CITY OF NEWARK
Delaware

September 14, 2015

TO: The Honorable Mayor and City Council

VIA: Carol S. Houck, City Manager

FROM : Louis C. Vitola, Finance Director

RE: Response to Financial Analysis Commentary from District 6 Resident

Councilman Stu Markham forwarded a critique of the financial analysis put forth in Appendices A and C to the refuse recommendation dated August 21, 2015 (the "Analysis") prepared by a resident of his district. Excerpts of the critique are reported below, followed by my responses.

> *As you may remember, I worked in financial analysis at DuPont the last 20 years of my career. I worked on many large project analyses similar to that which was presented by city staff for this decision - most of the decisions I analyzed were actually much larger and impactful than this one. This analysis would not meet standards followed by industry in certain aspects:*
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> *As for calculating the most cost effective contractor -*
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> *-There is an NPV presented for the 2 contractor analyses, but no mention made as the the discount rate assumption used. In industry we used the cost of capital as the discount rate, which was a hybrid of the borrowing rate and the owner's (stockholder) expected rate of return. The discount rate used to calculate an NPV is extremely important.... the higher the rate used the lower the absolute NPV will be. In this analysis it looks like they were calculating the NPV of expenditures, so it is possible to skew the result by using an improperly low discount rate to increase the difference between the high and low cost. In any event the assumption used is not stated (or I missed it). If I were doing the analysis I would use expected borrowing costs as the discount rate since the city doesn't have stockholders.*

Ordinarily, in a bid evaluation, net present value (NPV) analysis is not used. However, it was a useful tool in Appendix A to the refuse analysis because (1) the seven-year contract period solicited represented a significantly longer duration than a typical outright purchase or contract bid solicited by the City, and (2) the escalation of the bid prices of the two highest-ranked firms differed in such a way that one firm – Waste Management – featured the low bid for the first five years, while a second firm – Republic – featured the low bid in years six and seven. Therefore, it was appropriate to apply the bid pricing for each year to the published unit count in the bid to extend the pricing for each of the seven years, and then discount the resulting costs to judge the firms' responses on a NPV basis. A discount rate of 2.0% was used in the calculation as a proxy for the City's cost of capital. Generally, a discount rate ranging from 1.15% to 3.25% could be justified for the City of Newark, depending on how the underlying project is financed and the life of the project. Tax-exempt, general obligation debt of the City having a short term could cost the City as little as ±1%, while 30-year debt could cost closer to ±3%. For some recent examples, the City's smart meter project was financed with a tax-exempt capital lease obligation with a term of fifteen years at a rate of 2.15%. The City's LED lights

project, if approved by Council, would carry an interest rate of 1.99% for a term of 7-10 years. Last week, tax-exempt municipal bonds rated AA and AAA maturing in ten years were being issued at 2.25% and 2.05%, respectively, according to data compiled by FMS Bonds, Inc. Given the City's current credit rating of AA+, the expected cost of ten-year debt should fall within that range. Based on the City's profile and cost of capital, the 2.0% used in Appendix A is reasonable and justified. It should be noted that the RFP scoring for the price metric was based on the lowest NPV, and the other firms were scored based on the relative distance from the NPV of each to the lowest NPV. If a discount rate near zero were used, the ranking of the firms would remain the same as with the 2.0% discount rate. Likewise, if an absurdly high discount rate of, say, 10.0% were used, the ranking of the firms would remain the same as with the 2.0% discount rate. Further, the magnitude of the difference in NPV between the top two firms is negligible even when comparing the near zero discount rate to the 10.0% discount rate, so we can be certain that the selection of the discount rate had no bearing on the selection of the recommended firm.

As for calculation of annual savings -

-Analyses like these should be based on expected annual cash flows, emphasis on the word cash and the word annual. The use of depreciation in calculating net savings, contrary to the statement that it is customary to do so, is completely incorrect. This is because of the timing impact... I'm sure the city does not purchase the same amount of equipment each year, but assuming that it does (as was done here) distorts the annual savings and the NPV (although none was calculated) . This is a lazy way to do an analysis of this sort - and deceiving. Even though the footnote provides some clarification, you should have the real expected numbers.

Mr. Schecter makes some good points here, but only from the perspective of his roots in corporate finance. In private sector / corporate financial analysis, NPV is heavily utilized as an investment decision tool, and I agree that non-cash depreciation and amortization expenses should never be featured in a traditional NPV analysis. However, this is not a traditional analysis. In fact, it's not even an investment analysis, and NPV was therefore not used. Mr. Schecter does not demonstrate an awareness of the City's practice of "capitalization of depreciation," whereby non-cash equipment depreciation expenses are rolled into the operating budget and funded with cash to build an equipment replacement reserve. So, unlike most private sector capital programs, the City's depreciation expenses are artificially converted to cash expenses. In addition, this analysis was treated more like a rate design case, because it is not an investment, but rather a decision that will change the cost of one of the City's services, the offsetting "rate" for which is a component of the property tax rate and all commingled general fund sources of revenue. While different rate consultants may differ in their rate-setting practices, it is true that some argue that capital investments funded with cash be ignored over the rate-setting horizon, as irregular cash flows distort the revenue requirements for each year in the analysis. Some rate analysts also argue that capital investments funded with debt (more specifically, the resulting debt service) be ignored over the rate-setting horizon because the term of the debt does not necessarily match the useful life of the underlying asset. As a way to normalize the revenue requirements in a rate study, some rate consultants prefer the use of depreciation expenses, as they represent the long-term embedded cost of the system being studied. This practice seemed to be the most applicable to capture the portion of the long-term savings that occurs over the course of the seven-year term, and I continue to support the rationale of the method employed.

-Personnel savings were inflated in the out years at 4% per footnote 1 on page 20. Really!! Does the city really expect to have these costs increase at twice the rate of inflation? Or does the city finance manager know something that no one else knows? A basic principle of doing this kind of work is to be conservative on using inflation factors, and if the project looks good in spite of conservatism, then it probably is a good project. If I were you, I like to see the calculation of the 4%. Even considering health care costs, this seems too high.

The City's contract with the American Federation of State, County and Municipal Employees (AFSCME) provides for wage progression increases ranging from roughly 2.2% to 4.2% between the five wage steps, each step of which can occur as frequently as every six months. In addition, the contract rates are subject to across-the-board increases on an annual basis with each contract renewal. The most recent contract featured across-the-board increases of 3.0% per year. As employee tenure grows, workers become eligible for incentives such as growing longevity pay and a service award, which contribute to higher wage growth. The City's pension and other post-employment benefit (OPEB) costs, as well as health care, dental, vision and long-term disability costs are also factored into the increases. Expense categories such as pension, OPEB and healthcare costs tend to inflate significantly higher than the broad basket of goods measured by the consumer price index, and even higher than 4.0%. The projected personnel costs in the model for 2016 are 4.6% higher than the projected personnel costs for 2015. We believe that the 4.0% assumed for the out years is a reasonable expectation of personnel cost increases.

> *-Lastly, the analysis doesn't really state how the personnel savings were calculated, which is a problem. It doesn't state how many employees would retire, how many would be let go or how many would be transferred to current approved job vacancies. At a minimum, you should have been provided with a table as to how this was calculated.*

Personnel cost savings are described in the preceding paragraph. This comment seems intended to address the cost of the "Personnel Offsets – Incentives" of more than $192,000 described in footnote 2 of Appendic C to the refuse recommendation. City staff and Newark's Mayor and City Council will undertake the appropriate steps related to labor negotiations pending the disposition of the refuse recommendation. The number of employees that would retire or that would be transferred to another job is not able to be calculated at this time. It is the City's true intention that all employees either retire or are transferred to another position, either with the City or with the contracted hauler. We are unable to make any assumptions beyond the estimate described in footnote 2.