 2022 | 210,000.00 | 5.00\% | 47,375.00 | 257,375.00 | 304,750.00 |
| 8/15/22 |  | - |  | 42,125.00 | 42,125.00 |  |
| 2/15/23 | FY 2023 | 210,000.00 | 5.00\% | 42,125.00 | 252,125.00 | 294,250.00 |
| 8/15/23 |  | - |  | 36,875.00 | 36,875.00 |  |
| 2/15/24 | FY 2024 | 210,000.00 | 5.00\% | 36,875.00 | 246,875.00 | 283,750.00 |
| 8/15/24 |  | - |  | 31,625.00 | 31,625.00 |  |
| 2/15/25 | FY 2025 | 210,000.00 | 5.00\% | 31,625.00 | 241,625.00 | 273,250.00 |
| 8/15/25 |  | - |  | 26,375.00 | 26,375.00 |  |
| 2/15/26 | FY 2026 | 210,000.00 | 5.00\% | 26,375.00 | 236,375.00 | 262,750.00 |
| 8/15/26 |  | - |  | 21,125.00 | 21,125.00 |  |
| 2/15/27 | FY 2027 | 210,000.00 | 5.00\% | 21,125.00 | 231,125.00 | 252,250.00 |
| 8/15/27 |  | - |  | 15,875.00 | 15,875.00 |  |
| 2/15/28 | FY 2028 | 210,000.00 | 5.00\% | 15,875.00 | 225,875.00 | 241,750.00 |
| 8/15/28 |  | - |  | 10,625.00 | 10,625.00 |  |
| 2/15/29 | FY 2029 | 210,000.00 | 5.00\% | 10,625.00 | 220,625.00 | 231,250.00 |
| 8/15/29 |  | - |  | 5,375.00 | 5,375.00 |  |
| 2/15/30 | FY 2030 | 215,000.00 | 5.00\% | 5,375.00 | 220,375.00 | 225,750.00 |
| TOTAL |  | 2,155,000.00 |  | 533,114.58 | 2,688,114.58 |  |

## \$2,155,000 Long Term Debt Principal - Construction New MS/HS

| Amount Due 2/15/23 | $\$ 210,000.00$ |  |
| :--- | ---: | ---: |
|  |  |  |
| FY 2018 Manchester EQV: |  |  |
| FY 2018 Essex EQV: | $\$ 2,526,294,800.00$ | $74.44206 \%$ |
| Total: | $\$ 867,344,300.00$ | $25.55794 \%$ |
| US 2010 Manchester Pop: | $593,639,100.00$ | $100.00000 \%$ |
| US 2010 Essex Pop: | 5136 | $59.44444 \%$ |
| Total: | 3504 | $40.55556 \%$ |
| Manchester EQV Proportion: | 8640 | $100.00000 \%$ |
| Essex EQV Proportion: | $\$ 78,164.16$ | $(\$ 210,000 \times .5 \times .7444)$ |
|  | $\$ 26,835.84$ | $(\$ 210,000 \times .5 \times .2555)$ |
| Manchester Pop. Proportion: | $\$ 62,416.67$ | $(\$ 210,000 \times .5 \times .5944)$ |
| Essex Pop. Proportion: | $\$ 42,583.33$ | $(\$ 210,000 \times .5 \times .4056)$ |
|  |  |  |
| Manchester Total: | $\$ 140,580.83$ | $66.943 \%$ |
| Essex Total: | $\$ 69,419.17$ | $33.057 \%$ |
| Total Due | $\$ 210,000.00$ | $100.000 \%$ |

## \$2,155,000 Long Term Debt Interest - Construction New MS/HS


*Unamortized premium from \$5MM advance refunded bond applied to interest payments on \$2.155MM replacement bond

## Amortization of Reserve for Reduction of Future Excluded Debt

| Premium Received on $\$ 5,000,000$ Bond Issue: Issuance costs: | $\begin{gathered} \$ 129,605.00 \\ (\$ 47,992.62) \end{gathered}$ |  |
| :---: | :---: | :---: |
| Net Proceeds: | \$81,612.38 |  |
| Term: | 20 years |  |
| Annual Amortization: | \$4,080.62 | Applied to \$2.155 million refunding bond |
| Net Due: | \$4,080.62 |  |
| FY 2008 Manchester EQV: | \$2,346,551,100 | 0.7269906 |
| FY 2008 Essex EQV: | \$881,208,600 | 0.2730094 |
| Total: | \$3,227,759,700 |  |
| US 2000 Manchester Pop: | 5228 | 61.54\% |
| US 2000 Essex Pop: | 3267 | 38.46\% |
| Total: | 8495 |  |
| Manchester EQV Proportion: | \$1,483.29 | (\$4,080.62 $\times .5 \times .7270$ ) |
| Essex EQV Proportion: | \$557.02 | (\$4,080.62 $\times .5 \times .2730$ ) |
| Manchester Pop. Proportion: | \$1,255.65 | (\$4,080.62 $\times .5 \times .6154$ ) |
| Essex Pop. Proportion: | \$784.66 | (\$4,080.62 $\times .5 \times .3846$ ) |
| Manchester Total: | \$2,738.93 | 67.12\% |
| Essex Total: | \$1,341.68 | 32.88\% |
|  | \$4,080.62 | 100.00\% |


| $\quad$ FY | Beg. Balance | Amortization | Ending Balance |
| :--- | ---: | ---: | ---: |
| 1 FY-11 | $\$ 81,612.38$ | $(\$ 4,080.62)$ | $\$ 77,531.76$ |
| 2 FY-12 | $\$ 77,531.76$ | $(\$ 4,080.62)$ | $\$ 73,451.14$ |
| 3 FY-13 | $\$ 73,451.14$ | $(\$ 4,080.62)$ | $\$ 69,370.52$ |
| 4 FY-14 | $\$ 69,370.52$ | $(\$ 4,080.62)$ | $\$ 65,289.90$ |
| 5 FY-15 | $\$ 65,289.90$ | $(\$ 4,080.62)$ | $\$ 61,209.29$ |
| 6 FY-16 | $\$ 61,209.29$ | $(\$ 4,080.62)$ | $\$ 57,128.67$ |
| 7 FY-17 | $\$ 57,128.67$ | $(\$ 4,080.62)$ | $\$ 53,048.05$ |
| 8 FY-18 | $\$ 53,048.05$ | $(\$ 4,080.62)$ | $\$ 48,967.43$ |
| 9 FY-19 | $\$ 48,967.43$ | $(\$ 4,080.62)$ | $\$ 44,886.81$ |
| 10 FY-20 | $\$ 44,886.81$ | $(\$ 4,080.62)$ | $\$ 40,806.19$ |
| 11 FY-21 | $\$ 40,806.19$ | $(\$ 4,080.62)$ | $\$ 36,725.57$ |
| 12 FY-22 | $\$ 36,725.57$ | $(\$ 4,080.62)$ | $\$ 32,644.95$ |
| 13 FY-23 | $\$ 32,644.95$ | $(\$ 4,080.62)$ | $\$ 28,564.33$ |
| 14 FY-24 | $\$ 28,564.33$ | $(\$ 4,080.62)$ | $\$ 24,483.71$ |
| 15 FY-25 | $\$ 24,483.71$ | $(\$ 4,080.62)$ | $\$ 20,403.10$ |
| 16 FY-26 | $\$ 20,403.10$ | $(\$ 4,080.62)$ | $\$ 16,322.48$ |
| 17 FY-27 | $\$ 16,322.48$ | $(\$ 4,080.62)$ | $\$ 12,241.86$ |
| 18 FY-28 | $\$ 12,241.86$ | $(\$ 4,080.62)$ | $\$ 8,161.24$ |
| 19 FY-29 | $\$ 8,161.24$ | $(\$ 4,080.62)$ | $\$ 4,080.62$ |
| 20 FY-30 | $\$ 4,080.62$ | $(\$ 4,080.62)$ | $\$ 0.00$ |
|  |  |  |  |
|  |  |  |  |

## Long Term Debt Schedule - MS/HS Project \$1,964,000 Bonds

10 year obligation, due 2022

| Date Due | Principal Coupon | Interest <br> $\$ 0$ | Total <br> $\$ 0$ | Fiscal Year Total |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $8 / 2 / 2012$ |  |  | $\$ 21,058$ | $\$ 21,058$ |  |
| $2 / 15 / 2013$ |  |  | $\$ 21,058$ |  |  |
| $8 / 15 / 2013$ | $\$ 204,000$ | $2.00 \%$ | $\$ 19,640$ | $\$ 223,640$ | $\$ 21,050$ |
| $2 / 15 / 2014$ |  |  | $\$ 17,600$ | $\$ 17,600$ | $\$ 241,240$ |
| $8 / 15 / 2014$ | $\$ 200,000$ | $2.00 \%$ | $\$ 17,600$ | $\$ 217,600$ |  |
| $2 / 15 / 2015$ |  |  | $\$ 15,600$ | $\$ 15,600$ | $\$ 233,200$ |
| $8 / 15 / 2015$ | $\$ 195,000$ | $2.00 \%$ | $\$ 15,600$ | $\$ 210,600$ |  |
| $2 / 15 / 2016$ |  |  | $\$ 13,650$ | $\$ 13,650$ | $\$ 224,250$ |
| $8 / 15 / 2016$ | $\$ 195,000$ | $2.00 \%$ | $\$ 13,650$ | $\$ 208,650$ |  |
| $2 / 15 / 2017$ |  |  | $\$ 11,700$ | $\$ 11,700$ | $\$ 220,350$ |
| $8 / 15 / 2017$ | $\$ 195,000$ | $2.00 \%$ | $\$ 11,700$ | $\$ 206,700$ |  |
| $2 / 15 / 2018$ |  |  | $\$ 9,750$ | $\$ 9,750$ | $\$ 216,450$ |
| $8 / 15 / 2018$ | $\$ 195,000$ | $2.00 \%$ | $\$ 9,750$ | $\$ 204,750$ |  |
| $2 / 15 / 2019$ |  |  | $\$ 7,800$ | $\$ 7,800$ | $\$ 212,550$ |
| $8 / 15 / 2019$ | $\$ 195,000$ | $2.00 \%$ | $\$ 7,800$ | $\$ 202,800$ |  |
| $2 / 15 / 2020$ |  |  | $\$ 5,850$ | $\$ 5,850$ | $\$ 208,650$ |
| $8 / 15 / 2020$ | $\$ 195,000$ | $2.00 \%$ | $\$ 5,850$ | $\$ 200,850$ |  |
| $2 / 15 / 2021$ |  |  | $\$ 3,900$ | $\$ 3,900$ | $\$ 204,750$ |
| $8 / 15 / 2021$ | $\$ 195,000$ | $2.00 \%$ | $\$ 3,900$ | $\$ 198,900$ |  |
| $2 / 15 / 2022$ |  |  | $\$ 1,950$ | $\$ 1,950$ | $\$ 200,850$ |
| $8 / 15 / 2022$ | $\$ 195,000$ | $2.00 \%$ | $\$ 1,950$ | $\$ 196,950$ | $\$ 196,950$ |

## \$1,964,000 Long Term Debt Principal - Construction New MS/HS

| Amount Due 8/15/22 | $\$ 195,000.00$ |  |
| :--- | ---: | ---: |
|  |  | $\%$ |
| FY 2010 Manchester EQV: | $\$ 2,434,992,400.00$ | $73.82733 \%$ |
| FY 2010 Essex EQV: | $\$ 863,233,800.00$ | $26.17267 \%$ |
| Total: | $\$ 3,298,226,200.00$ | $100.00000 \%$ |
|  |  |  |
| US 2010 Manchester Pop: | 5136 | $59.44444 \%$ |
| US 2010 Essex Pop: | 3504 | $40.55556 \%$ |
| Total: | 8640 | $100.00000 \%$ |
|  |  |  |
| Manchester EQV Proportion: | $\$ 71,981.65$ | $(\$ 195,000 \times .5 \times .7383)$ |
| Essex EQV Proportion: | $\$ 25,518.35$ | $(\$ 195,000 \times .5 \times .2617)$ |
|  |  |  |
| Manchester Pop. Proportion: | $\$ 57,958.33$ | $(\$ 195,000 \times .5 \times .5944)$ |
| Essex Pop. Proportion: | $\$ 39,541.67$ | $(\$ 195,000 \times .5 \times .4056)$ |
|  |  |  |
| Manchester Total: | $\$ 129,939.98$ | $66.64 \%$ |
| Essex Total: | $\$ 65,060.02$ | $33.36 \%$ |

## \$1,964,000 Long Term Debt Interest - Construction New MS/HS

| Amount Due $8 / 15 / 22$ | $\$ 1,950.00$ | $100.0 \%$ |
| :--- | ---: | ---: |
| Amount Due $2 / 15 / 23$ | $\$ 0.00$ | $0.0 \%$ |
| Total Due: | $\$ 1,950.00$ | $100.0 \%$ |
|  |  |  |
|  |  | $\%$ of Total |
| FY 2010 Manchester EQV: | $\$ 2,434,992,400.00$ | $73.82733 \%$ |
| FY 2010 Essex EQV: | $\$ 863,233,800.00$ | $26.17267 \%$ |
| Total: | $\$ 3,298,226,200.00$ | $100.00000 \%$ |
|  |  |  |
| US 2010 Manchester Pop: | 5136 | $59.44444 \%$ |
| US 2010 Essex Pop: | 3504 | $40.55556 \%$ |
| Total: | 8640 | $100.00000 \%$ |
|  |  |  |
| Manchester EQV Proportion: | $\$ 719.82$ | $(\$ 1,950 \times .5 \times .7383)$ |
| Essex EQV Proportion: | $\$ 255.18$ | $(\$ 1,950 \times .5 \times .2617)$ |
|  |  |  |
| Manchester Pop. Proportion: | $\$ 579.58$ | $(\$ 1,950 \times .5 \times .5944)$ |
| Essex Pop. Proportion: | $\$ 395.42$ | $(\$ 1,950 \times .5 \times .4056)$ |
|  |  |  |
|  |  | Less Reserve for Reduction of Excluded Debt |
| Manchester Total: | $\$ 1,299.40$ | $(\$ 1,481.48)$ |
| Essex Total: | $\$ 650.60$ | $(\$ 741.77)$ |


| Due 8/15/22 | Due 2/15/23 | Total |  |
| :---: | :---: | :---: | :--- |
| $\mathbf{( \$ 1 8 2 . 0 8 )}$ | $\$ 0.00$ | $\mathbf{( \$ 1 8 2 . 0 8 )}$ | $66.64 \%$ |
| $(\$ 91.17)$ | $\$ 0.00$ | $\mathbf{( \$ 9 1 . 1 7 )}$ | $33.36 \%$ |
| $(\$ 273.24)$ | $\$ 0.00$ | $\mathbf{( \$ 2 7 3 . 2 4 )}$ | $100.00 \%$ |

## Amortization of Reserve for Reduction of Future Excluded Debt

| Premium Received on \$1,964,000 Bond Issue: | \$62,490.23 |  | FY | Beg. Balance | Amortization | Ending Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issuance costs: | (\$38,034.54) |  | 1 FY -13 | \$24,455.69 | (\$2,223.24) | \$22,232.45 |
| Net Proceeds: | \$24,455.69 |  | 2 FY-14 | \$22,232.45 | (\$2,223.24) | \$20,009.20 |
| Term: | 11 years | 11 years of interest; 10 of principal | 3 FY-15 | \$20,009.20 | (\$2,223.24) | \$17,785.96 |
| Annual Amortization: | \$2,223.24 |  | 4 FY-16 | \$17,785.96 | (\$2,223.24) | \$15,562.71 |
|  |  |  | 5 FY-17 | \$15,562.71 | (\$2,223.24) | \$13,339.47 |
|  |  |  | 6 FY-18 | \$13,339.47 | (\$2,223.24) | \$11,116.22 |
| Net Due: | \$2,223.24 |  | 7 FY-19 | \$11,116.22 | (\$2,223.24) | \$8,892.98 |
|  |  |  | 8 FY-20 | \$8,892.98 | (\$2,223.24) | \$6,669.73 |
| FY 2010 Manchester EQV: | \$2,434,992,400.00 | 0.7382733 | $9 \mathrm{FY}-21$ | \$6,669.73 | (\$2,223.24) | \$4,446.49 |
| FY 2010 Essex EQV: | \$863,233,800.00 | 0.2617267 | $10 \mathrm{FY}-22$ | \$4,446.49 | (\$2,223.24) | \$2,223.24 |
| Total: | \$3,298,226,200.00 |  | 11 FY-23 | \$2,223.24 | (\$2,223.24) | \$0.00 |
| US 2010 Manchester Pop: | 5136 | 59.44\% |  |  |  |  |
| US 2010 Essex Pop: | 3504 | 40.56\% |  |  |  |  |
| Total: | 8640 |  |  |  |  |  |
| Manchester EQV Proportion: | \$820.68 | (\$2,223.24 x . $5 \times .7270$ ) |  |  |  |  |
| Essex EQV Proportion: | \$290.94 | (\$2,223.24 x . $\times$. 2730 ) |  |  |  |  |
| Manchester Pop. Proportion: | \$660.80 | (\$2,223.24 $\times .5 \times .6154)$ |  |  |  |  |
| Essex Pop. Proportion: | \$450.82 | (\$2,223.24 x . $5 \times .3846$ ) |  |  |  |  |
| Manchester Total: | \$1,481.48 | 66.64\% |  |  |  |  |
| Essex Total: | \$741.77 | 33.36\% |  |  |  |  |
|  | \$2,223.24 | 100.00\% |  |  |  |  |

## \$32.29 Million Long-Term Debt - Memorial School Construction

30 Year Bonds, 3.289\% TIC, with Final Maturity 2049

| Date Due | Principal | Coupon | Interest | Total | Fiscal Year Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 08/01/2019 |  |  | \$649,213 | \$649,213 |  |
| 02/01/2020 | \$1,080,000 | 5.000\% | \$699,750 | \$1,779,750 | \$2,428,963 |
| 08/01/2020 |  |  | \$672,750 | \$672,750 |  |
| 02/01/2021 | \$1,080,000 | 5.000\% | \$672,750 | \$1,752,750 | \$2,425,500 |
| 08/01/2021 |  |  | \$645,750 | \$645,750 |  |
| 02/01/2022 | \$1,080,000 | 5.000\% | \$645,750 | \$1,725,750 | \$2,371,500 |
| 08/01/2022 |  |  | \$618,750 | \$618,750 |  |
| 02/01/2023 | \$1,080,000 | 5.000\% | \$618,750 | \$1,698,750 | \$2,317,500 |
| 08/01/2023 |  |  | \$591,750 | \$591,750 |  |
| 02/01/2024 | \$1,080,000 | 5.000\% | \$591,750 | \$1,671,750 | \$2,263,500 |
| 08/01/2024 |  |  | \$564,750 | \$564,750 |  |
| 02/01/2025 | \$1,080,000 | 5.000\% | \$564,750 | \$1,644,750 | \$2,209,500 |
| 08/01/2025 |  |  | \$537,750 | \$537,750 |  |
| 02/01/2026 | \$1,080,000 | 5.000\% | \$537,750 | \$1,617,750 | \$2,155,500 |
| 08/01/2026 |  |  | \$510,750 | \$510,750 |  |
| 02/01/2027 | \$1,080,000 | 5.000\% | \$510,750 | \$1,590,750 | \$2,101,500 |
| 08/01/2027 |  |  | \$483,750 | \$483,750 |  |
| 02/01/2028 | \$1,075,000 | 5.000\% | \$483,750 | \$1,558,750 | \$2,042,500 |
| 08/01/2028 |  |  | \$456,875 | \$456,875 |  |
| 02/01/2029 | \$1,075,000 | 5.000\% | \$456,875 | \$1,531,875 | \$1,988,750 |
| 08/01/2029 |  |  | \$430,000 | \$430,000 |  |
| 02/01/2030 | \$1,075,000 | 5.000\% | \$430,000 | \$1,505,000 | \$1,935,000 |
| 08/01/2030 |  |  | \$403,125 | \$403,125 |  |
| 02/01/2031 | \$1,075,000 | 5.000\% | \$403,125 | \$1,478,125 | \$1,881,250 |
| 08/01/2031 |  |  | \$376,250 | \$376,250 |  |
| 02/01/2032 | \$1,075,000 | 5.000\% | \$376,250 | \$1,451,250 | \$1,827,500 |
| 08/01/2032 |  |  | \$349,375 | \$349,375 |  |
| 02/01/2033 | \$1,075,000 | 4.000\% | \$349,375 | \$1,424,375 | \$1,773,750 |
| 08/01/2033 |  |  | \$327,875 | \$327,875 |  |
| 02/01/2034 | \$1,075,000 | 4.000\% | \$327,875 | \$1,402,875 | \$1,730,750 |
| 08/01/2034 |  |  | \$306,375 | \$306,375 |  |
| 02/01/2035 | \$1,075,000 | 4.000\% | \$306,375 | \$1,381,375 | \$1,687,750 |
| 08/01/2035 |  |  | \$284,875 | \$284,875 |  |
| 02/01/2036 | \$1,075,000 | 4.000\% | \$284,875 | \$1,359,875 | \$1,644,750 |
| 08/01/2036 |  |  | \$263,375 | \$263,375 |  |
| 02/01/2037 | \$1,075,000 | 4.000\% | \$263,375 | \$1,338,375 | \$1,601,750 |
| 08/01/2037 |  |  | \$241,875 | \$241,875 |  |
| 02/01/2038 | \$1,075,000 | 4.000\% | \$241,875 | \$1,316,875 | \$1,558,750 |
| 08/01/2038 |  |  | \$220,375 | \$220,375 |  |
| 02/01/2039 | \$1,075,000 | 4.000\% | \$220,375 | \$1,295,375 | \$1,515,750 |
| 08/01/2039 |  |  | \$198,875 | \$198,875 |  |
| 02/01/2040 | \$1,075,000 | 4.000\% | \$198,875 | \$1,273,875 | \$1,472,750 |
| 08/01/2040 |  |  | \$177,375 | \$177,375 |  |
| 02/01/2041 | \$1,075,000 | 4.000\% | \$177,375 | \$1,252,375 | \$1,429,750 |
| 08/01/2041 |  |  | \$155,875 | \$155,875 |  |
| 02/01/2042 | \$1,075,000 | 4.000\% | \$155,875 | \$1,230,875 | \$1,386,750 |
| 08/01/2042 |  |  | \$134,375 | \$134,375 |  |
| 02/01/2043 | \$1,075,000 | 3.500\% | \$134,375 | \$1,209,375 | \$1,343,750 |
| 08/01/2043 |  |  | \$115,563 | \$115,563 |  |
| 02/01/2044 | \$1,075,000 | 3.500\% | \$115,563 | \$1,190,563 | \$1,306,125 |
| 08/01/2044 |  |  | \$96,750 | \$96,750 |  |
| 02/01/2045 | \$1,075,000 | 3.500\% | \$96,750 | \$1,171,750 | \$1,268,500 |
| 08/01/2045 |  |  | \$77,938 | \$77,938 |  |
| 02/01/2046 | \$1,075,000 | 3.625\% | \$77,938 | \$1,152,938 | \$1,230,875 |
| 08/01/2046 |  |  | \$58,453 | \$58,453 |  |
| 02/01/2047 | \$1,075,000 | 3.625\% | \$58,453 | \$1,133,453 | \$1,191,906 |
| 08/01/2047 |  |  | \$38,969 | \$38,969 |  |
| 02/01/2048 | \$1,075,000 | 3.625\% | \$38,969 | \$1,113,969 | \$1,152,938 |
| 08/01/2048 |  |  | \$19,484 | \$19,484 |  |
| 02/01/2049 | \$1,075,000 | 3.625\% | \$19,484 | \$1,094,484 | \$1,113,969 |
| Total | \$32,290,000 |  | \$20,069,025 | \$52,359,025 |  |

## \$32,290,000 Long Term Debt Principal - Construction New Memorial Scho

| Amount Due 2/1/23 | $\$ 1,080,000.00$ |  |
| :--- | ---: | ---: |
|  |  | $\%$ |
|  |  | \% of Total |
| FY 2018 Manchester EQV: | $\$ 2,526,294,800.00$ | $74.44206 \%$ |
| FY 2018 Essex EQV: | $\$ 867,344,300.00$ | $25.55794 \%$ |
| Total: | $\$ 3,393,639,100.00$ | $100.00000 \%$ |
|  |  |  |
| US 2010 Manchester Pop: | 5136 | $59.44444 \%$ |
| US 2010 Essex Pop: | 3504 | $40.55556 \%$ |
| Total: | 8640 | $100.00000 \%$ |
|  |  |  |
| Manchester EQV Proportion: | $\$ 401,987.12$ | $(\$ 1,080,000 \times .5 \times .7444)$ |
| Essex EQV Proportion: | $\$ 138,012.88$ | $(\$ 1,080,000 \times .5 \times .2555)$ |
|  |  |  |
| Manchester Pop. Proportion: | $\$ 321,000.00$ | $(\$ 1,080,000 \times .5 \times .5944)$ |
| Essex Pop. Proportion: | $\$ 219,000.00$ | $(\$ 1,080,000 \times .5 \times .4056)$ |
|  |  |  |
| Manchester Total: | $\$ 722,987.12$ | $66.943 \%$ |
| Essex Total: | $\$ 357,012.88$ | $33.057 \%$ |

## \$32,290,000 Long Term Debt Interest - Construction New Memorial School

| Amount Due 8/1/22 | \$618,750.00 |  |  |
| :---: | :---: | :---: | :---: |
| Amount Due 2/1/23 | \$618,750.00 |  |  |
| Total Due: | \$1,237,500.00 |  |  |
|  | \% of Total |  |  |
| FY 2018 Manchester EQV: | \$2,526,294,800.00 | 74.44206\% |  |
| FY 2018 Essex EQV: | \$867,344,300.00 | 25.55794\% |  |
| Total: | \$3,393,639,100.00 | 100.00000\% |  |
| US 2010 Manchester Pop: | 5136 | 59.44444\% |  |
| US 2010 Essex Pop: | 3504 | 40.55556\% |  |
| Total: | 8640 | 100.00000\% |  |
| Manchester EQV Proportion: | \$460,610.24 (\$1,237,500.00 $\times .5 \times .7444$ ) |  |  |
| Essex EQV Proportion: | \$158,139.76 (\$1,237,500.00 $\times .5 \times .2555$ ) |  |  |
| Manchester Pop. Proportion: | \$367,812.50 (\$1,237,500.00 $\times .5 \times .5944$ ) |  |  |
| Essex Pop. Proportion: | \$250,937.50 (\$1,237,500.00 $\times .5 \times .4056$ ) |  |  |
| Less Reserve for Reduction of Excluded Debt |  |  |  |
| Manchester Total: | \$828,422.74 | \$0.00 \$828,422.74 | 66.94\% |
| Essex Total: | \$409,077.26 | \$0.00 \$409,077.26 | 33.06\% |
|  | \$1,237,500.00 | \$0.00 \$1,237,500.00 | 100.00\% |


| Due 8/1/22 | Due 2/1/23 | Total |  |
| :---: | :---: | :---: | :--- |
| $\$ 414,211.37$ | $\$ 414,211.37$ | $\$ 828,422.74$ | $66.94 \%$ |
| $\$ 204,538.63$ | $\$ 204,538.63$ | $\$ 409,077.26$ | $33.06 \%$ |
| $\$ 618,750.00$ | $\$ 618,750.00$ | $\$ 1,237,500.00$ | $100.00 \%$ |

## Manchester Essex RSD, Massachusetts

\$3,230,000 General Obligation School Bonds
Manchester Memorial Elementary School Construction, Dated August 24, 2021
Debt Service Schedule

| Date | Principal | Coupon | Interest | Total P+I | Fiscal Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 08/24/2021 | - | - | - | - | - |
| 08/01/2022 | 165,000 | 5.000\% | 101,755 | 266,755 | - |
| 02/01/2023 | - | - | 50,225 | 50,225 | 316,980 |
| 08/01/2023 | 165,000 | 5.000\% | 50,225 | 215,225 | - |
| 02/01/2024 | - | - | 46,100 | 46,100 | 261,325 |
| 08/01/2024 | 165,000 | 5.000\% | 46,100 | 211,100 | - |
| 02/01/2025 | - | - | 41,975 | 41,975 | 253,075 |
| 08/01/2025 | 165,000 | 5.000\% | 41,975 | 206,975 | - |
| 02/01/2026 | - | - | 37,850 | 37,850 | 244,825 |
| 08/01/2026 | 165,000 | 5.000\% | 37,850 | 202,850 | - |
| 02/01/2027 | - | - | 33,725 | 33,725 | 236,575 |
| 08/01/2027 | 165,000 | 5.000\% | 33,725 | 198,725 | - |
| 02/01/2028 | - | - | 29,600 | 29,600 | 228,325 |
| 08/01/2028 | 160,000 | 2.000\% | 29,600 | 189,600 | - |
| 02/01/2029 | - | - | 28,000 | 28,000 | 217,600 |
| 08/01/2029 | 160,000 | 5.000\% | 28,000 | 188,000 | - |
| 02/01/2030 | - | - | 24,000 | 24,000 | 212,000 |
| 08/01/2030 | 160,000 | 5.000\% | 24,000 | 184,000 | - |
| 02/01/2031 | - | - | 20,000 | 20,000 | 204,000 |
| 08/01/2031 | 160,000 | 5.000\% | 20,000 | 180,000 | - |
| 02/01/2032 | - | - | 16,000 | 16,000 | 196,000 |
| 08/01/2032 | 160,000 | 2.000\% | 16,000 | 176,000 | - |
| 02/01/2033 | - | - | 14,400 | 14,400 | 190,400 |
| 08/01/2033 | 160,000 | 2.000\% | 14,400 | 174,400 | - |
| 02/01/2034 | - | - | 12,800 | 12,800 | 187,200 |
| 08/01/2034 | 160,000 | 2.000\% | 12,800 | 172,800 | - |
| 02/01/2035 | - | - | 11,200 | 11,200 | 184,000 |
| 08/01/2035 | 160,000 | 2.000\% | 11,200 | 171,200 | - |
| 02/01/2036 | - | - | 9,600 | 9,600 | 180,800 |
| 08/01/2036 | 160,000 | 2.000\% | 9,600 | 169,600 | - |
| 02/01/2037 | - | - | 8,000 | 8,000 | 177,600 |
| 08/01/2037 | 160,000 | 2.000\% | 8,000 | 168,000 | - |
| 02/01/2038 | - | - | 6,400 | 6,400 | 174,400 |
| 08/01/2038 | 160,000 | 2.000\% | 6,400 | 166,400 | - |
| 02/01/2039 | - | - | 4,800 | 4,800 | 171,200 |
| 08/01/2039 | 160,000 | 2.000\% | 4,800 | 164,800 | - |
| 02/01/2040 | - | - | 3,200 | 3,200 | 168,000 |
| 08/01/2040 | 160,000 | 2.000\% | 3,200 | 163,200 | - |
| 02/01/2041 | - | - | 1,600 | 1,600 | 164,800 |
| 08/01/2041 | 160,000 | 2.000\% | 1,600 | 161,600 | 161,600 |
| Total | 3,230,000 | - | 900,705 | 4,130,705 | - |

## Yield Statistics

| Bond Year Dollars. | \$33,498.64 |
| :---: | :---: |
| Average Life.. | 10.371 Years |
| Average Coupon.. | 2.6887817\% |
| Net Interest Cost (NIC). | 1.7053987\% |
| True Interest Cost (TIC). | 1.6253240\% |
| Bond Yield for Arbitrage Purposes. | 1.4443455\% |
| All Inclusive Cost (AIC). | 1.7999872\% |
| IRS Form 8038 |  |
| Net Interest Cost. | 1.4946275\% |
| Weighted Average Maturity. | 10.036 Years |

## Hilltop Securities

Public Finance

## \$3,230,000 Long Term Debt Principal - Construction New Memorial Schoc

| Amount Due 8/1/22 | $\$ 165,000.00$ |  |
| :--- | ---: | :---: |
|  |  | \% of Total |
|  |  |  |
| FY 2020 Manchester EQV: | $\$ 2,662,108,600.00$ | $73.80904 \%$ |
| FY 2020 Essex EQV: | $\$ 944,642,600.00$ | $26.19096 \%$ |
| Total: | $\$ 3,606,751,200.00$ | $100.00000 \%$ |
|  |  |  |
| US 2020 Manchester Pop: | 5,395 | $59.48181 \%$ |
| US 2020 Essex Pop: | 3,675 | $40.51819 \%$ |
| Total: | 9,070 | $100.00000 \%$ |
|  |  |  |
| Manchester EQV Proportion: | $\$ 60,892.46$ | $(\$ 165,000 \times .5 \times .73809)$ |
| Essex EQV Proportion: | $\$ 21,607.54$ | $(\$ 165,000 \times .5 \times .26191)$ |
|  |  |  |
| Manchester Pop. Proportion: | $\$ 49,072.49$ | $(\$ 165,000 \times .5 \times .59482)$ |
| Essex Pop. Proportion: | $\$ 33,427.51$ | $(\$ 165,000 \times .5 \times .40518)$ |
|  |  |  |
| Manchester Total: | $\$ 109,964.95$ | $66.645 \%$ |
| Essex Total: | $\$ 55,035.05$ | $33.355 \%$ |
| Total Due | $\$ 165,000.00$ | $100.00 \%$ |

## \$3,230,000 Long Term Debt Interest - Construction New Memorial School

| Amount Due 8/1/22 | $\$ 101,755.28$ |
| :--- | ---: |
| Amount Due 2/1/23 | $\$ 50,225.00$ |
| Total Due: | $\$ 151,980.28$ |


|  | \% of Total |  |  |
| :---: | :---: | :---: | :---: |
| FY 2020 Manchester EQV: | \$2,662,108,600.00 | 73.80904\% |  |
| FY 2020 Essex EQV: | \$944,642,600.00 | 26.19096\% |  |
| Total: | \$3,606,751,200.00 | 100.00000\% |  |
| US 2020 Manchester Pop: | 5,395 | 59.48181\% |  |
| US 2020 Essex Pop: | 3,675 | 40.51819\% |  |
| Total: | 9,070 | 100.00000\% |  |
| Manchester EQV Proportion: | \$56,087.60 (\$151,980.28 $\times .5 \times .73809$ ) |  |  |
| Essex EQV Proportion: | \$19,902.54 (\$151,980.28 $\times .5 \times .26191$ ) |  |  |
| Manchester Pop. Proportion: | \$45,200.31 (\$151,980.28 $\times .5 \times .59482)$ |  |  |
| Essex Pop. Proportion: | \$30,789.83 (\$151,980.28 $\times .5 \times .40518)$ |  |  |
| Less Reserve for Reduction of Excluded Debt |  |  |  |
| Manchester Total: | \$101,287.91 | \$0.00 | \$101,287.91 66.65\% |
| Essex Total: | \$50,692.37 | \$0.00 | \$50,692.37 33.35\% |
| Total Due | \$151,980.28 | \$0.00 | \$151,980.28 100.00\% |


| Due 8/1/22 | Due 2/1/23 | Total |  |
| :---: | :---: | :---: | :---: |
| $\$ 50,643.95$ | $\$ 50,643.95$ | $\mathbf{\$ 1 0 1 , 2 8 7 . 9 1}$ | $66.65 \%$ |
| $\$ 25,346.19$ | $\$ 25,346.19$ | $\$ 50,692.37$ | $33.35 \%$ |
| $\$ 75,990.14$ | $\$ 75,990.14$ | $\mathbf{\$ 1 5 1 , 9 8 0 . 2 8}$ | $100.00 \%$ |

## \$1,300,000 Short-Term Debt (BAN) - Memorial School Construction

| Principal Due 3/3/23 Interest Due, 3/3/23 | $\begin{array}{r} \$ 1,300,000.00 \\ \$ 25,927.78 \\ \hline \end{array}$ | to be paid by combination of new, final bond and return of any used funds to be paid by FY23 Capital Budget |
| :---: | :---: | :---: |
| Total Due: | \$1,325,927.78 |  |
| Amount Assessed to Towns | \$25,927.78 | interest only |
|  |  | \% of Total |
| FY 2020 Manchester EQV: | \$2,662,108,600.00 | 73.80904\% |
| FY 2020 Essex EQV: | \$944,642,600.00 | 26.19096\% |
| Total: | \$3,606,751,200.00 | 100.00000\% |
| US 2020 Manchester Pop: | 5,395 | 59.48181\% |
| US 2020 Essex Pop: | 3,675 | 40.51819\% |
| Total: | 9,070 | 100.00000\% |
| Manchester EQV Proportion: | \$9,568.52 | (\$25,927.78 $\times .5 \times .73809$ ) |
| Essex EQV Proportion: | \$3,395.37 | (\$25,927.78 x . $5 \times .26191$ ) |
| Manchester Pop. Proportion: | \$7,711.16 | (\$25,927.78 $\times .5 \times .59482)$ |
| Essex Pop. Proportion: | \$5,252.73 | (\$25,927.78 $\times .5 \times .40518)$ |
| Manchester Total: | \$17,279.68 | 66.65\% |
| Essex Total: | \$8,648.10 | 33.35\% |
| Total Due | \$25,927.78 | 100.00\% |

