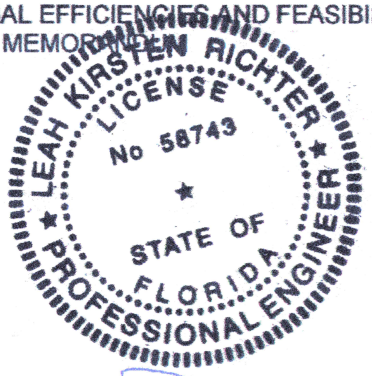
ARCADIS Design & Consultancy for natural and built assets

City of Tampa Department of Solid Waste and Environmental Program Management

EVALUATION OF MCKAY BAY FACILITY OPERATIONAL EFFICIENCIES AND FEASIBILITY TECHNICAL MEMORANDUM

McKay Bay Refuse-to-Energy Facility

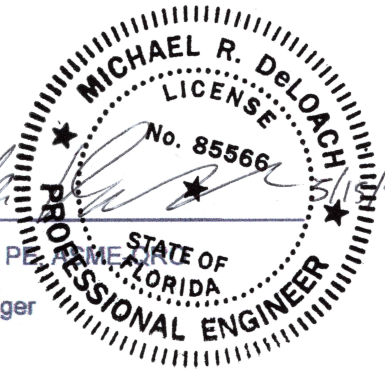
May 2018



5/15/2018

Leah K. Richter, PE

Project Manager



5/15/2018

Michael R. DeLoach, PE, CFM, ENV SP

Deputy Project Manager

EVALUATION OF MCKAY BAY FACILITY OPERATIONAL EFFICIENCIES AND FEASIBILITY TECHNICAL MEMORANDUM

McKay Bay Refuse-to-Energy Facility

Prepared for:

City of Tampa

Department of Solid Waste and Environmental Program Management

Prepared by:
Arcadis U.S., Inc.
3109 West Dr. Martin Luther King Jr. Boulevard
Suite 350
Tampa
Florida 33607
Tel 813 903 3100
Fax 813 903 9115

Our Ref.:

00043058.0000

Date:

May 2018

CONTENTS

ATTACHMENTS

I - City Operations of Facility with High CIP Financial Projections

ACRONYMS AND ABBREVIATIONS

APCS	Air Pollution Control System
Arcadis	Arcadis U.S., Inc., including subconsultant Earthshine Environmental, Inc.
CIP	Capital Improvement Plan
City	City of Tampa
Complex	The McKay Bay Refuse-to-Energy Facility, scale house and transfer station.
Department	Department of Solid Waste and Environmental Program Management
EH&S	Environmental Health and Safety
Facility	McKay Bay Refuse-to-Energy Facility
FDEP	Florida Department of Environmental Protection
FFH	Fabric Filter House
FY	Fiscal Year
HHV	Higher Heating Value
KV	kilovolt
kWh/ton	Kilowatt-Hours per ton of MSW
MSW	Municipal Solid Waste
MW	Megawatt
MWh	Megawatt-Hours
NPV	Net Present Value
O&M	Operation and Maintenance
O&M Agreement	Operation and Maintenance Agreement originally dated December 28, 1998, amended and restated on July 21, 2011, effective August 1, 2011
Operator	Wheelabrator McKay Bay, Inc.
PPA	Power Purchase Agreement
R&M	Repair and maintenance

RDF	Refuse derived fuel
RECs	Renewable Energy Credits
SDA	Spray Dryer Absorber
Seminole Agreement	Seminole Electric Cooperative Power Purchase Agreement, dated June 28, 2010, and subsequent Amendments
tpd	Tons per Day
Transfer Station	800 tpd McKay Bay Transfer Station
WMBI	Wheelabrator McKay Bay, Inc.
WTE	Waste-to-Energy
WTI	Wheelabrator Technologies, Inc.

SUMMARY OF RESULTS AND RECOMMENDATIONS

This technical memorandum summarizes the findings of Arcadis U.S., Inc., and its subconsultant, Earthshine Environmental Inc. (collectively referred to as Arcadis), with respect to evaluation of the operational efficiencies and feasibility of alternative operators or operating methods of the McKay Bay Refuse-to-Energy Facility (Facility). Arcadis was requested to perform this work by the City of Tampa, Florida (City), as part of the City's ongoing master planning efforts relating to the Facility. Arcadis is knowledgeable about the Facility because Arcadis, working on behalf of the City, has been the independent consulting engineering firm that oversees the operations of the Facility from 1998 to the present.

As part of this effort, Arcadis reviewed information available to it in accordance with that separate independent consulting contract and relied in part on the accuracy of information supplied by the City and historically provided by the Facility operator in developing this report. The complete scope of work should be reviewed in its entirety in connection with the scope and depth of this technical memorandum.

As part of the approved scope of work, Arcadis performed the following tasks:

- Evaluated the feasibility of certain agreed-upon operational option's feasibility and benefits and risks associated with those options (Attachment A - Operational Efficiencies and Feasibility Evaluation Matrix).
- Developed "order of magnitude" estimates concerning long-term capital projects and capital improvements at the Facility (Attachment B - Long-Term Facility Capital Project Estimate).
- Developed detailed Facility financial projections for the feasible options (Attachments C through I).
- Developed this technical memorandum.

Based on our initial evaluation of feasibility, benefits, and risks, Arcadis eliminated the least feasible options and only developed detailed financial projections for the three most feasible options. Following the financial analysis, Arcadis ranked the various options, based on estimated fiscal savings and various other considerations that are not quantifiable at this time. In an effort to limit any bias in the rankings, Arcadis used similar assumptions for each feasible option and compared the options against a "Base Case." The Base Case is the financial projection for continuing Facility operations under the current O&M Agreement. The financial projections in the Base Case are supported by the financial information obtained from the actual operations at the Facility under the current O&M Agreement. The Base Case was developed by Arcadis when performing previous evaluations for the City and it was updated for this evaluation.

The rankings of the three most feasible operational options after financial analysis are as follows:

Rank	Option	Main Considerations
1	City Operation of Facility	Benefit: City control of operations, maintenance, and longevity of Facility Benefit: Flexibility and optimization in capital investment implementation and funding Risk: Requires capital investments in Facility over time Risk: All Facility risks are accepted and assumed by the City
2	Renegotiate O&M Agreement with WMBI	Benefit: Opportunity to improve contract terms and WMBI performance Risk: Requires bonds for up-front capital investments in Facility Risk: Concerns with current Facility age and Guarantor change requests
3	Procurement of Alternative O&M Contractor	Benefit: Opportunity to improve contract terms Risk: Requires bonds for up-front capital investments in Facility Risk: Limited competition during procurement may hamper the potential benefits of this option

Detailed explanations of the evaluation and ranking steps are presented in their respective sections, below.

Both the technical evaluation and the detailed financial analysis led to the same rankings, with City operations of the Facility proving to be the most technically and financially attractive option. City operation of the Facility is the only option that is projected to be more financially favorable than the Base Case. The Base Case notably does not include or require any funds for capital improvements at the Facility (because WMBI is responsible for such improvements pursuant to the O&M Agreement), while the other feasible options do include capital funding by the City. Notwithstanding this financial advantage for the Base Case, City operations of the Facility are estimated to cost approximately $77 million less than the Base Case over a 20-year period. Stated differently, the savings for the City could reduce the City's cost of disposal by approximately $12 per ton of waste processed. City operation of the Facility is estimated to cost at least $110 million less than the other two feasible options that were evaluated over the same 20-year period (i.e., a reduction in disposal costs equal to approximately $18 per ton of waste processed).

Renegotiating the O&M Agreement with the current operator, Wheelabrator McKay Bay, Inc. (WMBI), was ranked second. This option was ranked higher than procuring a new operator because Arcadis believes negotiations with WMBI are more likely to result in a lower operating fee for the City than the operating fee that would be obtained through an open procurement process with new vendors. Of course, these estimates and rankings are highly dependent on the outcome of the negotiations. However, choosing renegotiations before open procurement provides the City with an opportunity to resolve its concerns informally, and without having to undergo the disruptions that may occur if a new operator takes over the operation of the Facility. If the City is unable to negotiate favorable terms with WMBI, the City will have

the ability to end the renegotiation efforts and then conduct an open procurement process for an alternative operator.

Based on these results and the City's ongoing concerns about the age of the Facility, Arcadis recommends the City follow a three-pronged path forward:

1. Begin developing a detailed transition plan to guide the City in the event that the City concludes it wishes to operate the Facility. This plan would address all major hurdles for the City to take-over operations, including staffing, planning, training, procurement, bond holder approval, and other critical functions to ensure a smooth transition with limited interruptions in the City's solid waste management services. This plan will provide the City with additional options and security in the event the City encounters problems when pursuing one of its other options (e.g., hypothetically, an event of default under the existing O&M Agreement by WMBI, an impasse in negotiations with WMBI, or a lack of interest by qualified firms during the procurement process).
2. Simultaneously commence negotiations with WMBI for significantly improved terms in the O&M Agreement, based on the City's willingness to contribute capital improvement funds for the Facility. This approach would allow the City to maintain continuity in its operations, by continuing to work with WMBI, rather than undergoing a transition in operations from WMBI to the City or a new contractor. This approach would give WMBI an opportunity to provide savings to the City in exchange for capital contributions and a mutually-beneficial continued business partnership.
3. Simultaneously develop a procurement strategy and preliminary documents for procuring an alternative operator. This approach would be initiated by meeting with the City staff responsible for City contracts and procurements. This effort would put WMBI on notice that negotiations must be conducted in good faith and position the City for the procurement of a new operator if negotiations with WMBI fail to provide sufficient cost savings to the City.

Alternatively, the City could focus strictly on planning for the City's takeover of Facility operations, without attempting to continue with private operations and maintenance of the Facility. This alternative is expected to provide the greatest cost savings for the City. However, this path forward could result in potential difficulties with WMBI during the planning and transition phases because there would be little incentive for WMBI to make long-term investments in Facility maintenance or staffing after the City concludes it will terminate the WMBI contract and take over Facility operations. For this reason, if the City wishes to become responsible for Facility operations, the City should carefully evaluate potential incentive options to help ensure WMBI will continue operating in good faith.

Regardless of the operational approach ultimately selected, Arcadis recommends that the City develop a transition plan for City operations in order to provide an alternative operating method that the City can rely on to ensure long-term stability at the City's Facility if other operational options fail. Arcadis also recommends that the City begin developing a strategy for long-term capital improvements to the Facility. The capital improvement plan should identify the specific projects the City will pursue, the proposed method of financing, the method that will be used to procure contractors, the preliminary schedule for implementing the capital improvement plan, and the steps that will be taken to minimize Facility downtime and minimize the cost of diverting waste to other solid waste management facilities. This capital improvement plan will be critical for all of the three feasible options, because it will provide a basis for

private vendors to develop operating costs and for the City to develop its own long-term budget if the City elects to operate the Facility itself.

A detailed description of the evaluation method and ranking steps used by Arcadis is provided in the following sections of this memorandum.

INTRODUCTION

Facility Background

The City owns the Facility and associated Complex, which includes the Transfer Station and scale house and adjacent properties currently used for Tampa police impound and fire training. The Facility is a 1,000 ton-per-day (tpd) mass-burn waste-to-energy (WTE) facility that generates approximately 22 MW of electrical energy for use in the electrical grid. As the City has no current operating landfill, all residential and most commercial Municipal Solid Waste (MSW) generated within the City is either processed at the Facility or bypassed to other publicly or privately-owned WTE facilities or landfills at existing market rates. Ash from the Facility is currently sent to a Republic Services owned landfill in neighboring Polk County.

The City has an Amended and Restated Operations and Maintenance Agreement (O&M Agreement) with Wheelabrator McKay Bay, Inc. (WMBI), which requires WMBI to operate and maintain the Facility in accordance with good standards and meet or exceed certain Performance Guarantees as defined in the O&M Agreement. The O&M Agreement's current expiration date is September 30, 2032. WMBI completed the retrofit of the Facility to meet Clean Air Act requirements in January 2002.

Additional History

While a complete history of relevant historical data of the Facility operations and maintenance would be too large to summarize in this setting, certain ongoing Facility condition and operations concerns, along with other previous assessments, reflect an important perspective when evaluating the non-quantifiable risks that must be considered in this evaluation. Some brief summaries of the relevant ongoing considerations are included below.

Risk Assessment

Arcadis previously developed a Facility Risk Assessment and Budget Analysis report in 2014 (Risk Assessment) to assist the City in its ongoing efforts to review critical portions of the O&M Agreement, specific financial and default risks related to the recent sale of the Facility Operator's parent company and their requests to change the Guarantor, the general condition and financial risk of the Facility's assets, and to commence the process for future Facility planning. At the conclusion of that assessment, Arcadis recommended that the City consider developing a formal Solid Waste Master Plan that would include specific detailed cost estimates and would map out long-term strategies and City actions looking at major time benchmarks (i.e. 5 years, 10 years, 20 years, 30 years, 50 years, etc.). Arcadis recommends assigning resources according to a Master Plan or long-term strategy on the future of the City's solid waste system.

The Risk Assessment identified some key concerns that directly relate to this feasibility exercise:

1. Potential City liability due to WMBI's parent company's recent sale to an outside investment firm.
2. Potential City liability for risk of future capital improvements based on environmental changes in law.

3. Potential City liability risk once bonds are paid off, wherein WMBI's financial liability under the contract is non-existent for penalties or default conditions if the City chooses to continue operating the Facility.
4. Potential City liability risk for certain types of equipment failure on equipment past its useful intended life.
5. High potential for increased bypass waste costs, even if Facility failure or downtimes risks are heavily borne by WMBI.

EVALUATION FOR OPERATIONAL EFFICIENCIES AND INITIAL FEASIBILITY

Operational Options

The following Facility operational options were developed by Arcadis and selected by the City for evaluation as they are the most feasible and acceptable options for the City. Originally, the options pertained specifically to Facility waste disposal, excluding options that included waste disposal at other facilities or landfills; however, based on requests from the City, Option C, Sale of Facility and contract for disposal, was expanded to include shut down of the Facility and use of other public or private WTE facilities or landfills.

A. Continue Wheelabrator McKay Bay Inc. (WMBI) operation of the Facility under current Amended and Restated Operations and Maintenance Agreement (O&M Agreement), which expires in 2032

B. Renegotiation of current O&M Agreement with WMBI to procure better terms or risk profiles

C. Sale of the Facility to an alternative private contractor and negotiation of a long-term contract with them for disposal

    1) Sale or shut down of Facility and contract for waste-to-energy facility disposal, which could include other waste-to-energy facilities

    2) Shut down of facility and contract for landfill disposal

D. Procurement of and contract with an alternative private contractor for operation of the Facility under the current agreement or a revised agreement

E. City planning and implementation to take over operations and maintenance of the Facility in a public effort

Evaluation Method

The first step in this evaluation was to develop the evaluation criteria used to compare and evaluate the operational options. Arcadis staff developed general and specific criteria with which to evaluate the selected operational options, as well as defined deal breaker situations where the City would not be willing to accept an option's risk and therefore would remove that option from further evaluation and consideration.

The second step was to develop an evaluation matrix of operational option-specific risks and benefits to determine a preliminary ranking of the options. The evaluation matrix includes quantified risks and benefits and operational option benefit-less-risk calculations for consideration when ranking. Ranking also further considered overall risks and benefits of each option, particularly because many of the risks and benefits identified are potentially significant but not quantifiable at this time. The top three options were then selected to perform more detailed financial analysis, the third step in the evaluation.

Financial analysis of the top three feasible operational options included developing 30-year revenue and expenditure projections, also called financial pro formas, for each of the three options selected as well as

for a Base Case of continuing Facility operations under the current contract. The total net income, net present value, and average net disposal cost per ton for terms of 13 years, 20 years, and 30 years for each option were reviewed. The 13-year duration was reviewed since that is the time frame until the termination of the current O&M Agreement. The three options were compared with each other as well as to the Base Case pro forma to provide a final option ranking.

Evaluation Criteria

The evaluation criteria identify the main categories of specific benefits and risks for the Facility operational options and are used to structure the Evaluation Matrix. A workshop was held with the City to finalize the operational options to evaluate, discuss some of the key assumptions needed to perform the evaluation, review and further develop evaluation criteria, and define potential deal breakers. The criteria are separated into benefits and risks, so the overall benefits and risks can be compared in a cost / risk benefit analysis. Benefits considered can be categorized into operational efficiencies, financial efficiencies, legal benefits, and environmental benefits. Conversely, the risks considered can be categorized into operational risks, financial risks, legal risks, and environmental risks. The specific benefits and risks for each option are identified in the Attachment A - Operational Efficiencies and Feasibility Evaluation Matrix.

Deal breakers, which are risks significant enough to eliminate the associated operational option from consideration and therefore terminate further analysis, were identified and defined as follows:

- Significant increase to the City's solid waste rate structure, identified with a threshold level of greater than 25 percent customer / resident rate increase caused by the operational option selected.
- Significant increase in environmental risk, such as large cost equipment improvement requirements due to change in law or compliance issues.
- Significant increase in legal risk.
- Maintain control of waste disposal, therefore loss of control of the City's waste disposal Facility or method would be a deal breaker.

Evaluation of Feasible Options

After the evaluation criteria was finalized, the risks and benefits for each operational option were identified and assigned order-of-magnitude values, if possible, based on identified assumptions, best available information, or comparable industry knowledge. Often these order-of-magnitude estimates would be a range of values, so the middle or most likely was used for this initial valuation. This was compiled into an Evaluation Matrix, Attachment A, and the net benefit less risk was calculated for each option. This calculation compared the total of estimated values of all option benefits and subtracted the total estimated value of all option risks to get an order of magnitude benefit cost analysis for each option. Benefits and risks were also assigned a probability or likelihood of occurring, of low, moderate, or high. It must be noted that estimated values are not adjusted for term of item or net present value and many benefits and risks are not quantifiable at this time.

The net benefit less risk calculation provides scale of magnitude benefit versus risk estimates and helped facilitate initial rankings; however, the overall operational option ranking focused on overall benefits and risks and probability of those benefits and risks, not only the estimated values. Notes regarding specific option assumptions or benefits and risks are included in the individual option matrix pages. Each option was considered completely separate to develop the benefits and risks and then all of the options were considered collectively to ensure that any benefits or risks identified that could also be associated with other operational options were also included for that operational option. This was done to enable option comparison at equivalent levels for all operational options.

The following provides a summary of the key assumptions and significant benefits and risks for each operational option evaluated, with detail of all benefits and risks associated with each operational option provided in Attachment A:

A. Continue WMBI operation of the Facility under current Amended and Restated O&M Agreement, which expires in 2032

Benefits

- Per the current O&M Agreement, WMBI is responsible for all maintenance and repairs to the Facility until the expiration on September 30, 2032, therefore the City would not be responsible for Facility capital improvements until Agreement expiration.
- Once the current bonds are paid off in 2021, the City can save those funds for future Facility needs such as facility refurbishment or capital projects needed to maintain reliability of the Facility.

Risks

- Non-performance of contractual maintenance could cause significant depreciation of the Facility, the City's asset. The cost of Facility retrofit in 1999 was $88M, and the cost to construct a new Facility today would be significantly higher. Estimated depreciation can range from $5M to $50M depending on the performance of the Operator, which has greatly fluctuated over the past 10 years.
- Substantial annual escalation of the operating fee is included in the current O&M Agreement. The operating fee has a unique structure and is still slightly higher than regional industry standard even when normalized for comparison with other Facility operating fees. Therefore, the substantial escalation of this higher rate over the term of the agreement results in increased fees paid to the Operator when compared to other facilities in the area and other operational options considered.
- Current O&M Agreement stipulates loss of Operator liability once the City's bonds are paid off, which is in 2021 for the current bonds, unless the City initiates new bonds. The maximum Operator liability identified in the Agreement for default or penalties after bond payoff is $20M if the City closed the Facility but would be zero if the City chose to continue using the Facility.

- Environmental risks, such as significant capital improvements required due to a change in environmental law or requirements or a severe Facility environmental violation resulting in Facility shutdown and capital improvements would have significant financial consequences, but occurrence is unlikely.

B. Renegotiation of current O&M Agreement with WMBI to procure better terms or risk profiles

Key Assumptions

- The City confirmed that this would be an allowable option, as there was a concern that it may not be allowable by Contract Administration.
- Renegotiate is stipulated on a lower operating fee paid to Operator as well as other improved contract terms in exchange for City funding of specific capital projects, contract term extension, and reduction in WMBI's cash flow risk for repairs.
- Operator would manage capital improvement projects, and therefore receive an overhead and profit fee for management.

Benefits

- Likely to reduce operating fee and lessen impact of annual contractual escalation and potentially reinvest the funds saved into Facility capital improvements.
- Improve contract terms such as revising the liability language, revise performance indicators and penalties / damages, develop more specific maintenance and capital improvement terms and include better provisions for when the Power Purchase Agreement expires in 2026.

Risks

- Likely requires increased capital funds provided by the City as an incentive for the Operator to lower the operating fee and likely match the funds saved by negotiating a reduced operating fee.
- Possible increase in operation fee due to shift in risk, but if a lower operating fee could not be negotiated, negotiations would likely cease, and another operational option would be pursued.
- Non-performance of contractual maintenance could cause significant depreciation of the Facility, the City's asset. The cost of Facility retrofit in 1999 was $88M, and the cost to construct a new Facility today would be significantly higher. Estimated depreciation can range from $5M to $50M depending on the performance of the Operator, which has greatly fluctuated over the past 10 years.
- Environmental risks, such as significant capital improvements required due to a change in environmental law or requirements or a severe Facility environmental violation resulting in Facility shutdown would have significant financial consequences, but occurrence is unlikely.

C. Sale of the Facility to an alternative private contractor and negotiation of a long-term contract with them for disposal

As mentioned previously and per the City's request, operational option C was separated into two related operational options, adding the option of alternative WTE Facility disposal or landfill disposal.

1) Sale or shut down of Facility and contract for waste-to-energy facility disposal, which could include other WTE facilities

Key Assumptions

- Assumes sale of the Facility and the Facility would continue to operate and accept waste from the City.
- Approximate disposal fee at McKay Bay Facility would be similar to fee for hauling and disposal at neighboring WTE facilities.

Benefits

- City would receive revenues from the sale of the Facility and would cover funds required for bond payoff and Operator contract termination fee.
- Likely to reduce waste disposal fee due to all Facility revenue received by new owner, Facility allowing outside waste, as well as Facility needing to be competitive with the area market.

Risks

- *Deal Breaker*: Loss of control of disposal facility and disposal methods. With the loss of control of the waste disposal method, there could be significant currently unquantifiable risks associated with the disposal cost volatility and possible unreliability of using other WTE facilities or landfills.
- Bond payment completion would likely be required prior to sale of Facility. Therefore, the approximately $41M bond payment balance would be due.
- Loss of almost $9M total in revenue streams from electricity and renewable energy credits, over $8M annually; from metals recovery, over $400K annually; and potential future revenue from metals recovery from further ash processing, approximately $400K annually.
- City would be required to pay contract termination penalties of $2.5M to WMBI for terminating contract prior to expiration in 2032.

2) Shut down of Facility and contract for landfill disposal

Key Assumptions

- Assumes the Facility will be shut down and decommissioned.
- Disposal at Heart of Florida landfill including hauling and landfill tipping fee. Heart of Florida Landfill may be an unreliable long-term disposal option. There are closer public landfills, but they may not be willing to accept all of the City's waste as they are often more concerned with preserving airspace for future use.

Benefits

- Likely to reduce overall waste disposal fee, as the cost to landfill waste is typically less than disposal via WTE.

Risks

- *Deal Breaker:* Loss of control of disposal facility and disposal methods. With the loss of control of the waste disposal method, there could be significant currently unquantifiable risks associated with the disposal cost volatility and possible unreliability of using other WTE facilities or landfills.
- Although unlikely, the decision for the City to use a less sustainable and environmentally beneficial disposal method may become a public issue for the City Council or Mayor.
- Shutdown of Facility will result in associated closure costs on the scale of $30M.
- Bond payment completion would likely be required prior to sale of Facility. Therefore, the approximately $41M bond payment balance would be due.
- Loss of almost $9M total revenue streams from electricity and renewable energy credits, over $8M annually; from metals recovery, over $400K annually; and potential future revenue from metals recovery from further ash processing, approximately $400K annually.
- City would be required to pay contract termination penalties of $2.5M to WMBI for terminating contract prior to expiration in 2032.

D. Procurement of and contract with an alternative private contractor for operation of the Facility under the current agreement or a revised agreement

Key Assumptions

- The City confirmed that this would be an allowable option, as there was a concern that it may not be allowable by Contract Administration.

- Operator would manage capital improvement projects, and therefore receive an overhead and profit fee for management.

Benefits

- Likely reduction in operation fee based on current operating fees at other area facilities, but if a lower operating fee could not be negotiated, negotiations would likely cease, and another operational option would be pursued.

Risks

- Increased capital funds will likely be required from the City to attract alternative O&M Contractors to bid on and provide a favorable operator fee to the City. Capital funds preliminary estimate of $63M required would likely be more than for Option B, Renegotiate O&M with WMBI, and would likely be a one-time expenditure rather than phased over time.
- City would be required to pay contract termination penalties of $2.5M to WMBI for terminating contract prior to expiration in 2032.

E. City planning and implementation to take over operations and maintenance of the Facility in a public effort

Key Assumptions

- Bondholder approval of change in Facility operation would likely require additional effort and fees.
- Operational cost estimates based on preliminary operations plan developed by the City.

Benefits

- Likely significantly reduced waste disposal cost or allow the City to allocate O&M savings for capital projects and improved Facility maintenance.
- City control of longevity of the Facility, including capital project scale and timing as well as increased Facility maintenance.
- Receive all Facility revenue streams from electricity and renewable energy credits, almost $1M annually and from metals recovery, approximately $400K annually.

Risks

- Major Facility maintenance will be coming due in the near future as equipment is nearing or exceeding the end of its anticipated life and will become the City's complete financial responsibility.
- City would be required to pay contract termination penalties of $2.5M to WMBI for terminating contract prior to expiration in 2032.

- Development and execution of a Transition Plan from Facility contracted operations to City operations would be required, as well as additional efforts related to operations planning and implementation.

Ranking and Selection for Further Analysis

After consideration of the significant benefits and risks for each operational option, net-benefit-less-risk calculation, and of the not quantifiable benefits and risks, the overall benefits and risks analysis was used to provide a ranking of the operational options. Options C1) sale of or shut down Facility and contract for disposal at a WTE facility, and C2) shut down Facility and contract for landfill disposal, both of which had favorable net benefit less risk values, were eliminated because of the loss of control of the waste disposal method, which is a City deal breaker. With the loss of control of the waste disposal method, there could be significant currently unquantifiable risks associated with the disposal cost volatility and possible unreliability of using other WTE facilities or landfills.

Option A, continuing with the current O&M contract with WMBI, ranked fourth of the remaining four options as this option had the lowest net-benefit-less-risk value estimate due to the higher than industry standard operator fee and escalation as well as significant not quantifiable risks associated with current contract terms and current decline of operation and maintenance practices at the Facility.

Option D, procurement of an alternative O&M Contractor, ranked third with similar benefits and risks as Option B, but with a slightly lower net-benefit-less-risk value estimate because of the assumption that increased capital funds will be required from the City to attract alternative O&M Contractors to bid on and provide a favorable operations fee to the City.

Option B, renegotiate O&M with WMBI ranked second with slightly improved net-benefit-less-risk value estimate due to the anticipated lower amount of capital funds required from the City to attract WMBI to negotiate a lower operating fee than their current fee as well as an anticipated lower operating fee compared to an alternative contractor.

Option E, ranked first with a significantly higher net-benefit-less-risk value estimate as well as significant not quantifiable benefits such as control of all aspects of the City's waste disposal and Facility capital projects and putting the City in control of the longevity of the Facility. As the Facility owner, the City will always assume many of the risks associated with the Facility, but with City operation as well as ownership, the City will assume all and not be able to share some of the Facility maintenance risks, like they currently do with a contracted operator.

The following table summarizes the preliminary ranking of options and the main considerations contributing to the ranking.

Table 1 – Preliminary Ranking of Options and Main Considerations

Preliminary Rank	Option	Main Considerations
1	E. City O&M of Facility	Benefit: City control of waste disposal and longevity of Facility Benefit: Flexibility and optimization in capital investment implementation and funding

		Risk: Likely requires capital investment in Facility over time
2	B. Renegotiate O&M with WMBI	Benefit: Opportunity to improve contract terms Risk: Likely requires bonded capital investment in Facility
3	D. Procurement of an alternative O&M Contractor	Benefit: Opportunity to improve contract terms Risk: Likely requires bonded capital investment in Facility
4	A. Continue with current O&M with WMBI	Risk: Loss of Liability in 2021 and extreme Operator fee escalation Benefit: WMBI responsible for maintenance and repairs with no City capital investment Risk: Depreciation of Facility with time
5	C.1) Sale or shutdown and contract for WTE disposal	Deal Breaker: Loss of control of waste disposal facility
6	C.2) Shutdown and contract for landfill disposal	Deal Breaker: Loss of control of waste disposal facility Deal Breaker: Public and political optics of using a less environmentally beneficial disposal method Risk: Volatility of landfill market regarding disposal reliability and cost

A workshop was held with the City to review the Evaluation Matrix and for the City to provide feedback on the preliminary ranking as well as select the three options to perform further financial analysis. During the workshop, the City agreed on elimination of both Options C1 and C2 as having deal breaker risks and agreed to moving forward with further financial analysis of the top three ranked options.

FINANCIAL ANALYSIS OF FEASIBLE OPTIONS

Updated Long-Term Facility Capital Projects Estimates and Planning

As part of the detailed financial evaluation of feasible options, capital project estimates and order of magnitude engineering costs for various repair and refurbishment options were developed for input into the detailed financial projections. Arcadis previously developed such estimates in a risk assessment performed for the City in 2014 and identified certain major equipment in the Facility, its expected useful life, along with order of magnitude cost estimates for repair or replacement of those systems. Costs were further expanded to include additional permitting, engineering, construction, demolition, startup / shutdown, and other contingencies necessary for a construction effort.

Those previous 2014 estimates were updated and refined based on Arcadis' knowledge of the current status of the Facility and Arcadis' recent experience in actual costs for construction and refurbishment of other WTE facilities in the state. The updated estimates are included to this report as Attachment B - Long-Term Facility Capital Project Estimate. Assumptions regarding individual Facility equipment condition and timing as well as necessity of replacement were discussed and compared with the City's Facility engineer. Further detailed engineering cost estimates will be necessary prior to the City moving forward with any associated projects.

Estimated Financial Projection and Analysis

To further evaluate the three operational options selected as most technically feasible, estimated financial projections of Facility operating expenses and maintenance expenses for a 30-year period were developed for each option as well as the Base Case, which projects operations under the current O&M Agreement. The estimated valuation of risks and benefits identified in the evaluation matrix that would likely impact the Facility operations and maintenance costs were included in the estimated financial projections. These projections were then compared to each other using several different financial analysis methods and ranked. It should also be noted that many benefits and risks are still not quantifiable at this time and the impact of downtime for capital improvement projects are not included in the financial projections, as financial projections are for comparative purposes and not detailed project planning.

Three different time periods, or terms, were selected for review. The first was a 13-year term which signifies the end of the term of the current O&M Agreement (or the Base Case). The second was a 20-year term, which is a standard long-term projection period; rankings were focused on this duration because it likely has more accuracy than a 30-year term and also extends beyond the term of the current O&M Agreement. The third was a 30-year term, as identified in the scope of work. Because it is such a long period, assumptions will not be as accurate, especially towards the end of the 30-year term.

The financial analysis performed on the financial projections included total net income, net present value (NPV) using both a 3% discount rate and a 5% discount rate, and average net disposal cost per ton. The total net income is included as a line item calculation on each financial projection and calculates the total projected income less the projected expenses for the specified term. The total net income considers the operating fee as well as all other Facility costs and revenues. The values projected are negative because the financial projections do not include revenues from commercial or residential solid waste rates paid to

the City, which make up most of the Department revenues and are used to pay for waste disposal as well as waste collection, recyclables collection and distribution, and Department administration.

The net present value calculation takes into account the time value of money, returning the series of future cash inflows and outflows back to the present value by assigning a discount rate. The discount rate for a government is typically set at either the rate at the government's anticipated or latest borrowing; rate at the government's current or projected earning rate on short term investment; current rate of US Treasury bonds; or blended with these methods and public input or professional judgement.

The net disposal cost per ton is calculated annually by dividing the total net cost, which is the negative of the total net income, by the annual tonnage processed. Then the average of the annual net disposal cost per ton is calculated for whichever term is being evaluated. This provides an approximate overall cost for disposal of each ton of waste.

The main assumptions made for each of the operational options, the assumed differences from other operational options evaluated, and a summary of the financial analysis of these options is discussed below.

Base Case (Option A)

The Base Case was developed in previous Risk Assessment evaluations and updated for this evaluation for comparison purposes only, as Option A, continue with current O&M with WMBI, ranked fourth in the technical evaluation and was not considered for further financial analysis. The Base Case does not include the $81M of capital projects as, per the current Agreement, it is WMBI's responsibly to keep the Facility operating for the term of the O&M Agreement. Realistically, the Facility would require capital funds from the City within the 30-year term, particularly upon the expiration of the O&M Agreement. Also, the current O&M Agreement will require renegotiation at the end of the contract term, or potentially earlier due to the expiration of the PPA and the loss of liability as the bonds are paid off, which are not included in the financial projections.

All escalation was kept at an identical escalation rate of 2.5% for every option to provide an equivalent comparison across the options. The Base Case was also updated to include calculation of an equivalent tip fee to more accurately compare the current McKay operating fee to other WTE facilities, as no other facility uses the net ash tip fee structure used at McKay. The Power Purchase Agreement (PPA) expires in 2026. Therefore, it is assumed that there will be a 35% reduction to the electrical energy fee with no escalation. The Base Case presents the current agreement parameters of a base operating fee applied to 260,000 tons per year and excess operating fee applied to waste delivered over 260,000 tons per year. In all operational option scenarios, the projections assume the base O&M fee is based on 310,000 tons per year and all options assume this same tonnage of waste delivered. Therefore, excess waste fees do not appear in the operational option financial projections, but all scenarios will likely include an excess O&M fee.

Option E. City O&M of the Facility

Option E, City operation of the Facility, has the most favorable total net income, average net disposal cost per ton, and net present value for all terms of the three operational options evaluated and was more favorable than the Base Case.

Operations and maintenance costs for City operation of the Facility were estimated for inclusion in the financial projection. The estimate for City operations of the Facility includes 11 more personnel than currently at the Facility as well as more conservative repair and maintenance costs compared to the Base Case. The repair and maintenance budget in this option is estimated to be $16/ton of waste processed. This estimate includes daily maintenance and periodic outage activities and excludes large capital projects and is believed to be conservatively higher than WMBI is currently spending on the Facility. The financial projections also assume 2.5% per year escalation on the repair and maintenance budget, which is likely higher than actual escalation and therefore more conservative. The estimate also assumed the same usage for environmental reagents, which could likely be reduced with improved operations, as WMBI tends to use excess lime for ash pH control.

Projections for Option E assumes cash funded capital improvements, with no additional bonds required as once the current bonds are paid off in 2021, there would likely be additional funds available for continuous capital improvements. Therefore, the timing and cost of the estimated $81M of capital improvement projects differs from Options B and D, as the capital projects would likely be performed up front in the contracted operations scenarios of Options B and D. The Option E scenarios assume $4M per year of capital improvement from 2019 to 2021, which then increases to $8M per year from 2022 to 2029 once current bonds are paid off, and $5M in 2030 to bring the total to $81M. Alternative Option E scenario includes even further capital improvements to the Facility of $4M per year for the remaining years of the pro forma, 2031 to 2048, resulting in capital projects total of $152M over 30 years.

The ash transportation fee is estimated at approximately $0.40 per ton-mile and likely higher than actual costs for a contracted bulk rate. Consulting fees include additional estimated fees for transition planning and support. Actual fees could vary greatly depending on the scope and level of effort requested by the City.

One of the main benefits which is reflected in the financial projection is that all Facility revenues will go to the City (no revenue sharing) as well as profit that would have gone to the contracted operator. Although it is not as common for a municipality to operate WTE facilities, most water and wastewater facilities, including those owned by the City, are operated publicly by municipalities, so operation of an industrial type facility is not a completely foreign concept.

Option B. Renegotiate O&M with Wheelabrator

Option B, renegotiate with WMBI, in the best-case scenario, has the second most favorable total net income, average net disposal cost per ton, and net present value for all terms of the three operational options evaluated. Even looking at best case, it was still not more favorable than the Base Case, though that is primarily due to the lack of capital projects included in the Base Case pro forma.

The financial projection for this option is similar to the Base Case projection but the operating fee was updated to a fee based on total tonnage and it includes the cost for capital projects. An operating fee of $40 per ton, which is comparable to other Facilities in the area, was used for the best-case scenario. This was based on the Pinellas operator fee of approximately $24 per ton plus fixed fee for construction, Lake County operator fee of approximately $40/ton, West Palm Beach facilities operator fee of approximately $41 per ton for RDF and $23 per ton for mass burn, Hillsborough operator fee of approximately $44 per ton, and Pasco operator fee of approximately $42 per ton. It was also taken into account that larger

facilities usually have a lower operator fee and each contract has unique structure, pass-through costs, and excess waste fees which can significantly contribute to the overall financial bottom line.

An operating fee of $45 per ton was used for the worst-case scenario, as the City could likely procure a new operator for this fee or less. The current WMBI equivalent operating fee, which is included in the Base Case financial projections, is approximately $53 per ton. Because the current WMBI operating fee is based on a net ash tonnage, the equivalent operating fee recalculates the contract fee per ton less ash to a total cost per ton.

Both projections for this option include, as an incentive to the Operator, the City investing $81M of capital improvements to the Facility and assumes the remaining bond balance would be combined with the new bonds for a new 20-year bond payment. The new bond payment is assumed to begin in 2019 for pro forma comparison purposes but would likely be later. The full $81M of capital projects identified were used in Option B, renegotiate with WMBI and Option D, procure new operator, which allows option comparison at equivalent levels and a conservative estimate for comparison, but the capital project cost may be less for Option B as WMBI is currently responsible for Facility equipment maintenance or replacement and may perform some of the capital projects identified.

Option D. Procurement of an Alternative O&M Operator

Option D, procure new operator, in the best-case scenario, has the third most favorable total net income, average net disposal cost per ton, and net present value for all terms of the three operational options evaluated. Even looking at best case, it was still not more favorable than the Base Case, though that is primarily due to the lack of capital projects included in the Base Case pro forma.

The financial projection for this option assumes a per ton operating fee, with a best case operating fee of $42 per ton and worst case of $50 per ton. The best-case fee was estimated to be comparable to other Facilities in the area but slightly higher than Option B, assuming a new contractor would likely require a higher operating fee. The worst-case fee was estimated assuming that if the operator proposed a fee higher than $50 per ton, it is approaching the current equivalent cost per ton of $52 and changing from the current operations may not be as financially beneficial. In addition, the most likely operators to respond to a procurement would be Wheelabrator and Covanta, which does not provide much incentive for Covanta to provide significantly lower rates than their other facilities.

As with Option B, this option also includes incentives to the Operator by the City investing $81M of capital improvements to the Facility and combined with the remaining bond balance. This would result in a new 20-year bond payment assumed to begin in 2019.

The following table provides a summary of the financial analysis results for the various terms reviewed.

Table 2 – McKay Bay Operational Options Financial Analysis Summary Table

		Total Net Income Summary						Notes/Considerations	
Options	**Rank**	**Total Net Income**	**Difference From Base Case**	**Total Net Income**	**Difference From Base Case**	**Total Net Income**	**Difference From Base Case**	**Base Fee Assumed***	**Capital Projects**
Term, Years		*13*		*20*		*30*			
Base Case	N/A	($226,092)	$0	($383,105)	$0	($674,713)	$0	*N/A*	*No CIP*
Option b) Renegotiate with WMBI *best*	***2***	($243,376)	($17,284)	($416,117)	($33,012)	($627,966)	$46,748	*$40/ton*	*$81M, 20 year bond*
Option b) Renegotiate with WMBI *worst*		($267,204)	($41,112)	($456,320)	($73,215)	($697,061)	($22,348)	*$45/ton*	*$81M, 20 year bond*
Option d) Procure New Operator *best*	***3***	($256,115)	($30,023)	($435,406)	($52,300)	($658,811)	$15,902	*$42/ton*	*$81M, 20 year bond*
Option d) Procure New Operator *worst*		($294,240)	($68,148)	($499,730)	($116,625)	($769,364)	($94,651)	*$50/ton*	*$81M, 20 year bond*
Option e) City Operations of Facility	**1**	($213,541)	$12,551	($305,838)	$77,267	($487,436)	$187,277	*N/A*	*$81M, 12 years cash funded**
Option e) City Operations of Facility *high CIP*		($216,541)	$9,551	($336,838)	$46,267	($558,436)	$116,277	*N/A*	*$152M, 30 years cash funded**

All income values are in $000s
**Base fee assumes total tonnage, not net as in current contract*
**cash funded from reserves or available funds*

		Average Net Disposal Cost Per Ton Summary						Notes/Considerations	
Options	**Rank**	**Average Net Disposal Cost Per Ton***	**Difference From Base Case**	**Average Net Disposal Cost Per Ton***	**Difference From Base Case**	**Average Net Disposal Cost Per Ton***	**Difference From Base Case**	**Base Fee Assumed***	**Capital Projects**
Term, Years		*13*		*20*		*30*			
Base Case	N/A	$56.10	$0.00	$61.79	$0.00	$72.55	$0	*N/A*	*No CIP*
Option b) Renegotiate with WMBI *best*	***2***	$60.39	$4.29	$67.12	$5.32	$67.52	($5.03)	*$40/ton*	*$81M, 20 year bond*
Option b) Renegotiate with WMBI *worst*		$66.30	$10.20	$73.60	$11.81	$74.95	$2.40	*$45/ton*	*$81M, 20 year bond*
Option d) Procure New Operator *best*	***3***	$63.55	$7.45	$70.23	$8.44	$70.84	($1.71)	*$42/ton*	*$81M, 20 year bond*
Option d) Procure New Operator *worst*		$73.01	$16.91	$80.60	$18.81	$82.73	$10.18	*$50/ton*	*$81M, 20 year bond*
Option e) City Operations of Facility	**1**	$52.99	($3.11)	$49.33	($12.46)	$52.41	($20.14)	*N/A*	*$81M, 12 years cash funded**
Option e) City Operations of Facility *high CIP*		$53.73	($2.37)	$54.33	($7.46)	$60.05	($12.50)	*N/A*	*$152M, 30 years cash funded**

**Average Net Disposal Cost per Ton includes debt service*
**Base fee assumes total tonnage, not net as in current contract*
**cash funded from reserves or available funds*

			Net Present Value Summary						Notes/Considerations	
Options		**Rank**	**Net Income NPV**	**Difference From Base Case**	**Net Income NPV**	**Difference From Base Case**	**Net Income NPV**	**Difference From Base Case**	**Base Fee Assumed***	**Capital Projects**
NPV Term, Years (3% rate)			*13*		*20*		*30*			
Base Case		N/A	($186,412)	$0	($281,240)	$0	($417,937)	$0	*N/A*	*No CIP*
Option b) Renegotiate with WMBI	*best*	***2***	($197,233)	($10,821)	($301,647)	($20,407)	($400,895)	$17,042	*$40/ton*	*$81M, 20 year bond*
Option b) Renegotiate with WMBI	*worst*		($216,528)	($30,116)	($330,838)	($49,598)	($443,650)	($25,712)	*$45/ton*	*$81M, 20 year bond*
Option d) Procure New Operator	*best*	***3***	($208,047)	($21,635)	($316,420)	($35,180)	($421,093)	($3,156)	*$42/ton*	*$81M, 20 year bond*
Option d) Procure New Operator	*worst*		($238,920)	($52,508)	($363,125)	($81,885)	($489,500)	($71,563)	*$50/ton*	*$81M, 20 year bond*
Option e) City Operations of Facility		**1**	($177,345)	$9,067	($233,029)	$48,211	($318,058)	$99,880	*N/A*	*$81M, 12 years cash funded**
Option e) City Operations of Facility	*high CIP*		($179,367)	$7,045	($252,021)	$29,218	($355,942)	$61,995	*N/A*	*$152M, 30 years cash funded**

All income values are in $000s
**Base fee assumes total tonnage, not net as in current contract*
**cash funded from reserves or available funds*

Options	**Significant Not Quantifiable Benefits**	**Significant Not Quantifiable Risks**
Base Case	WMBI responsible for all maintenance and repairs.	Concerns with Facility age / Guarantor. $81M retrofit not included. Release of liability.
Option b) Renegotiate with WMBI	Continued Facility Historical Knowledge with WMBI.	Concerns with Facility age / Guarantor.
Option d) Procure New Operator	New operator brings improved practices / relationship.	Concerns for limited competition during procurement.
Option e) City Operations of Facility	Complete control of O&M and path forward.	All Facility risk becomes the City's. City restrictions on Procurement.

Financial Evaluation Ranking

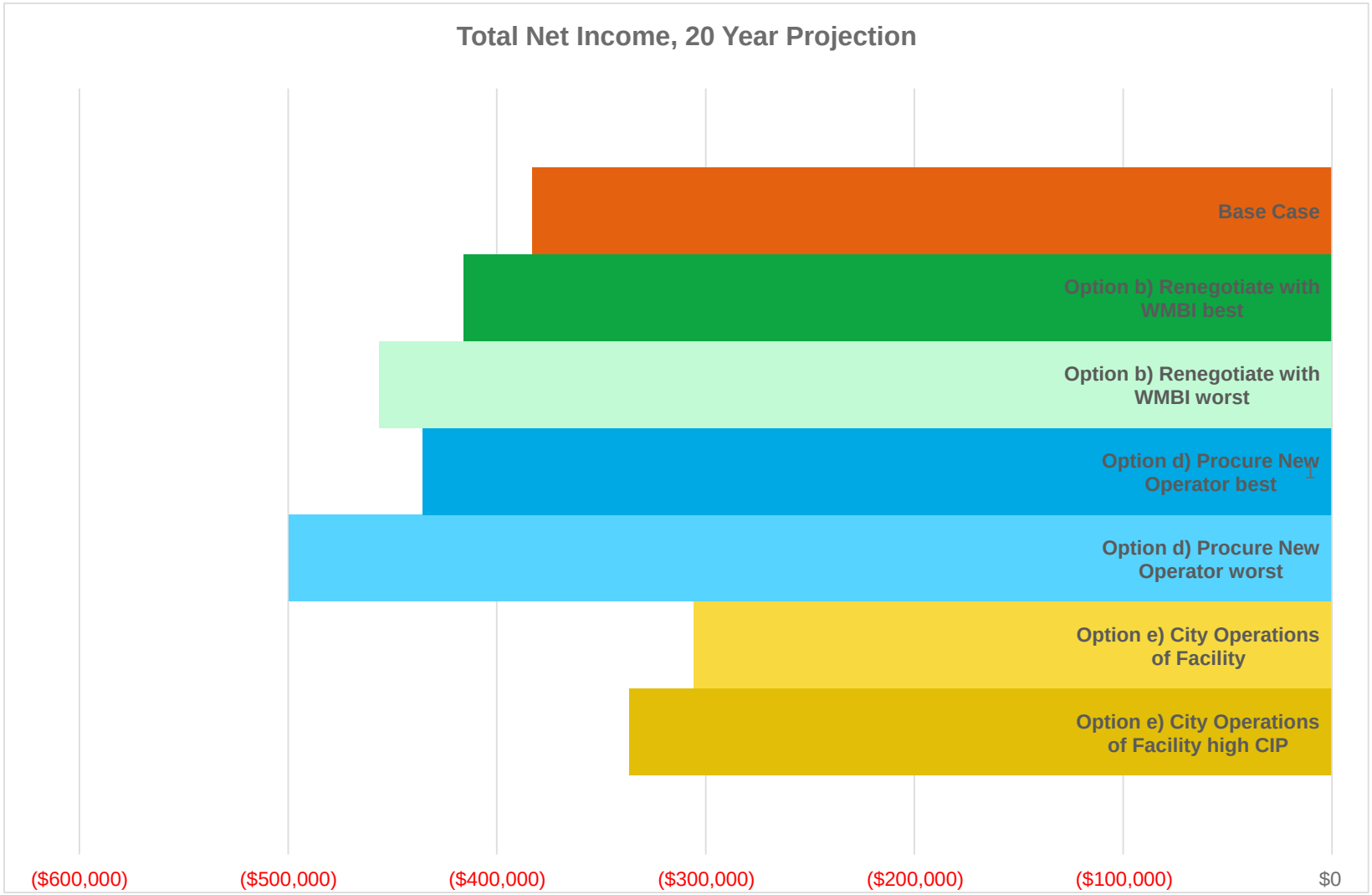
The financial evaluation rankings matched the technical evaluation rankings, when considering the best-case scenarios. The best-case scenarios presented are realistic and assume operator fees that are favorable and likely achievable. The worst-case scenarios assume a higher operating fee that would be near the upper limit of negotiations, assuming that if the operating fee were to be much higher, negotiations would cease and other options would be pursued by the City. The financial evaluation ranking of the three operational options is as follows:

Rank	Option	Main Considerations
1	City Operation of Facility	Benefit: City control of waste disposal and longevity of Facility Benefit: Flexibility and optimization in capital investment implementation and funding Risk: Requires capital investment in Facility over time Risk: All Facility risk becomes the City's
2	Renegotiate O&M Agreement with WMBI	Benefit: Opportunity to improve contract terms Risk: Requires bonded capital investment in Facility up front Risk: Concerns with Facility age and Guarantor
3	Procurement of Alternative O&M Contractor	Benefit: Opportunity to improve contract terms Risk: Requires bonded capital investment in Facility up front Risk: Concerns for limited competition during procurement

A workshop was held with the City to review and provide feedback on the updated capital projects estimate, detailed financial analysis, and ranking of the three identified options.

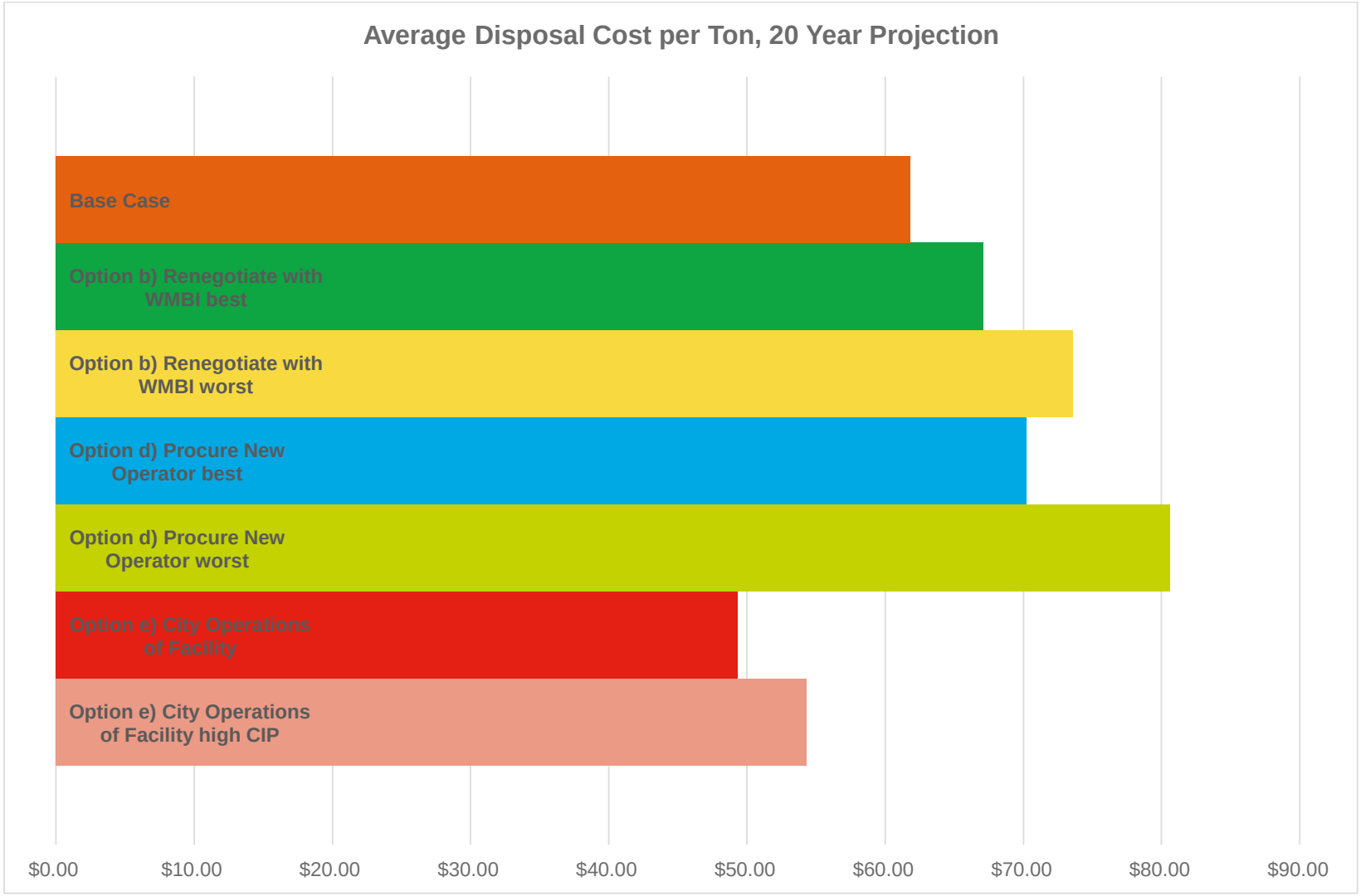
The following figures depict the total net income and the average disposal cost per ton over a 20-year term for best-case and worst-case scenarios for the three operational options evaluated.

Figure 1 – Total Net Income for a 20-year Term



The total net income is negative due to financial projections not including full solid waste rate revenues. The values shown are 20-year net expenses for each option. Because of the negative projections, a scenario is more favorable the closer it is to zero.

Figure 2 - Average Cost Per Ton for a 20-year Term



ATTACHMENT A

Operational Efficiencies and Feasibility Evaluation Matrix

McKay Bay Facility Operational Efficiencies and Feasibility
Evaluation Matrix Summary

		Preliminary Ranking[1,2]	Deal Breakers			
Operational Options			Significant Increase to SW Rate Structure	Significant Increase to Environmental Risk	Significant Increase to Legal Risk	Control of Waste Disposal
Deal Breaker Thresholds			>25% Rate Increase	Loss of Permits or Facility Shut Down	Evaluated Case by Case	Loss of Long-Term Disposal Facility
a) Continue with current O&M with WMBI	Evaluation Rank[1]	**4**	Pass	Questionable	Pass	Pass
	Notes/Comments		No change except affect of contractual CPI Adjustments	Possible loss of permit with continued violations, but unlikely.	Unlikely	Continued control of disposal Facility
Order of Magnitude Comparison	Net Benefit Less Risk[2]	($102,900,000)				
b) Renegotiate O&M with WMBI	Evaluation Rank[1]	**2**	Pass	Pass	Pass	Pass
	Notes/Comments		Possible increase to SW Rates, but likely not significant	Possible loss of permit with continued violations, but unlikely	Unlikely	Continued control of disposal Facility
Order of Magnitude Comparison	Net Benefit Less Risk[2]	($75,200,000)				
c1) Sale of or Shut Down Facility and contract for disposal at a WTE Facility	Evaluation Rank[1]	**5**	Pass	Pass	Pass	Fail
	Notes/Comments	May include deal breaker	Possible increase to SW Rates, but likely not significant	Land and possible remediation would likely remain City's responsibility, but not a significant risk.	Coordination/ agreement required with transfer station and Facility, but not a significant risk.	Would require long term contract for disposal option and long term planning. Could lose disposal option at end of term.
Order of Magnitude Comparison	Net Benefit Less Risk[2]	($6,694,000)				
c2) Shut Down Facility and contract for landfill disposal	Evaluation Rank[1]	**6**	Pass	Pass	Questionable	Fail
	Notes/Comments	May include deal breaker	Possible increase to SW Rates, but likely not significant	Land and possible remediation would likely remain City's responsibility, but not a significant risk.	Shift to non-sustainable methods and possible political optics. Coordination/ agreement required with transfer station and Facility, but not a significant risk.	Would require long term contract for disposal option and long term planning. Could lose disposal option at end of term. Rates subject to market conditions.
Order of Magnitude Comparison	Net Benefit Less Risk[2]	($71,344,000)				
d) Procurement of alternative O&M Contractor	Evaluation Rank[1]	**3**	Pass	Pass	Pass	Pass
	Notes/Comments		Possible increase to SW Rates, but likely not significant	Possible loss of permit with permit violations, but unlikely	Unlikely	Continued control of disposal Facility
Order of Magnitude Comparison	Net Benefit Less Risk[2]	($85,350,000)				
e) City O&M of Facility	Evaluation Rank[1]	**1**	Pass	Pass	Pass	Pass
	Notes/Comments		Likely no change or possible reduction in SW Rate	Responsibility and control of compliance would be with City.	Unlikely	Continued control of disposal Facility
Order of Magnitude Comparison	Net Benefit Less Risk[2]	($24,950,000)				

Notes:

[1]Ranking focused on overall benefits and risks, not only estimated values.

[1]Preliminary ranking, subject to change from workshop discussions.

[2]Net Benefit Less Risk based on estimated values for all identified benefits and risks.

[2]Estimated values are scale of magnitude estimates, middle of range.

[2]Many benefits and risks are not quantifiable at this time and therefore not included in estimated value totals.

[2]Estimated values are not adjusted for term of item or net present value.

McKay Bay Facility Operational Efficiencies and Feasibility
Evaluation Matrix

Option a) Continue with current O&M with WMBI

Rank **4**
Net Benefit Less Risk **($102,900,000)**

BENEFITS

Operational Benefits	*1*	*2*	*3*			Magnitude
Benefits	WMBI responsible for all maintenance and repairs, therefore no additional cost to the Facility.	Consistent operator with long-term facility knowledge resulting in efficient facility operation.	Familiar with City operations and contacts			
Estimated $ Value	*Not Quantifiable*	*Not Quantifiable*	*Not Quantifiable*			$ -
Benefit Probability	Moderate	High	Low			
Financial Benefits	*1*					
Benefits	Once bonds paid, City can save those funds for future Facility needs/costs (per year).					
Estimated $ Value	*$ 13,500,000*					$ 13,500,000
Benefit Probability	High					
Legal Benefits	*1*					
Benefits	Agreement in place until 2032.					
Estimated $ Value	*Not Quantifiable*					$ -
Benefit Probability	Low					
Environmental Benefits						
Benefits						
Estimated $ Value						$ -
Benefit Probability						
Notes:						**$ 13,500,000**

Benefit Probability Key:
Low
Moderate
High

RISKS

Operational Risks	*1*	*2*	*3*	*4*	*5*	Magnitude
Risks	Non-performance of contractual maintenance resulting in loss of asset value due to accelerated depreciation of Facility. [1]	Operating fee escalation over the term of the Agreement may be significant (over agreement term).[2]	Continued Operational Inefficiencies: Reduced availability resulting in increased waste diversions (per year).	Continued Operational Inefficiencies: Reduced electrical generation resulting in reduced electrical revenues (per year).[3]	Continued Operational Inefficiencies: Excessive reagent usage resulting in increased pass-through reagent costs (per year).	
Estimated $ Value	*$ 25,000,000*	*$ 10,000,000*	*$ 500,000*	*$ 500,000*	*$ 150,000*	$ 36,150,000
Risk Probability	Moderate	High	High	Low	Moderate	
Deal Breaker						
Financial Risks	*1*	*2*	*3*			
Risks	Loss of Operator liability with completion of debt service payments. (Renegotiate, terminate, or get new bonds to address)	UCC Clause - High cost equipment failure will likely be responsibility of City	Operator Parent Company debt issues or sale resulting inadequate funding of O&M at the Facility.			
Estimated $ Value	*$ 20,000,000*	*$ 5,000,000*	*Not quantifiable*			$ 25,000,000
Risk Probability	High	Low	Low			
Deal Breaker						
Legal Risks	*1*	*2*				
Risks	Legal risk for contract default, non-performance.	Legal risk for Contractor bankruptcy.				
Estimated $ Value	*$ 500,000*	*$ 750,000*				$ 1,250,000
Risk Probability	Low	Low				
Deal Breaker						
Environmental Risks	*1*	*2*	*3*	*4*		
Risks	Continued exceedances and violations resulting in Loss of Permit and temporary or permanent halt in operation of Facility.[4]	Change in Law resulting in capital costs i.e. upgrade to APCS.[5]	Continued exceedances and violations resulting in Penalties, Fines, Consent Orders, and/or Capital Projects.[6]	Prolonged exceedances can affect City's ability to get other permits or renewals (several different permits)		
Estimated $ Value	*$ 26,000,000*	*$ 22,000,000*	*$ 6,000,000*	*Not Quantifiable*		$ 54,000,000
Risk Probability	Low	Low	Low	Low		
Deal Breaker						
Notes:						**$ 116,400,000**

Risk Probability Key:
Low
Moderate
High

[1] Large range of $5M-$50M based on fluctuating performance of Operator.

[2] Rough escalation to 2032 (end of term). Does account for escalation of other options, mainly because tipping fee starting higher, then escalating.

[3] Electrical revenue reduction: 30 kwh/ton reduction in electrical efficiency *$0.0597 $/ton *310K tons *90%.

[4] Facility shut down due to permit issues - $10M lost revenues, $15M diverted waste disposal cost, $0.5M consulting to get permit back, $0.5M misc.

[5] APCS improvements like SCR installation cost worst case, other methods may be appropriate and less costly ($11M).

[6] Consent order fines $50K but capital projects required can be in the millions (ie new gas guns).

McKay Bay Facility Operational Efficiencies and Feasibility
Evaluation Matrix

Option b) Renegotiate O&M with WMBI

Rank **2**

Net Benefit Less Risk **($75,200,000)**

BENEFITS

Operational Benefits	*1*	*2*	*3*			Magnitude
Benefits	Make O&M Agreement Improvements: Develop more specific CIP terms and contractual requirements. Assign penalties for diverted waste/ revise performance indicators and penalties (per year).[1]	Equalize the BOF and EOF at a reasonable rate increasing the incentive to burn more waste. Current structure does not provide incentive. Turbine is steam limited so operating at lower loads maximizes kWT.				
Estimated $ Value	*$ 500,000*	*Not Quantifiable*				$ 500,000
Benefit Probability	Moderate	Moderate				
Financial Benefits	*1*	*2*	*3*			
Benefits	Make O&M Agreement Improvements: Reduce or maintain same operation fees, if possible (per year). Put savings into Capital improvements.[2]	Make O&M Agreement Improvements: Include terms for when PPA expires in 2026.	Make O&M Agreement Improvements: Add clause for WMBI to receive 100% of electricity revenue above 490 kWT. Potential $400K @ 520 kWT. Could gain on availability and throughput			
Estimated $ Value	*$ 2,100,000*	*Not Quantifiable*	*$ -*			$ 2,100,000
Benefit Probability	Moderate	Moderate	Moderate			
Legal Benefits	*1*					
Benefits	Make O&M Agreement Improvements: Reduce legal risks (default parameters, guarantor requirements)					
Estimated $ Value	*Not Quantifiable*					$ -
Benefit Probability	Moderate					
Environmental Benefits	*1*					
Benefits	Make O&M Agreement Improvements: Environmental or permit requirements.					
Estimated $ Value	*Not Quantifiable*					$ -
Benefit Probability	Low					
						$ 2,600,000

Benefit Probability Key:
Low
Moderate
High

Notes:
[1]Based on 2017 unrecovered diverted waste costs to City.
[2]WMBI could recapture 7.5% OHP on Capital Projects. Reduce or revise escalation rates.

RISKS

Operational Risks	*1*	*2*	*3*	*4*		Magnitude
Risks	Non-performance of contractual maintenance resulting in loss of asset value due to accelerated depreciation of Facility. [1]	Continued Operational Inefficiencies: Reduced availability resulting in increased waste diversions (per year).	Continued Operational Inefficiencies: Reduced electrical generation resulting in reduced electrical revenues (per year).[2]	Continued Operational Inefficiencies: Excessive reagent usage resulting in increased pass-through reagent costs (per year).		
Estimated $ Value	*$ 25,000,000*	*$ 500,000*	*$ 500,000*	*$ 150,000*		$ 26,150,000
Risk Probability	Moderate	Moderate	Low	Moderate		
Deal Breaker						
Financial Risks	*1*	*2*	*3*	*4*	*5*	
Risks	Negotiating better terms will likely require increased capital infusion to Facility (per year).[3]	Potential increase in operational cost due to shift in risk or more defined contractual requirements - Capital Improvements (per year)	Incur Contract negotiation cost (engineering and legal consulting)	Operator Parent Company debt issues or sale resulting inadequate funding of O&M at the Facility.	Operator guarantor inadequacy.	
Estimated $ Value	*$ 2,100,000*	*Included in non-performance risk estimate*	*$ 200,000*	*Not quantifiable*	*Not quantifiable*	$ 2,300,000
Risk Probability	High	High	High	Moderate	Moderate	
Deal Breaker						
Legal Risks	*1*	*2*				
Risks	Legal risk for contract default, non-performance.	Legal risk for Contractor bankruptcy.				
Estimated $ Value	*$ 500,000*	*$ 750,000*				$ 1,250,000
Risk Probability	Low	Low				
Deal Breaker						
Environmental Risks	*1*	*2*	*3*	*4*		
Risks	Continued exceedances and violations resulting in Loss of Permit and temporary or permanent halt in operation of Facility.[4]	Change in Law resulting in capital costs i.e. upgrade to APCS.[5]	Continued exceedances and violations resulting in Penalties, Fines, Consent Orders, and/or Capital Projects.[6]	Prolonged exceedances can affect City's ability to get other permits or renewals (several different permits)		
Estimated $ Value	*$ 26,000,000*	*$ 22,000,000*	*$ 100,000*	*Not Quantifiable*		$ 48,100,000
Risk Probability	Low	Low	Low	Low		
Deal Breaker						
						$ 77,800,000

Risk Probability Key:
Low
Moderate
High

Notes:
[1]Large range of $5M-$50M based on fluctuating performance of Operator.
[2]Electrical revenue reduction: 30 kwh/ton reduction in electrical efficiency *$0.0597 $/ton *310K tons *90%.
[3]Reduction in Operator fee of approximate $10/ton.
[4]Facility shut down due to permit issues - $10M lost revenues, $15M diverted waste disposal cost, $0.5M consulting to get permit back, $0.5M misc.
[5]APCS improvements like SCR installation cost worst case, other methods may be appropriate and less costly ($11M).
[6]Consent order fines $50K - $100K. Capital projects assumed to be included in planned capital expenditures.

McKay Bay Facility Operational Efficiencies and Feasibility
Evaluation Matrix

Rank **5**

Option c1) Sale of or Shut Down of Facility and contract for disposal at a WTE Facility **Net Benefit Less Risk** **($6,694,000)**

BENEFITS

Operational Benefits						Magnitude
Benefits						
Estimated $ Value						$ -
Benefit Probability						
Financial Benefits	*1*	*2*				
Benefits	Revenue from Facility Sale (Bond payoff and Termination Fee) (one time)[1]	Potential for reduction in waste disposal fee, especially in the short term (per year)[2]	City no longer responsible or at risk for long-term cost, operation, or care of Facility (direct pay and pass through costs, consulting fees) (per year)[3]			
Estimated $ Value	*$ 43,500,000*	*$ 2,100,000*	*$ 2,500,000*			$ 48,100,000
Benefit Probability	Moderate	Moderate	Moderate			
Legal Benefits						
Benefits						
Estimated $ Value						$ -
Benefit Probability						
Environmental Benefits	*1*					
Benefits	Assign environmental responsibility to others (permit fees, reporting, and testing) (per year)					
Estimated $ Value	*Included in Pass-Through Costs*					$ -
Benefit Probability	Moderate					

$ 48,100,000

Notes:

[1]Assume revenues would at least pay for Bond Payoff in 2019 and termination fee.

[2]Difference in current fee paid to Operator and cost for hauling and tipping fee at Pinellas.

[3]Costs identified in updated Proforma.

Benefit Probability Key:
- Low
- Moderate
- High

RISKS

Operational Risks	*1*	*2*	*3*	*4*	*5*	Magnitude
Risks	Lose control of disposal Facility and methods.	Subject to flow control from Hillsborough County and lose ability for City to operate their own solid waste disposal system.	City loses all control over operational characteristics or reliability of facility.	WMBI may operate less effectively during transition or may need additional enforcement or supervision to ensure they follow Agreement during transition. (additional consulting fees to help enforce contract)	Sale of property would results in loss of property control among neighboring City properties.	
Estimated $ Value	*Not Quantifiable*	*Not Quantifiable*	*Not Quantifiable*	*$ 100,000*	*Not Quantifiable*	$ 100,000
Risk Probability	High	Low	High	Moderate	Moderate	
Deal Breaker	Fail	Fail				
Financial Risks	*1*	*2*	*3*	*4*	*5*	
Risks	Bond payment completion likely required (assume occurs in 2019)	Lose revenue streams from electricity and RECs (per year)	Lose revenue streams from metals recovery (per year)	Possible loss of revenue stream from metals recovery from further ash processing (per year, in future).	Long term disposal and hauling rates may be higher than current Agreement and subject to market conditions (per year)[1]	
Estimated $ Value	*$ 40,730,000*	*$ 8,248,000*	*$ 416,000*	*$ 400,000*	*$ 2,000,000*	$ 51,794,000
Risk Probability	Moderate	High	High	High	Moderate	
Deal Breaker						
Legal Risks	*1*	*2*	*3*	*4*	*5*	
Risks	Contract Termination Penalties (may not apply if sell Facility to WTI)	Likely require significant legal involvement for termination, transaction, and development of long term disposal agreement.	Bond holder approval of change: Additional effort and fees for approval or early bond payoff.	Transfer or terminate current Facility agreements to the new Facility Owner.	Potential land sale or lease complexities and negotiation due to multiple ownership and/or existing leases/agreements.	
Estimated $ Value	*$ 2,500,000*	*$ 150,000*	*Assume Bond Payoff*	*$ 150,000*	*$ 100,000*	$ 2,900,000
Risk Probability	High	High	High	Moderate	Moderate	
Deal Breaker						
Environmental Risks	*1*	*2*	*3*	*4*		
Risks	City would still be liable for environmental risk of property if the City maintains land ownership.	City would still be liable for some environmental risk of Operator and operations if the City maintains land ownership.	City would remain responsible for Pond 5 sediment conditions.	Could be detrimental to City meeting State Recycling Goal		
Estimated $ Value	*Not Quantifiable*	*Not Quantifiable*	*Not Quantifiable*	*Not Quantifiable*		$ -
Risk Probability	Moderate	Moderate	Moderate	Low		
Deal Breaker						

$ 54,794,000

Notes:

[1]Difference in current fee paid to Operator and cost for hauling and tipping fee at Hillsborough.

Risk Probability Key:
- Low
- Moderate
- High

McKay Bay Facility Operational Efficiencies and Feasibility
Evaluation Matrix

Rank **6**

Option c2) Shut Down of Facility and contract for disposal at Landfill **Net Benefit Less Risk** **($71,344,000)**

BENEFITS

Operational Benefits						Magnitude
Benefits						
Estimated $ Value						$ -
Benefit Probability						
Financial Benefits	*1*	*2*				
Benefits	Potential for reduction in waste disposal fee, especially in the short term (per year, Heart of Florida $30/ton)[1]	City no longer responsible or at risk for long-term cost, operation, or care of Facility (direct pay and pass through costs, consulting fees) (per year)[2]				
Estimated $ Value	*$ 8,700,000*	*$ 2,500,000*				$ 11,200,000
Benefit Probability	Moderate	High				
Legal Benefits						
Benefits						
Estimated $ Value						$ -
Benefit Probability						
Environmental Benefits	*1*	*2*				
Benefits	Assign environmental responsibility to others (permit fees, reporting, and testing) (per year)	No longer responsible for permitting of waste disposal.				
Estimated $ Value	*Included in Pass-Through Costs*	*Included in Pass Through*				$ -
Benefit Probability	High	High				
Notes:						**$ 11,200,000**

[1]Difference in current fee paid to Operator and cost for hauling and tipping fee at Heart of Florida Landfill.

[2]Costs identified in updated Proforma.

Benefit Probability Key:
- Low
- Moderate
- High

RISKS

Operational Risks	*1*	*2*	*3*			Magnitude
Risks	Lose control of disposal Facility and methods.	Subject to flow control from Hillsborough County and lose ability for City to operate their own solid waste disposal system.	WMBI may operate less effectively during transition or may need additional enforcement or supervision to ensure they follow Agreement during transition. (additional consulting fees to help enforce contract)			
Estimated $ Value	*Not Quantifiable*	*Not Quantifiable*	*$ 100,000*			$ 100,000
Risk Probability	High	Low	Moderate			
Deal Breaker	Fail	Fail				
Financial Risks	*1*	*2*	*3*	*4*	*5*	
Risks	Bond payment completion likely required (assume occurs in 2019)	Lose revenue streams from electricity and RECs, metals recovery and future metals recovery from further ash processing (per year)	Cost for Closure of Facility[1]	Transfer Station or Hauling Additions or Improvements Required for Long Distance Hauling (Infrastructure Improvements)[2]	Volatility and reliability of landfill disposal long term[3]	
Estimated $ Value	*$ 40,730,000*	*$ 9,064,000*	*$ 30,000,000*	*Not Quantifiable*	*Not Quantifiable*	$ 79,794,000
Risk Probability	Moderate	High	Moderate	Moderate	High	
Deal Breaker						
Legal Risks	*1*	*2*	*3*			
Risks	Contract Termination Penalties (may not apply if sell Facility to WTI)	Likely require significant legal involvement for termination, transaction, and development of long term disposal agreement.	Possible political optics: Regression in disposal method, as landfilling is not a renewable or sustainable method.			
Estimated $ Value	*$ 2,500,000*	*$ 150,000*	*Not Quantifiable*			$ 2,650,000
Risk Probability	High	High	Moderate			
Deal Breaker			Fail			
Environmental Risks	*1*	*2*	*3*			
Risks	City would still be liable for environmental risk of property if the City maintains land ownership.	City would remain responsible for Pond 5 sediment conditions.	Could be detrimental to City meeting State Recycling Goal			
Estimated $ Value	*Not Quantifiable*	*Not Quantifiable*	*Not Quantifiable*			$ -
Risk Probability	Moderate	Moderate	Moderate			
Deal Breaker						
Notes:						**$ 82,544,000**

[1]Estimated cost for closure of Facility, as estimated during Risk Assessment.

[2]Additional transfer station may be required, as well as purchase of long-haul tractor trailers.

[3]Heart of Florida Landfill may be unreliable long-term disposal option. Other closer landfills may not accept all of City's waste.

Risk Probability Key:
- Low
- Moderate
- High

McKay Bay Facility Operational Efficiencies and Feasibility
Evaluation Matrix

Rank **3**

Option d) Procurement of Alternative O&M Contractor **Net Benefit Less Risk** **($85,350,000)**

BENEFITS

Operational Benefits	*1*	*2*	*3*	*4*		Magnitude
Benefits	Make O&M Agreement Improvements: Develop more specific CIP terms and contractual requirements. Assign penalties for diverted waste/ revise performance indicators and penalties.	Procurement of a new vendor would change operating practices and could improve facility condition.	Initiate needed Facility maintenance and improvements.	Make O&M Agreement Improvements: Increase electricity revenue shares and metals recovery revenue shares.[1]		
Estimated $ Value	*$ 500,000*	*Not Quantifiable*	*$ -*	*$ -*		$ 500,000
Benefit Probability	Moderate	High	High	Low		
Financial Benefits	*1*	*2*	*3*			
Benefits	Make O&M Agreement Improvements: Reduce or maintain same operation fees, if possible (per year). Put savings into Capital improvements.	Make O&M Agreement Improvements: Include terms for when PPA expires in 2026.	Could negotiate lower rates or lower escalation to improve City cash flows.			
Estimated $ Value	*$ 2,100,000*	*Not Quantifiable*	*$ -*			$ 2,100,000
Benefit Probability	Moderate	Moderate	Moderate			
Legal Benefits	*1*					
Benefits	Make O&M Agreement Improvements: Reduce legal risks (default parameters, guarantor requirements)					
Estimated $ Value	*Not Quantifiable*					$ -
Benefit Probability	Moderate					
Environmental Benefits	*1*					
Benefits	Make O&M Agreement Improvements: Environmental or permit requirements.					
Estimated $ Value	*Not Quantifiable*					$ -
Benefit Probability	Moderate					
						$ 2,600,000

Benefit Probability Key:
Low
Moderate
High

Notes:
[1]Uncertain revisions for revenue sharing and likely counteracted with other costs or risks.

PRELIMINARY DRAFT
DO NOT DISTRIBUTE

RISKS

Operational Risks	*1*	*2*				Magnitude
Risks	Limited options for qualified Contractor (less competition may result in higher fees)	WMBI may operate less effectively during transition or may need additional enforcement or supervision to ensure they follow Agreement during transition. (additional consulting fees to help enforce contract)				
Estimated $ Value	*Not Quantifiable*	*$ 100,000*				$ 100,000
Risk Probability	Moderate	Moderate				
Deal Breaker						
Financial Risks	*1*	*2*	*3*			
Risks	City may need to invest significant capital funds into Facility to attract bidders and reduce O&M fee.[1]	Potential increase in operational cost due to shift in risk or more defined contractual requirements - Capital Improvements (per year)	Incur Contract negotiation cost (engineering and legal consulting)			
Estimated $ Value	*$ 63,000,000*	*Included in Capital Projects*	*$ 200,000*			$ 63,200,000
Risk Probability	High	High	High			
Deal Breaker						
Legal Risks	*1*	*2*	*3*	*4*	*5*	
Risks	Contract Termination Penalties	Bond holder approval of change: Additional effort and fees for approval or early bond payoff (approval).	Contract Termination legal costs	Some compromises during negotiations may increase risk to City.	Decreasing City risks therefore Increasing risks for Contractor would limit Contractor interest/response.	
Estimated $ Value	*$ 2,500,000*	*$ 100,000*	*$ 50,000*	*$ -*	*Not Quantifiable*	$ 2,650,000
Risk Probability	High	High	High	Moderate	Moderate	
Deal Breaker						
Environmental Risks	*1*					
Risks	Change in Law resulting in capital costs i.e. upgrade to APCS.[2]					
Estimated $ Value	*$ 22,000,000*					$ 22,000,000
Risk Probability	Low					
Deal Breaker						
						$ 87,950,000

Risk Probability Key:
Low
Moderate
High

Notes:
[1]Risk Assessment estimate, to be updated.
[2]APCS improvements like SCR installation cost worst case, other methods may be appropriate and less costly ($11M).

McKay Bay Facility Operational Efficiencies and Feasibility
Evaluation Matrix

Option e) City O&M of Facility

Rank **1**

Net Benefit Less Risk **($24,950,000)**

BENEFITS

Operational Benefits	*1*	*2*	*3*	*4*		Magnitude
Benefits	Control of operations, maintenance, and capital projects, putting City in control of the longevity of the Facility.	Initiate needed Facility maintenance and improvements.	Unified operations of site and Department, increasing efficiency	Less expense for Facility maintenance and improvements with the City managing the projects (at least 15% mark-up for Contractor to manage projects).		
Estimated $ Value	*Not Quantifiable*	*Not Quantifiable*	*Not Quantifiable*	*$ -*		$ -
Benefit Probability	High	Moderate	Moderate	Moderate		
Financial Benefits	*1*	*2*	*3*	*4*		
Benefits	Possible reduction in annual facility budget, or use of funds for capital projects.[1]	Control of Facility operation and receive 100% of Electrical Revenues (per year).	Control of metals recovery and receive 100% of metals revenue (per year).	Financially prepare for current PPA expiration, as will have more control of operational expenditures.		
Estimated $ Value	*$ 4,000,000*	*$ 900,000*	*$ 400,000*	*Not Quantifiable*		$ 5,300,000
Benefit Probability	High	High	High	Moderate		
Legal Benefits	*1*					
Benefits	No longer concern for WMBI liability change once bonds paid off					
Estimated $ Value	*Not Quantifiable*					$ -
Benefit Probability	High					
Environmental Benefits	*1*	*2*				
Benefits	Full control and responsibility of environmental testing and reporting.	Full control of operations affecting environmental compliance.				
Estimated $ Value	*Not Quantifiable*	*Not Quantifiable*				$ -
Benefit Probability	High	High				
						$ 5,300,000

Benefit Probability Key:
- Low
- Moderate
- High

Notes:

[1]Estimated based on City's estimated cost to operate Facility compared to current cost of WMBI.

RISKS

Operational Risks	*1*	*2*	*3*			Magnitude
Risks	City responsible for staffing and currently personnel availability is limited and turnover is high.	WMBI may operate less effectively during transition or may need additional enforcement or supervision to ensure they follow Agreement during transition. (additional consulting fees to help enforce contract)	Licensing Fees, including legal transfer, one time fee			
Estimated $ Value	*Not Quantifiable*	*$ 100,000*	*$ 500,000*			$ 600,000
Risk Probability	Moderate	Moderate	Moderate			
Deal Breaker						
Financial Risks	*1*	*2*	*3*	*4*		
Risks	Major Facility maintenance will be due in the short term and will become the responsibility of City (per year)[1].	May not be allowed until bonds paid off resulting in early bond payoff or delay in operational change.	Transition Plan Development	Transition Support		
Estimated $ Value	*$ 4,000,000*	*$ -*	*$ 500,000*	*$ 500,000*		$ 5,000,000
Risk Probability	Moderate	Low	High	High		
Deal Breaker						
Legal Risks	*1*	*2*	*3*	*4*		
Risks	Contract Termination Penalties	Bond holder approval of change: Additional effort and fees for approval or early bond payoff (approval).	Contract Termination legal costs	City procurement and purchasing guidelines would be required		
Estimated $ Value	*$ 2,500,000*	*$ 100,000*	*$ 50,000*	*$ -*		$ 2,650,000
Risk Probability	High	High	High	Moderate		
Deal Breaker						
Environmental Risks	*1*					
Risks	Change in Law resulting in capital costs i.e. upgrade to APCS.[2]	City would be responsible for all compliance and bear all responsibility for penalties and fines	Additional responsibility regarding permit reporting[3]			
Estimated $ Value	*$ 22,000,000*	*Not Quantifiable*	*$ -*			$ 22,000,000
Risk Probability	Low	High	High			
Deal Breaker						
						$ 30,250,000

Risk Probability Key:
- Low
- Moderate
- High

Notes:

[1]City could allocate O&M savings for capital projects and maintenance, or could include previous debt service payments.

[2]APCS improvements like SCR installation cost worst case, other methods may be appropriate and less costly ($11M).

[3]City would also be responsible for regular Facility reporting required per permit.

ATTACHMENT B

Long-Term Facility Capital Project Estimates

Long-Term Facility Capital Project Estimate

EQUIPMENT	QTY	In Service	Normal Life (years)	End of Estimated Life	Risk H = < 10 years M = > 10 years	Corrective Action 2019 Refurbishment	Cost (each)	Total Cost	Operations Impact* Downtime days	Processing %	Generation %	Comments
Current Year												
Main Transformer 69 KV - 15KV	1	1984	35	2019	H	Replace	$ 700,000	$ 700,000	7	0%	0%	Replacement availability review should be performed
Station Service Transformer 15KV - 5 KV	1	1984	35	2019	H	Replace	$ 200,000	$ 200,000	2	0%	0%	Replacement availability review should be performed
Generator	1	1985	30	2015	H	Rewind Stator	$ 1,500,000	$ 1,500,000	150	50%	0%	Consider having spare rotor constructed
Turbine	1	1985	30	2015	M	Refurbish	$ 3,000,000	$ 3,000,000	500	50%	0%	If not refurbished, consider having spare rotor constructed
Main Condenser	1	1985	30	2015	H	Retube	$ 500,000	$ 500,000	20	50%	0%	Leaks can be plugged up to 5% of total number of boiler tubes
Cooling Tower	1	1985	Perpetual repair		M	Replace	$ 1,500,000	$ 1,500,000	45	0%	0%	Vulnerable to high winds and fire
Deaerator	2	1985	35	2020	H	Replace	$ 250,000	$ 500,000	90	60%	50%	Stress cracking over time occurs
Bypass Condenser (titanium tubes)	1	1985	40	2025	M	Replace	$ 1,000,000	$ 1,000,000	0	85%	85%	Waterboxes and tubesheets will fail first
Circulating Water Piping (buried feet)	300	1985	35	2020	H	Replace	$ 1,000,000	$ 1,000,000	14	0%	0%	Piping corrosion occurs internally and externally
13.8 KV Switchgear/Switchyard	1	1984	50	2034	M				14	0%	0%	Owned by TECO, covered in TECO maintenance Contract
5 KV Switchgear Room	1	1985	35	2020	M	Replace	$ 1,500,000	$ 1,500,000	45	0%	0%	Based on catastrophic loss, includes TG metering and relays
Boiler Room MCC	1	1985	35	2020	H	Refurbish	$ 3,000,000	$ 3,000,000	30	0%	0%	Highest anticipated cost of total loss of room. Includes DCS refurbishment.
Boiler Feed Pumps	3	1985	35	2020	H	Replace	$ 750,000	$ 2,250,000				Current 9 stage pumps are subject to failure any time. Needs redesign.
Water Treatment	1	2000	20	2020	M	Replace	$ 3,000,000	$ 3,000,000	30	0%	0%	
Room 322 Switchgear	1	2000	40	2040	M				60	0%	0%	Highest anticipated cost of total loss of room
East Electrical Room	1	2000	40	2040	M				45	0%	0%	Contains L3/4 ID fan and compressor starters
West Electrical Room	1	2000	40	2040	M	Reconfigure	$ 300,000	$ 300,000	45	50%	50%	Contains L1/2 ID fan starters
Continuous Emission Monitoring System	4	2000	20	2020	H	Replace	$ 350,000	$ 1,400,000	10	50%	50%	
Refuse Pit Cranes	2	1985/2000	40	2025	H	Replace	$ 1,500,000	$ 3,000,000	240	0%	100%	Trolley replaced in 2000
Building Upgrades and Roof Repairs	1	1985/2000	40	2025	H	Refurbish	$ 2,500,000	$ 2,500,000	0	100%	100%	
Boiler	4	2000	30	2030	M	Increased Repairs	$ 5,000,000	$ 20,000,000	180	75%	75%	Potentially includes gas guns, economizer and SH tubes, expellers, screen tubes, other misc small items.
APC (FFH, SDA, Flues)	4	2000	20	2020	M	Refurbish	$ 2,500,000	$ 10,000,000	180	75%	75%	
Ash Handling System	1	2000	20	2020	H	Replace	$ 4,000,000	$ 4,000,000	0	100%	100%	Continue processing providing scalper building in operation
Ferrous Metals Recovery System	1	2000	20	2020	H	Refurbish	$ 500,000	$ 500,000	0	100%	100%	Continue processing providing scalper building in operation
Non-Ferrous Metals Recovery System	1	2009	20	2029	H	Refurbish	$ 500,000	$ 500,000	0	100%	100%	Continue processing providing scalper building in operation

**Operations Impact estimating Processing and Generation Percentages of regular production during replacement or repairs.*

Construction Cost Totals (2018 Dollars)	$	61,850,000
Preliminary Engineering / Permitting	$	2,000,000
RFQ/RFP Development	$	1,000,000
Legal	$	500,000
Demolition	$	3,000,000
Startup / Spare Parts	$	3,500,000
Engineering Oversight	$	2,000,000
Sub Total	$	73,850,000
Contingency @ 10%	$	7,385,000
Total Project Costs	**$**	**81,235,000**
Annual Amortized Cost (20 yrs, 4%)	$	5,977,413
Remaining Bond Balance in 2019	$	40,730,000
Total Annual Amorized Cost (old and new bonds)	**$**	**8,974,398**

ATTACHMENT C

Base Case Financial Projections

McKay Bay Base Case Proforma

		Term	13 years	Term	20 years	Term	30 years
Total Net Income, $000s			($226,092)		($383,105)		($674,713)
Average Net Disposal Cost Per Ton			$56.10		$61.79		$72.55
NPV Net Income, $000s	**NPV Rate**	3%	($186,412)		($281,240)		($417,937)
	NPV Rate	5%	($165,686)		($234,118)		($317,942)

Base Case

			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
1.	**PRO FORMA**																																
	Solid Waste Generation (tons per year)	*Percentage of MSW*																															
2.	**MSW Processed (tons)**		310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
3.	**Ash Produced during Base O&M Fee (wet tons)**	23%	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800	59,800
	Ash Produced during Excess O&M Fee (wet tons)	23%	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500	11,500
	Net MSW (tons)		238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700
	System Income ($000s)	*Escalation Factor or Percentage of MSW*																															
	WTE Operating Revenues																																
4.	Electrical Generation Rate (kWh/ton)		475	460	475	475	475	475	460	475	475	475	475	460	475	475	475	475	460	475	475	475	475	460	475	475	475	475	460	475	475	475	475
	Net Electrical Generation (mwh/yr)		147,250	142,600	147,250	147,250	147,250	147,250	142,600	147,250	147,250	147,250	147,250	142,600	147,250	147,250	147,250	147,250	142,600	147,250	147,250	147,250	147,250	142,600	147,250	147,250	147,250	147,250	142,600	147,250	147,250	147,250	147,250
5.	Electrical Energy Fee ($/kWh)	1.025	0.0597	0.0612	0.0627	0.0643	0.0659	0.0676	0.0693	0.0710	0.0728	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473
6.	Renewable Energy Credits (RECs) ($/kWh)	1.025	0.0023	0.0024	0.0024	0.0025	0.0025	0.0026	0.0027	0.0027	0.0028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Electric Energy and RECs Revenues		9,133	9,065	9,595	9,835	10,081	10,333	10,257	10,856	11,128	6,964	6,964	6,744	6,964	6,964	6,964	6,964	6,744	6,964	6,964	6,964	6,964	6,744	6,964	6,964	6,964	6,964	6,744	6,964	6,964	6,964	6,964
7.	Ferrous Market Revenue ($/gross ton)	1.025	70	72	74	75	77	79	81	83	85	87	90	92	94	96	99	101	104	107	109	112	115	118	121	124	127	130	133	136	140	143	147
	Ferrous Market Revenue	3.1%	601	616	631	647	663	680	697	714	732	750	769	788	808	828	849	870	892	914	937	960	984	1,009	1,034	1,060	1,086	1,114	1,141	1,170	1,199	1,229	1,260
8.	Non-Ferrous Market Revenue ($/gross ton)	1.025	790	810	830	851	872	894	916	939	963	987	1,011	1,037	1,062	1,089	1,116	1,144	1,173	1,202	1,232	1,263	1,295	1,327	1,360	1,394	1,429	1,465	1,501	1,539	1,577	1,617	1,657
	Non-Ferrous Revenues	0.09%	197	202	207	212	217	223	228	234	240	246	252	258	265	271	278	285	292	299	307	315	322	331	339	347	356	365	374	383	393	403	413
	Total WTE Operating Revenues ($1000)		9,930	9,882	10,433	10,694	10,961	11,235	11,182	11,804	12,100	7,960	7,985	7,790	8,036	8,063	8,091	8,119	7,928	8,177	8,208	8,239	8,271	8,083	8,337	8,371	8,406	8,442	8,259	8,517	8,556	8,596	8,637
9.	**Tip Fee Revenues**	*Average Annual Amount*																															
	Tip Fee For MSW																																
	City Tip Fee for Hopper Waste ($/ton)		1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,101	1,102	1,103	1,104	1,105	1,106	1,107	1,108	1,109	1,110	1,111
	Hopper Waste Revenues	41	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
	City Tip Fee for Bulk Waste ($/ton)		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	101	102	103	104	105	106	107	108	109	110
	Bulk Waste Revenues	2,281	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	542	556	570	584	599	614	629	645	661	677	694	712
	Total Tip Fee Revenues (not including MSW Tip Fee)		1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,787	1,802	1,818	1,834	1,851	1,868	1,885	1,903	1,921	1,940	1,959	1,978
	TOTAL WASTE TO ENERGY REVENUES		11,403	11,355	11,906	12,167	12,434	12,708	12,655	13,277	13,572	9,433	9,458	9,263	9,509	9,536	9,564	9,592	9,401	9,650	9,681	10,026	10,073	9,901	10,171	10,222	10,274	10,328	10,162	10,438	10,496	10,554	10,615
	System Expenses ($000s)	*Escalation Factor or Average Annual Amount*																															
10.	**Waste-to-Energy Expenses**																																
	Base O&M Fee ($/ton)	1.025	74.38	76.24	78.15	80.10	82.11	84.16	86.26	88.42	90.63	92.90	95.22	97.60	100.04	102.54	105.10	107.73	110.42	113.18	116.01	118.91	121.89	124.93	128.06	131.26	134.54	137.90	141.35	144.89	148.51	152.22	156.03
	Base O&M Cost (for Net MSW)		14,892	15,264	15,646	16,037	16,438	16,849	17,270	17,702	18,144	18,598	19,063	19,539	20,028	20,528	21,042	21,568	22,107	22,660	23,226	23,807	24,402	25,012	25,637	26,278	26,935	27,608	28,299	29,006	29,731	30,475	31,236
	Excess O&M Fee ($/ton)	1.025	36.10	37.00	37.93	38.88	39.85	40.84	41.87	42.91	43.98	45.08	46.21	47.37	48.55	49.76	51.01	52.28	53.59	54.93	56.30	57.71	59.15	60.63	62.15	63.70	65.30	66.93	68.60	70.32	72.07	73.88	75.72
	Excess O&M Cost		1,390	1,425	1,460	1,497	1,534	1,573	1,612	1,652	1,693	1,736	1,779	1,824	1,869	1,916	1,964	2,013	2,063	2,115	2,168	2,222	2,277	2,334	2,393	2,453	2,514	2,577	2,641	2,707	2,775	2,844	2,915
	Hopper Waste O&M Cost	41	15	16	16	16	17	17	18	18	18	19	19	20	20	21	21	22	22	23	24	24	25	25	26	27	27	28	29	29	30	31	32
	Bulk Waste O&M Cost	2,281	339	348	357	365	375	384	394	403	413	424	434	445	456	468	479	491	504	516	529	542	556	570	584	599	614	629	645	661	677	694	712
11.	Ash Disposal Fee($/ton)	1.025	16.50	16.91	17.34	17.77	18.21	18.67	19.13	19.61	20.10	20.61	21.12	21.65	22.19	22.75	23.31	23.90	24.49	25.11	25.73	26.38	27.04	27.71	28.41	29.12	29.84	30.59	31.35	32.14	32.94	33.77	34.61
	Ash Disposal Cost		1,176	1,206	1,236	1,267	1,299	1,331	1,364	1,398	1,433	1,469	1,506	1,544	1,582	1,622	1,662	1,704	1,746	1,790	1,835	1,881	1,928	1,976	2,025	2,076	2,128	2,181	2,236	2,291	2,349	2,407	2,468
	Total Waste-to-Energy Expenses		17,813	18,258	18,714	19,182	19,662	20,153	20,657	21,173	21,703	22,245	22,802	23,372	23,956	24,555	25,169	25,798	26,443	27,104	27,781	28,476	29,188	29,918	30,666	31,432	32,218	33,023	33,849	34,695	35,563	36,452	37,363
12.	**Pass Through Costs and Direct Pay**																																
	Consumable Chemicals		901	928	956	985	1,014	1,045	1,076	1,108	1,141	1,176	1,211	1,247	1,285	1,323	1,363	1,404	1,446	1,489	1,534	1,580	1,627	1,676	1,726	1,778	1,832	1,887	1,943	2,001	2,062	2,123	2,187
	Utilities		453	731	475	487	500	512	827	538	551	565	579	935	609	624	639	655	1,058	689	706	723	742	760	779	799	819	839	860	881	904	926	949
13.	Ash Transportation Fee	1.025	7.65	7.84	8.04	8.24	8.44	8.66	8.87	9.09	9.32	9.55	9.79	10.04	10.29	10.55	10.81	11.08	11.36	11.64	11.93	12.23	12.54	12.85	13.17	13.50	13.84	14.18	14.54	14.90	15.27	15.66	16.05
	Ash Transportation Cost paid by City		90	92	94	97	99	102	104	107	109	112	115	118	121	124	127	130	133	137	140	144	147	151	155	159	163	167	171	175	179	184	188
	Other Pass Through Costs (Insurance, Testing, etc.)		517	532	548	564	580	597	614	632	651	670	690	710	731	752	774	797	821	845	870	896	924	952	981	1011	1041	1073	1106	1139	1174	1209	1245
	Total Pass Through Costs and Direct Pay		1,960	2,283	2,073	2,132	2,193	2,255	2,621	2,385	2,453	2,523	2,595	3,010	2,745	2,823	2,904	2,986	3,458	3,159	3,250	3,343	3,440	3,539	3,641	3,746	3,854	3,965	4,080	4,197	4,318	4,442	4,570
	Revenue Sharing (electrical and recovered metals)																																
	Ferrous Metals Recovery Revenue Sharing	50%	300	308	316	323	331	340	348	357	366	375	384	394	404	414	424	435	446	457	468	480	492	504	517	530	543	557	571	585	600	615	630
	Non- Ferrous Metals Recovery Revenue Sharing	45%	89	91	93	95	98	100	103	105	108	111	113	116	119	122	125	128	131	135	138	142	145	149	152	156	160	164	168	172	177	181	186
	Electrical Revenue Sharing	10%	913	907	960	984	1,008	1,033	1,026	1,086	1,113	696	696	674	696	696	696	696	674	696	696	696	696	674	696	696	696	696	696	674	696	696	696	696
	Total Revenue Sharing		1,302	1,305	1,368	1,402	1,437	1,473	1,477	1,548	1,587	1,182	1,194	1,185	1,219	1,232	1,246	1,260	1,252	1,288	1,303	1,318	1,334	1,328	1,366	1,383	1,400	1,417	1,413	1,454	1,473	1,492	1,512
14.	**Consulting Fees**																																
	Engineer-of-Record Contract		300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Other Engineering Contracts		150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
	Legal Consultant Contract		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	Total Consulting Fees		500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
	TOTAL WASTE TO ENERGY EXPENSES		21,575	22,346	22,656	23,217	23,792	24,382	25,255	25,607	26,243	26,450	27,091	28,067	28,420	29,110	29,818	30,544	31,653	32,051	32,834	33,637	34,461	35,284	36,173	37,061	37,972	38,906	39,842	40,846	41,853	42,886	43,945
	Net Income Before Debt Service		-10,172	-10,991	-10,750	-11,050	-11,358	-11,674	-12,600	-12,330	-12,670	-17,018	-17,633	-18,804	-18,911	-19,574	-20,255	-20,952	-22,252	-22,401	-23,153	-23,611	-24,389	-25,383	-26,002	-26,839	-27,698	-28,579	-29,680	-30,408	-31,358	-32,332	-33,331
	Net Disposal Cost per Ton (Without Debt Service) ($/Ton)		33	35	35	36	37	38	41	40	41	55	57	61	61	63	65	68	72	72	75	76	79	82	84	87	89	92	96	98	101	104	108
15.	**Debt Service**		13,860	13,859	13,435	13,436																											
	Net Income/Loss		(24,032)	(24,850)	(24,185)	(24,486)	(11,358)	(11,674)	(12,600)	(12,330)	(12,670)	(17,018)	(17,633)	(18,804)	(18,911)	(19,574)	(20,255)	(20,952)	(22,252)	(22,401)	(23,153)	(23,611)	(24,389)	(25,383)	(26,002)	(26,839)	(27,698)	(28,579)	(29,680)	(30,408)	(31,358)	(32,332)	(33,331)
	Net Disposal Cost per Ton (With Debt Service) ($/Ton)		78	80	78	79	37	38	41	40	41	55	57	61	61	63	65	68	72	72	75	76	79	82	84	87	89	92	96	98	101	104	108
	Percent Annual Increase			-3.4%	2.7%	-1.2%	53.6%	-2.8%	-7.9%	2.1%	-2.8%	-34.3%	-3.6%	-6.6%	-0.6%	-3.5%	-3.5%	-3.4%	-6.2%	-0.7%	-3.4%	-2.0%	-3.3%	-4.1%	-2.4%	-3.2%	-3.2%	-3.2%	-3.9%	-2.5%	-3.1%	-3.1%	-3.1%
16.	**WMBI Equivalent Tip Fee Comparison ($/Ton)**		53	54	55	57	58	59	61	62	64	66	67	69	71	72	74	76	78	80	82	84	86	88	90	93	95	97	100	102	105	107	110

Item Notes:

1. Proforma has a 30-year look-ahead starting with calendar year 2018. Underlined years assume T-G outages. For years in red: 2026 is when the PPA expires and 2032 is when the current WMBI Agreement expires.
2. MSW Processed based on Facility Processing Guarantee of 310,000 tons per year. Assumes no increase due to growth that the City would not otherwise divert.
3. Ash % based on FY 2016 - FY 2017 average values.
4. KWh/Ton based on FY 2016 - FY 2017 average and assume degradation and increases around T-G outages.
5. Electrical Energy Fee is based on the actual FY 2017 rate and assumes 2.5% increase per year until the PPA ends in 2026. Upon PPA expiration, fee is reduced to 65% of contracted PPA, with no escalation rate.
6. Renewable Energy Credit is based on the actual FY 2017 rate and is escalated 2.5% as noted in the Seminole PPA. Upon PPA expiration, RECs are assumed not sold.
7. Ferrous Revenue is based on the actual $/gross ton from the Dec 2017 invoice with 2.5%/year escalation. Ferrous % of MSW is based on the FY 2016 - FY 2017 average recovery.
8. Non-Ferrous Revenue is based on the actual $/gross ton from the Nov 2017 invoice with 2.5%/year escalation. Non-Ferrous % of MSW is based on the FY 2017 average recovery.
9. Tip Fee Revenues for hopper and bulk waste are based on actual amounts received average from FY 2012 - FY 2017. Tip fee $/ton is based on actual current City rates without escalation. Tip fee for private MSW loads through the scalehouse is ignored for this model.
10. Base and Excess O&M Fee and Ash Disposal Fee are based on actual FY 2017 rates escalated by their historical last 10 year average escalation factor of approximately 2.5%.
11. Ash Disposal Fee is based on the current fee of $16.50/ton and escalated by 2.5% per year.
12. Pass-Through Costs for chemicals and utilities are calculated on a separate sheet. Utilities costs are direct pay, except for natural gas. All chemicals and others are a pass-through under the WMBI contract.
13. Ash Transportation Fee is based on the City's share of the current fee (due to hauling range), escalated by 2.5% per year, and includes contractor's 5% markup.
14. Consulting fees are estimated at this time.
15. Debt service from Series 2013 and Series 2010 bonds. Bonds are paid off in 2021.
16. WMBI Equivalent Tip Fee Comparison is an adjusted tip fee value (without net ash adjustment) for use in comparing McKay's O&M Fee per ton of MSW with other operating facilities or landfill models.

ATTACHMENT D

Renegotiation with WMBI Best Case Financial Projections

McKay Bay Proforma - Renegotiation with WMBI

			Term	13 years	Term	20 years	Term	30 years
	Total Net Income, $000s			($243,376)		($416,117)		($627,966)
Best Case	**Average Net Disposal Cost Per Ton**			$60.39		$67.12		$67.52
	NPV Net Income, $000s	**NPV Rate**	3%	($197,233)		($301,647)		($400,895)
		NPV Rate	5%	($173,210)		($248,602)		($309,437)

Renegotiation with WMBI

			2019	2020	2021	2022	2023	2024	2025	**2026**	2027	2028	**2029**	2030	2031	**2032**	2033	2034	2035	2036	2037	2038	**2039**	2040	2041	2042	2043	**2044**	2045	2046	2047	2048
1.	***PRO FORMA***																															
	Solid Waste Generation (tons per year)		*Percentage of MSW*																													
2.	***MSW Processed (tons)***		**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**	**310,000**
3.	***Ash Produced (wet tons)***	*23%*	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**	**71,300**
	Net MSW (tons)		**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**	**238,700**
	System Income ($000s)		*Escalation Factor or Percentage of MSW*																													
	WTE Operating Revenues																															
4.	*Electrical Generation Rate (kWh/ton)*		*460*	*460*	*460*	*460*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*
	Net Electrical Generation (mwh/yr)		*142,600*	*142,600*	*142,600*	*142,600*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*
5.	*Electrical Energy Fee ($/kWh)*	*1.025*	*0.0612*	*0.0627*	*0.0643*	*0.0659*	*0.0676*	*0.0693*	*0.0710*	*0.0728*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*
6.	*Renewable Energy Credits (RECs) ($/kWh)*	*1.025*	*0.0024*	*0.0024*	*0.0025*	*0.0025*	*0.0026*	*0.0027*	*0.0027*	*0.0028*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Electric Energy and RECs Revenues		*9,065*	*9,292*	*9,524*	*9,763*	*10,659*	*10,480*	*11,199*	*11,479*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*
7.	*Ferrous Market Revenue ($/gross ton)*	*1.025*	*72*	*74*	*75*	*77*	*79*	*81*	*83*	*85*	*87*	*90*	*92*	*94*	*96*	*99*	*101*	*104*	*107*	*109*	*112*	*115*	*118*	*121*	*124*	*127*	*130*	*133*	*136*	*140*	*143*	*147*
	Ferrous Market Revenue	*3.1%*	*616*	*631*	*647*	*663*	*680*	*697*	*714*	*732*	*750*	*769*	*788*	*808*	*828*	*849*	*870*	*892*	*914*	*937*	*960*	*984*	*1,009*	*1,034*	*1,060*	*1,086*	*1,114*	*1,141*	*1,170*	*1,199*	*1,229*	*1,260*
8.	*Non-Ferrous Market Revenue ($/gross ton)*	*1.025*	*810*	*830*	*851*	*872*	*894*	*916*	*939*	*963*	*987*	*1,011*	*1,037*	*1,062*	*1,089*	*1,116*	*1,144*	*1,173*	*1,202*	*1,232*	*1,263*	*1,295*	*1,327*	*1,360*	*1,394*	*1,429*	*1,465*	*1,501*	*1,539*	*1,577*	*1,617*	*1,657*
	Non-Ferrous Revenues	*0.09%*	*202*	*207*	*212*	*217*	*223*	*228*	*234*	*240*	*246*	*252*	*258*	*265*	*271*	*278*	*285*	*292*	*299*	*307*	*315*	*322*	*331*	*339*	*347*	*356*	*365*	*374*	*383*	*393*	*403*	*413*
	Total WTE Operating Revenues ($1000)		**9,882**	**10,130**	**10,383**	**10,643**	**11,561**	**11,405**	**12,147**	**12,451**	**8,180**	**8,205**	**7,936**	**8,256**	**8,283**	**8,311**	**8,339**	**8,074**	**8,397**	**8,428**	**8,459**	**8,491**	**8,229**	**8,557**	**8,591**	**8,626**	**8,662**	**8,405**	**8,737**	**8,776**	**8,816**	**8,857**
9.	***Tip Fee Revenues***		*Average Annual Amount*																													
	Tip Fee For MSW																															
	City Tip Fee for Hopper Waste ($/ton)		*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,101*	*1,102*	*1,103*	*1,104*	*1,105*	*1,106*	*1,107*	*1,108*	*1,109*	*1,110*
	Hopper Waste Revenues	*41*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*
	City Tip Fee for Bulk Waste ($/ton)		*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*101*	*102*	*103*	*104*	*105*	*106*	*107*	*108*	*109*	*110*
	Bulk Waste Revenues	*2,281*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*230*	*233*	*235*	*237*	*240*	*242*	*244*	*246*	*249*	*251*
	Total Tip Fee Revenues (not including MSW Tip Fee)		**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,477**	**1,482**	**1,486**	**1,490**	**1,494**	**1,499**	**1,503**	**1,507**	**1,512**	**1,516**
	TOTAL WASTE TO ENERGY REVENUES		**11,355**	**11,603**	**11,856**	**12,116**	**13,034**	**12,878**	**13,620**	**13,923**	**9,653**	**9,678**	**9,409**	**9,729**	**9,756**	**9,784**	**9,812**	**9,547**	**9,870**	**9,901**	**9,932**	**9,964**	**9,707**	**10,038**	**10,077**	**10,116**	**10,157**	**9,904**	**10,240**	**10,283**	**10,328**	**10,373**
	System Expenses ($000s)		*Escalation Factor or Average Annual Amount*																													
10.	***Waste-to-Energy Expenses***																															
	Base O&M Fee ($/ton)	*1.025*	*40.00*	*41.00*	*42.03*	*43.08*	*44.15*	*45.26*	*46.39*	*47.55*	*48.74*	*49.95*	*51.20*	*52.48*	*53.80*	*55.14*	*56.52*	*57.93*	*59.38*	*60.86*	*62.39*	*63.95*	*65.54*	*67.18*	*68.86*	*70.58*	*72.35*	*74.16*	*76.01*	*77.91*	*79.86*	*81.86*
	Base O&M Cost (for MSW Processed)		**12,400**	**12,710**	**13,028**	**13,353**	**13,687**	**14,029**	**14,380**	**14,740**	**15,108**	**15,486**	**15,873**	**16,270**	**16,677**	**17,094**	**17,521**	**17,959**	**18,408**	**18,868**	**19,340**	**19,823**	**20,319**	**20,827**	**21,347**	**21,881**	**22,428**	**22,989**	**23,564**	**24,153**	**24,757**	**25,375**
	Excess O&M Fee ($/ton)		*20.00*	*20.50*	*21.01*	*21.54*	*22.08*	*22.63*	*23.19*	*23.77*	*24.37*	*24.98*	*25.60*	*26.24*	*26.90*	*27.57*	*28.26*	*28.97*	*29.69*	*30.43*	*31.19*	*31.97*	*32.77*	*33.59*	*34.43*	*35.29*	*36.17*	*37.08*	*38.01*	*38.96*	*39.93*	*40.93*
	Excess O&M Cost																															
	Hopper Waste O&M Cost	*41*	**8**	**8**	**9**	**9**	**9**	**9**	**9**	**10**	**10**	**10**	**10**	**11**	**11**	**11**	**12**	**12**	**12**	**12**	**13**	**13**	**13**	**14**	**14**	**14**	**15**	**15**	**15**	**16**	**16**	**17**
	Bulk Waste O&M Cost	*2,281*	**182**	**187**	**192**	**197**	**201**	**206**	**212**	**217**	**222**	**228**	**234**	**239**	**245**	**252**	**258**	**264**	**271**	**278**	**285**	**292**	**299**	**306**	**314**	**322**	**330**	**338**	**347**	**355**	**364**	**373**
11.	*Ash Disposal Fee($/ton)*	*1.025*	*16.91*	*17.34*	*17.77*	*18.21*	*18.67*	*19.13*	*19.61*	*20.10*	*20.61*	*21.12*	*21.65*	*22.19*	*22.75*	*23.31*	*23.90*	*24.49*	*25.11*	*25.73*	*26.38*	*27.04*	*27.71*	*28.41*	*29.12*	*29.84*	*30.59*	*31.35*	*32.14*	*32.94*	*33.77*	*34.61*
	Ash Disposal Cost		**1,206**	**1,236**	**1,267**	**1,299**	**1,331**	**1,364**	**1,398**	**1,433**	**1,469**	**1,506**	**1,544**	**1,582**	**1,622**	**1,662**	**1,704**	**1,746**	**1,790**	**1,835**	**1,881**	**1,928**	**1,976**	**2,025**	**2,076**	**2,128**	**2,181**	**2,236**	**2,291**	**2,349**	**2,407**	**2,468**
12.	*Capital Improvement Plan Management Fee*	*12.5%*		**3,919**	**3,919**	**1,959**																										
	Total Waste-to-Energy Expenses		**13,796**	**18,060**	**18,414**	**16,817**	**15,229**	**15,609**	**16,000**	**16,400**	**16,810**	**17,230**	**17,661**	**18,102**	**18,555**	**19,019**	**19,494**	**19,981**	**20,481**	**20,993**	**21,518**	**22,056**	**22,607**	**23,172**	**23,752**	**24,345**	**24,954**	**25,578**	**26,217**	**26,873**	**27,545**	**28,233**
13.	***Pass Through Costs and Direct Pay***																															
	Consumable Chemicals		*928*	*956*	*985*	*1,014*	*1,045*	*1,076*	*1,108*	*1,141*	*1,176*	*1,211*	*1,247*	*1,285*	*1,323*	*1,363*	*1,404*	*1,446*	*1,489*	*1,534*	*1,580*	*1,627*	*1,676*	*1,726*	*1,778*	*1,832*	*1,887*	*1,943*	*2,001*	*2,062*	*2,123*	*2,187*
	Utilities		*731*	*475*	*487*	*500*	*512*	*827*	*538*	*551*	*565*	*579*	*935*	*609*	*624*	*639*	*655*	*1,058*	*689*	*706*	*723*	*742*	*760*	*779*	*799*	*819*	*839*	*860*	*881*	*904*	*926*	*949*
14.	*Ash Transportation Fee*	*1.025*	*7.84*	*8.04*	*8.24*	*8.44*	*8.66*	*8.87*	*9.09*	*9.32*	*9.55*	*9.79*	*10.04*	*10.29*	*10.55*	*10.81*	*11.08*	*11.36*	*11.64*	*11.93*	*12.23*	*12.54*	*12.85*	*13.17*	*13.50*	*13.84*	*14.18*	*14.54*	*14.90*	*15.27*	*15.66*	*16.05*
	Ash Transportation Cost paid by City		*92*	*94*	*97*	*99*	*102*	*104*	*107*	*109*	*112*	*115*	*118*	*121*	*124*	*127*	*130*	*133*	*137*	*140*	*144*	*147*	*151*	*155*	*159*	*163*	*167*	*171*	*175*	*179*	*184*	*188*
	Other Pass Through Costs (Insurance, Testing, etc.)		*532*	*548*	*564*	*580*	*597*	*614*	*632*	*651*	*670*	*690*	*710*	*731*	*752*	*774*	*797*	*821*	*845*	*870*	*896*	*924*	*952*	*981*	*1011*	*1041*	*1073*	*1106*	*1139*	*1174*	*1209*	*1245*
	Total Pass Through Costs and Direct Pay		**2,283**	**2,073**	**2,132**	**2,193**	**2,255**	**2,621**	**2,385**	**2,453**	**2,523**	**2,595**	**3,010**	**2,745**	**2,823**	**2,904**	**2,986**	**3,458**	**3,159**	**3,250**	**3,343**	**3,440**	**3,539**	**3,641**	**3,746**	**3,854**	**3,965**	**4,080**	**4,197**	**4,318**	**4,442**	**4,570**
	Revenue Sharing (electrical and recovered metals)																															
	Ferrous Metals Recovery Revenue Sharing	*50%*	*308*	*316*	*323*	*331*	*340*	*348*	*357*	*366*	*375*	*384*	*394*	*404*	*414*	*424*	*435*	*446*	*457*	*468*	*480*	*492*	*504*	*517*	*530*	*543*	*557*	*571*	*585*	*600*	*615*	*630*
	Non- Ferrous Metals Recovery Revenue Sharing	*45%*	*91*	*93*	*95*	*98*	*100*	*103*	*105*	*108*	*111*	*113*	*116*	*119*	*122*	*125*	*128*	*131*	*135*	*138*	*142*	*145*	*149*	*152*	*156*	*160*	*164*	*168*	*172*	*177*	*181*	*186*
	Electrical Revenue Sharing	*10%*	*907*	*929*	*952*	*976*	*1,066*	*1,048*	*1,120*	*1,148*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*
	Total Revenue Sharing		**1,305**	**1,338**	**1,371**	**1,406**	**1,506**	**1,499**	**1,582**	**1,622**	**1,204**	**1,216**	**1,199**	**1,241**	**1,254**	**1,268**	**1,282**	**1,266**	**1,310**	**1,325**	**1,340**	**1,356**	**1,342**	**1,388**	**1,405**	**1,422**	**1,439**	**1,428**	**1,476**	**1,495**	**1,514**	**1,534**
15.	***Consulting Fees***																															
	Engineer-of-Record Contract		*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*
	Other Engineering Contracts		*250*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*
	Legal Consultant Contract		*150*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*
	Bond Procurement Contract		*100*																													
	Total Consulting Fees		**800**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**
	TOTAL WASTE TO ENERGY EXPENSES		**18,185**	**21,971**	**22,417**	**20,915**	**19,490**	**20,230**	**20,467**	**20,975**	**21,037**	**21,541**	**22,370**	**22,588**	**23,132**	**23,690**	**24,262**	**25,206**	**25,450**	**26,067**	**26,701**	**27,351**	**27,988**	**28,701**	**29,402**	**30,121**	**30,859**	**31,585**	**32,390**	**33,186**	**34,001**	**34,838**
	Net Income Before Debt Service		**-6,829**	**-10,369**	**-10,561**	**-8,799**	**-6,456**	**-7,352**	**-6,847**	**-7,051**	**-11,384**	**-11,863**	**-12,961**	**-12,859**	**-13,376**	**-13,906**	**-14,450**	**-15,659**	**-15,580**	**-16,167**	**-16,770**	**-17,388**	**-18,282**	**-18,663**	**-19,325**	**-20,005**	**-20,702**	**-21,681**	**-22,150**	**-22,902**	**-23,674**	**-24,465**
	Net Disposal Cost per Ton (Without Debt Service) ($/Ton)		**22**	**33**	**34**	**28**	**21**	**24**	**22**	**23**	**37**	**38**	**42**	**41**	**43**	**45**	**47**	**51**	**50**	**52**	**54**	**56**	**59**	**60**	**62**	**65**	**67**	**70**	**71**	**74**	**76**	**79**
16.	***Debt Service***		**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**	**8,974**										
	Net Income/Loss		**(15,804)**	**(19,343)**	**(19,536)**	**(17,773)**	**(15,430)**	**(16,327)**	**(15,822)**	**(16,026)**	**(20,358)**	**(20,838)**	**(21,936)**	**(21,834)**	**(22,351)**	**(22,881)**	**(23,425)**	**(24,634)**	**(24,555)**	**(25,141)**	**(25,744)**	**(26,362)**	**(18,282)**	**(18,663)**	**(19,325)**	**(20,005)**	**(20,702)**	**(21,681)**	**(22,150)**	**(22,902)**	**(23,674)**	**(24,465)**
	Net Disposal Cost per Ton (With Debt Service) ($/Ton)		**51**	**62**	**63**	**57**	**50**	**53**	**51**	**52**	**66**	**67**	**71**	**70**	**72**	**74**	**76**	**79**	**79**	**81**	**83**	**85**	**59**	**60**	**62**	**65**	**67**	**70**	**71**	**74**	**76**	**79**
	Percent Annual Increase		**14.2%**	**-22.4%**	**-1.0%**	**9.0%**	**13.2%**	**-5.8%**	**3.1%**	**-1.3%**	**-27.0%**	**-2.4%**	**-5.3%**	**0.5%**	**-2.4%**	**-2.4%**	**-2.4%**	**-5.2%**	**0.3%**	**-2.4%**	**-2.4%**	**-2.4%**	**30.7%**	**-2.1%**	**-3.5%**	**-3.5%**	**-3.5%**	**-4.7%**	**-2.2%**	**-3.4%**	**-3.4%**	**-3.3%**

Item Notes:

1. Proforma has a 30-year look-ahead starting with calendar year 2019. Assuming renegotiated contract in force in 2019 for comparison purposes, but likely will be later. Underlined years assume T-G outages. For years in red: 2026 is when the PPA expires and 2032 is when the current WMBI Agreement expires.
2. MSW Processed based on Facility Processing Guarantee of 310,000 tons per year. Assumes no increase due to growth that the City would not otherwise divert.
3. Ash % based on FY 2016 - FY 2017 average values.
4. KWh/Ton based on FY 2016 - FY 2017 average and assume degradation and increases around T-G outages. KWh/Ton is reduced for years 2020-2022 due to ongoing capital improvement projects.
5. Electrical Energy Fee is based on the actual FY 2017 rate and assumes 2.5% increase per year until the PPA ends in 2026. Upon PPA expiration, fee is reduced to 65% of contracted PPA, with no escalation rate.
6. Renewable Energy Credit is based on the actual FY 2017 rate and is escalated 2.5% as noted in the Seminole PPA. Upon PPA expiration, RECs are assumed not sold.
7. Ferrous Revenue is based on the actual $/gross ton from the Dec 2017 invoice with 2.5%/year escalation. Ferrous % of MSW is based on the FY 2016 - FY 2017 average recovery.
8. Non-Ferrous Revenue is based on the actual $/gross ton from the Nov 2017 invoice with 2.5%/year escalation. Non-Ferrous % of MSW is based on the FY 2017 average recovery.
9. Tip Fee Revenues for hopper and bulk waste are based on actual amounts received average from FY 2012 - FY 2017. Tip fee $/ton is based on actual current City rates without escalation. Tip fee for private MSW loads through the scale house is ignored for this model.
10. Base O&M Fee is estimated from other Facility fees and estimated cost for McKay, and will be dependent on negotiations. Rates escalated by their historical last 10 year average escalation factor of approximately 2.5%. Base fee threshold revised to 310,000 tons per year. Excess fee assumed to be half of base fee.
11. Ash Disposal Fee is based on the current fee of $16.50/ton and escalated by 2.5% per year.
12. Includes Capital Project Management Fee to Operator for management of planned, City funded capital projects related to the refurbishment.
13. Pass-Through Costs for chemicals and utilities are calculated on a separate sheet. Utilities costs are direct pay, except for natural gas. All chemicals and others are a pass-through under the WMBI contract.
14. Ash Transportation Fee is based on the City's share of the current fee (due to hauling range), escalated by 2.5% per year, and includes contractor's 5% markup.
15. Consulting fees are estimated at this time and include additional estimates for contract negotiation and bond procurement.
16. Debt service from Series 2013 and Series 2010 bonds combined with new bonds for City funded Facility refurbishment capital projects starting in 2020. Assuming bonds will be paid off in 2038.

ATTACHMENT E

Renegotiation with WMBI Worst Case Financial Projections

McKay Bay Proforma - Renegotiation with WMBI

			Term	13 years	Term	20 years	Term	30 years
Worst Case	**Total Net Income, $000s**			($267,204)		($456,320)		($697,061)
	Average Net Disposal Cost Per Ton			$66.30		$73.60		$74.95
	NPV Net Income, $000s	**NPV Rate**	3%	($216,528)		($330,838)		($443,650)
		NPV Rate	5%	($190,141)		($272,677)		($341,837)

Renegotiation with WMBI

			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
1.	***PRO FORMA***																															
	Solid Waste Generation (tons per year)		*Percentage of MSW*																													
2.	***MSW Processed (tons)***		310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
3.	***Ash Produced (wet tons)***	23%	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300
	Net MSW (tons)		238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700	238,700
	System Income ($000s)		*Escalation Factor or Percentage of MSW*																													
	WTE Operating Revenues																															
4.	*Electrical Generation Rate (kWh/ton)*		460	460	460	460	490	470	490	490	490	490	470	490	490	490	490	470	490	490	490	490	470	490	490	490	490	470	490	490	490	490
	Net Electrical Generation (mwh/yr)		142,600	142,600	142,600	142,600	151,900	145,700	151,900	151,900	151,900	151,900	145,700	151,900	151,900	151,900	151,900	145,700	151,900	151,900	151,900	151,900	145,700	151,900	151,900	151,900	151,900	145,700	151,900	151,900	151,900	151,900
5.	*Electrical Energy Fee ($/kWh)*	1.025	0.0612	0.0627	0.0643	0.0659	0.0676	0.0693	0.0710	0.0728	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473
6.	*Renewable Energy Credits (RECs) ($/kWh)*	1.025	0.0024	0.0024	0.0025	0.0025	0.0026	0.0027	0.0027	0.0028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Electric Energy and RECs Revenues		9,065	9,292	9,524	9,763	10,659	10,480	11,199	11,479	7,184	7,184	6,890	7,184	7,184	7,184	7,184	6,890	7,184	7,184	7,184	7,184	6,890	7,184	7,184	7,184	7,184	6,890	7,184	7,184	7,184	7,184
7.	*Ferrous Market Revenue ($/gross ton)*	1.025	72	74	75	77	79	81	83	85	87	90	92	94	96	99	101	104	107	109	112	115	118	121	124	127	130	133	136	140	143	147
	Ferrous Market Revenue	3.1%	616	631	647	663	680	697	714	732	750	769	788	808	828	849	870	892	914	937	960	984	1,009	1,034	1,060	1,086	1,114	1,141	1,170	1,199	1,229	1,260
8.	*Non-Ferrous Market Revenue ($/gross ton)*	1.025	810	830	851	872	894	916	939	963	987	1,011	1,037	1,062	1,089	1,116	1,144	1,173	1,202	1,232	1,263	1,295	1,327	1,360	1,394	1,429	1,465	1,501	1,539	1,577	1,617	1,657
	Non-Ferrous Revenues	0.09%	202	207	212	217	223	228	234	240	246	252	258	265	271	278	285	292	299	307	315	322	331	339	347	356	365	374	383	393	403	413
	Total WTE Operating Revenues ($1000)		9,882	10,130	10,383	10,643	11,561	11,405	12,147	12,451	8,180	8,205	7,936	8,256	8,283	8,311	8,339	8,074	8,397	8,428	8,459	8,491	8,229	8,557	8,591	8,626	8,662	8,405	8,737	8,776	8,816	8,857
9.	***Tip Fee Revenues***		*Average Annual Amount*																													
	Tip Fee For MSW																															
	City Tip Fee for Hopper Waste ($/ton)		1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,101	1,102	1,103	1,104	1,105	1,106	1,107	1,108	1,109	1,110
	Hopper Waste Revenues	41	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
	City Tip Fee for Bulk Waste ($/ton)		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	101	102	103	104	105	106	107	108	109	110
	Bulk Waste Revenues	2,281	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	230	233	235	237	240	242	244	246	249	251
	Total Tip Fee Revenues (not including MSW Tip Fee)		1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,473	1,477	1,482	1,486	1,490	1,494	1,499	1,503	1,507	1,512	1,516
	TOTAL WASTE TO ENERGY REVENUES		11,355	11,603	11,856	12,116	13,034	12,878	13,620	13,923	9,653	9,678	9,409	9,729	9,756	9,784	9,812	9,547	9,870	9,901	9,932	9,964	9,707	10,038	10,077	10,116	10,157	9,904	10,240	10,283	10,328	10,373
	System Expenses ($000s)		*Escalation Factor or Average Annual Amount*																													
10.	***Waste-to-Energy Expenses***																															
	Base O&M Fee ($/ton)	1.025	45.00	46.13	47.28	48.46	49.67	50.91	52.19	53.49	54.83	56.20	57.60	59.04	60.52	62.03	63.58	65.17	66.80	68.47	70.18	71.94	73.74	75.58	77.47	79.41	81.39	83.43	85.51	87.65	89.84	92.09
	Base O&M Cost (for MSW Processed)		13,950	14,299	14,656	15,023	15,398	15,783	16,178	16,582	16,997	17,422	17,857	18,304	18,761	19,230	19,711	20,204	20,709	21,227	21,757	22,301	22,859	23,430	24,016	24,616	25,232	25,863	26,509	27,172	27,851	28,547
	Excess O&M Fee ($/ton)		22.50	23.06	23.64	24.23	24.84	25.46	26.09	26.75	27.41	28.10	28.80	29.52	30.26	31.02	31.79	32.59	33.40	34.24	35.09	35.97	36.87	37.79	38.74	39.70	40.70	41.71	42.76	43.83	44.92	46.04
	Excess O&M Cost																															
	Hopper Waste O&M Cost	41	9	9	10	10	10	10	11	11	11	11	12	12	12	13	13	13	14	14	14	15	15	15	16	16	17	17	17	18	18	19
	Bulk Waste O&M Cost	2,281	205	210	216	221	227	232	238	244	250	256	263	269	276	283	290	297	305	312	320	328	336	345	353	362	371	381	390	400	410	420
11.	*Ash Disposal Fee($/ton)*	1.025	16.91	17.34	17.77	18.21	18.67	19.13	19.61	20.10	20.61	21.12	21.65	22.19	22.75	23.31	23.90	24.49	25.11	25.73	26.38	27.04	27.71	28.41	29.12	29.84	30.59	31.35	32.14	32.94	33.77	34.61
	Ash Disposal Cost		1,206	1,236	1,267	1,299	1,331	1,364	1,398	1,433	1,469	1,506	1,544	1,582	1,622	1,662	1,704	1,746	1,790	1,835	1,881	1,928	1,976	2,025	2,076	2,128	2,181	2,236	2,291	2,349	2,407	2,468
12.	*Capital Improvement Plan Management Fee*	12.5%		3,919	3,919	1,959																										
	Total Waste-to-Energy Expenses		15,370	19,673	20,067	18,512	16,966	17,390	17,825	18,270	18,727	19,195	19,675	20,167	20,671	21,188	21,718	22,261	22,817	23,388	23,972	24,572	25,186	25,816	26,461	27,123	27,801	28,496	29,208	29,938	30,687	31,454
13.	***Pass Through Costs and Direct Pay***																															
	Consumable Chemicals		928	956	985	1,014	1,045	1,076	1,108	1,141	1,176	1,211	1,247	1,285	1,323	1,363	1,404	1,446	1,489	1,534	1,580	1,627	1,676	1,726	1,778	1,832	1,887	1,943	2,001	2,062	2,123	2,187
	Utilities		731	475	487	500	512	827	538	551	565	579	935	609	624	639	655	1,058	689	706	723	742	760	779	799	819	839	860	881	904	926	949
14.	*Ash Transportation Fee*	1.025	7.84	8.04	8.24	8.44	8.66	8.87	9.09	9.32	9.55	9.79	10.04	10.29	10.55	10.81	11.08	11.36	11.64	11.93	12.23	12.54	12.85	13.17	13.50	13.84	14.18	14.54	14.90	15.27	15.66	16.05
	Ash Transportation Cost paid by City		92	94	97	99	102	104	107	109	112	115	118	121	124	127	130	133	137	140	144	147	151	155	159	163	167	171	175	179	184	188
	Other Pass Through Costs (Insurance, Testing, etc.)		532	548	564	580	597	614	632	651	670	690	710	731	752	774	797	821	845	870	896	924	952	981	1011	1041	1073	1106	1139	1174	1209	1245
	Total Pass Through Costs and Direct Pay		2,283	2,073	2,132	2,193	2,255	2,621	2,385	2,453	2,523	2,595	3,010	2,745	2,823	2,904	2,986	3,458	3,159	3,250	3,343	3,440	3,539	3,641	3,746	3,854	3,965	4,080	4,197	4,318	4,442	4,570
	Revenue Sharing (electrical and recovered metals)																															
	Ferrous Metals Recovery Revenue Sharing	50%	308	316	323	331	340	348	357	366	375	384	394	404	414	424	435	446	457	468	480	492	504	517	530	543	557	571	585	600	615	630
	Non- Ferrous Metals Recovery Revenue Sharing	45%	91	93	95	98	100	103	105	108	111	113	116	119	122	125	128	131	135	138	142	145	149	152	156	160	164	168	172	177	181	186
	Electrical Revenue Sharing	10%	907	929	952	976	1,066	1,048	1,120	1,148	718	718	689	718	718	718	718	689	718	718	718	718	689	718	718	718	718	689	718	718	718	718
	Total Revenue Sharing		1,305	1,338	1,371	1,406	1,506	1,499	1,582	1,622	1,204	1,216	1,199	1,241	1,254	1,268	1,282	1,266	1,310	1,325	1,340	1,356	1,342	1,388	1,405	1,422	1,439	1,428	1,476	1,495	1,514	1,534
15.	***Consulting Fees***																															
	Engineer-of-Record Contract		300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Other Engineering Contracts		250	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
	Legal Consultant Contract		150	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	Bond Procurement Contract		100																													
	Total Consulting Fees		800	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
	TOTAL WASTE TO ENERGY EXPENSES		19,758	23,584	24,071	22,610	21,227	22,010	22,292	22,845	22,954	23,506	24,385	24,653	25,249	25,860	26,486	27,485	27,787	28,462	29,156	29,867	30,567	31,345	32,112	32,899	33,705	34,503	35,381	36,251	37,143	38,058
	Net Income Before Debt Service		-8,403	-11,982	-12,215	-10,494	-8,193	-9,133	-8,673	-8,922	-13,302	-13,829	-14,976	-14,924	-15,493	-16,076	-16,674	-17,939	-17,917	-18,562	-19,224	-19,904	-20,861	-21,306	-22,035	-22,782	-23,548	-24,599	-25,141	-25,968	-26,816	-27,686
	Net Disposal Cost per Ton (Without Debt Service) ($/Ton)		27	39	39	34	26	29	28	29	43	45	48	48	50	52	54	58	58	60	62	64	67	69	71	73	76	79	81	84	87	89
16.	***Debt Service***		8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974	8,974										
	Net Income/Loss		(17,378)	(20,956)	(21,189)	(19,468)	(17,167)	(18,107)	(17,647)	(17,896)	(22,276)	(22,803)	(23,950)	(23,899)	(24,467)	(25,050)	(25,649)	(26,913)	(26,891)	(27,536)	(28,199)	(28,878)	(20,861)	(21,306)	(22,035)	(22,782)	(23,548)	(24,599)	(25,141)	(25,968)	(26,816)	(27,686)
	Net Disposal Cost per Ton (With Debt Service) ($/Ton)		56	68	68	63	55	58	57	58	72	74	77	77	79	81	83	87	87	89	91	93	67	69	71	73	76	79	81	84	87	89
	Percent Annual Increase		5.6%	-20.6%	-1.1%	8.1%	11.8%	-5.5%	2.5%	-1.4%	-24.5%	-2.4%	-5.0%	0.2%	-2.4%	-2.4%	-2.4%	-4.9%	0.1%	-2.4%	-2.4%	-2.4%	27.8%	-2.1%	-3.4%	-3.4%	-3.4%	-4.5%	-2.2%	-3.3%	-3.3%	-3.2%

Item Notes:

1. Proforma has a 30-year look-ahead starting with calendar year 2019. Assuming renegotiated contract in force in 2019 for comparison purposes, but likely will be later. Underlined years assume T-G outages. For years in red: 2026 is when the PPA expires and 2032 is when the current WMBI Agreement expires.
2. MSW Processed based on Facility Processing Guarantee of 310,000 tons per year. Assumes no increase due to growth that the City would not otherwise divert.
3. Ash % based on FY 2016 - FY 2017 average values.
4. KWh/Ton based on FY 2016 - FY 2017 average and assume degradation and increases around T-G outages. KWh/Ton is reduced for years 2020-2022 due to ongoing capital improvement projects.
5. Electrical Energy Fee is based on the actual FY 2017 rate and assumes 2.5% increase per year until the PPA ends in 2026. Upon PPA expiration, fee is reduced to 65% of contracted PPA, with no escalation rate.
6. Renewable Energy Credit is based on the actual FY 2017 rate and is escalated 2.5% as noted in the Seminole PPA. Upon PPA expiration, RECs are assumed not sold.
7. Ferrous Revenue is based on the actual $/gross ton from the Dec 2017 invoice with 2.5%/year escalation. Ferrous % of MSW is based on the FY 2016 - FY 2017 average recovery.
8. Non-Ferrous Revenue is based on the actual $/gross ton from the Nov 2017 invoice with 2.5%/year escalation. Non-Ferrous % of MSW is based on the FY 2017 average recovery.
9. Tip Fee Revenues for hopper and bulk waste are based on actual amounts received average from FY 2012 - FY 2017. Tip fee $/ton is based on actual current City rates without escalation. Tip fee for private MSW loads through the scale house is ignored for this model.
10. Base O&M Fee is estimated from other Facility fees and estimated cost for McKay, and will be dependent on negotiations. Rates escalated by their historical last 10 year average escalation factor of approximately 2.5%. Base fee threshold revised to 310,000 tons per year. Excess fee assumed to be half of base fee.
11. Ash Disposal Fee is based on the current fee of $16.50/ton and escalated by 2.5% per year.
12. Includes Capital Project Management Fee to Operator for management of planned, City funded capital projects related to the refurbishment.
13. Pass-Through Costs for chemicals and utilities are calculated on a separate sheet. Utilities costs are direct pay, except for natural gas. All chemicals and others are a pass-through under the WMBI contract.
14. Ash Transportation Fee is based on the City's share of the current fee (due to hauling range), escalated by 2.5% per year, and includes contractor's 5% markup.
15. Consulting fees are estimated at this time and include additional estimates for contract negotiation and bond procurement.
16. Debt service from Series 2013 and Series 2010 bonds combined with new bonds for City funded Facility refurbishment capital projects starting in 2020. Assuming bonds will be paid off in 2038.

ATTACHMENT F

Procure New Operator Best Case Financial Projections

McKay Bay Proforma - Procure New Operator

Best Case

			Term	13 years	Term	20 years	Term	30 years
Total Net Income, $000s				($256,115)		($435,406)		($658,811)
Average Net Disposal Cost Per Ton				$63.55		$70.23		$70.84
NPV Net Income, $000s	**NPV Rate**	3%		($208,047)		($316,420)		($421,093)
	NPV Rate	5%		($183,008)		($261,258)		($325,423)

Procure New Operator

			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
1.	***PRO FORMA***																															
	Solid Waste Generation (tons per year)	*Percentage of MSW*																														
2.	***MSW Processed (tons)***		***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***
3.	***Ash Produced (wet tons)***	*23%*	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***
	Net MSW (tons)		***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***
	System Income ($000s)	*Escalation Factor or Percentage of MSW*																														
	WTE Operating Revenues																															
4.	*Electrical Generation Rate (kWh/ton)*		*460*	*460*	*460*	*460*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*
	Net Electrical Generation (mwh/yr)		*142,600*	*142,600*	*142,600*	*142,600*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*
5.	*Electrical Energy Fee ($/kWh)*	*1.025*	*0.0612*	*0.0627*	*0.0643*	*0.0659*	*0.0676*	*0.0693*	*0.0710*	*0.0728*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*
6.	*Renewable Energy Credits (RECs) ($/kWh)*	*1.025*	*0.0024*	*0.0024*	*0.0025*	*0.0025*	*0.0026*	*0.0027*	*0.0027*	*0.0028*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Electric Energy and RECs Revenues		*9,065*	*9,292*	*9,524*	*9,763*	*10,659*	*10,480*	*11,199*	*11,479*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*
7.	*Ferrous Market Revenue ($/gross ton)*	*1.025*	*72*	*74*	*75*	*77*	*79*	*81*	*83*	*85*	*87*	*90*	*92*	*94*	*96*	*99*	*101*	*104*	*107*	*109*	*112*	*115*	*118*	*121*	*124*	*127*	*130*	*133*	*136*	*140*	*143*	*147*
	Ferrous Market Revenue	*3.1%*	*616*	*631*	*647*	*663*	*680*	*697*	*714*	*732*	*750*	*769*	*788*	*808*	*828*	*849*	*870*	*892*	*914*	*937*	*960*	*984*	*1,009*	*1,034*	*1,060*	*1,086*	*1,114*	*1,141*	*1,170*	*1,199*	*1,229*	*1,260*
8.	*Non-Ferrous Market Revenue ($/gross ton)*	*1.025*	*810*	*830*	*851*	*872*	*894*	*916*	*939*	*963*	*987*	*1,011*	*1,037*	*1,062*	*1,089*	*1,116*	*1,144*	*1,173*	*1,202*	*1,232*	*1,263*	*1,295*	*1,327*	*1,360*	*1,394*	*1,429*	*1,465*	*1,501*	*1,539*	*1,577*	*1,617*	*1,657*
	Non-Ferrous Revenues	*0.09%*	*202*	*207*	*212*	*217*	*223*	*228*	*234*	*240*	*246*	*252*	*258*	*265*	*271*	*278*	*285*	*292*	*299*	*307*	*315*	*322*	*331*	*339*	*347*	*356*	*365*	*374*	*383*	*393*	*403*	*413*
	Total WTE Operating Revenues ($1000)		***9,882***	***10,130***	***10,383***	***10,643***	***11,561***	***11,405***	***12,147***	***12,451***	***8,180***	***8,205***	***7,936***	***8,256***	***8,283***	***8,311***	***8,339***	***8,074***	***8,397***	***8,428***	***8,459***	***8,491***	***8,229***	***8,557***	***8,591***	***8,626***	***8,662***	***8,405***	***8,737***	***8,776***	***8,816***	***8,857***
9.	***Tip Fee Revenues***	*Average Annual Amount*																														
	Tip Fee For MSW																															
	City Tip Fee for Hopper Waste ($/ton)		*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,101*	*1,102*	*1,103*	*1,104*	*1,105*	*1,106*	*1,107*	*1,108*	*1,109*	*1,110*
	Hopper Waste Revenues	*41*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*
	City Tip Fee for Bulk Waste ($/ton)		*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*101*	*102*	*103*	*104*	*105*	*106*	*107*	*108*	*109*	*110*
	Bulk Waste Revenues	*2,281*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*230*	*233*	*235*	*237*	*240*	*242*	*244*	*246*	*249*	*251*
	Total Tip Fee Revenues (not including MSW Tip Fee)		***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,477***	***1,482***	***1,486***	***1,490***	***1,494***	***1,499***	***1,503***	***1,507***	***1,512***	***1,516***
	TOTAL WASTE TO ENERGY REVENUES		***11,355***	***11,603***	***11,856***	***12,116***	***13,034***	***12,878***	***13,620***	***13,923***	***9,653***	***9,678***	***9,409***	***9,729***	***9,756***	***9,784***	***9,812***	***9,547***	***9,870***	***9,901***	***9,932***	***9,964***	***9,707***	***10,038***	***10,077***	***10,116***	***10,157***	***9,904***	***10,240***	***10,283***	***10,328***	***10,373***
	System Expenses ($000s)	*Escalation Factor or Average Annual Amount*																														
10.	***Waste-to-Energy Expenses***																															
	Base O&M Fee ($/ton)	*1.025*	*42.00*	*43.05*	*44.13*	*45.23*	*46.36*	*47.52*	*48.71*	*49.92*	*51.17*	*52.45*	*53.76*	*55.11*	*56.49*	*57.90*	*59.34*	*60.83*	*62.35*	*63.91*	*65.51*	*67.14*	*68.82*	*70.54*	*72.31*	*74.11*	*75.97*	*77.87*	*79.81*	*81.81*	*83.85*	*85.95*
	Base O&M Cost (for MSW Processed)		***13,020***	***13,346***	***13,679***	***14,021***	***14,372***	***14,731***	***15,099***	***15,477***	***15,864***	***16,260***	***16,667***	***17,083***	***17,510***	***17,948***	***18,397***	***18,857***	***19,328***	***19,811***	***20,307***	***20,814***	***21,335***	***21,868***	***22,415***	***22,975***	***23,550***	***24,138***	***24,742***	***25,360***	***25,994***	***26,644***
	Excess O&M Fee ($/ton)		*21.00*	*21.53*	*22.06*	*22.61*	*23.18*	*23.76*	*24.35*	*24.96*	*25.59*	*26.23*	*26.88*	*27.55*	*28.24*	*28.95*	*29.67*	*30.41*	*31.17*	*31.95*	*32.75*	*33.57*	*34.41*	*35.27*	*36.15*	*37.06*	*37.98*	*38.93*	*39.91*	*40.90*	*41.93*	*42.97*
	Excess O&M Cost																															
	Hopper Waste O&M Cost	*41*	***9***	***9***	***9***	***9***	***9***	***10***	***10***	***10***	***10***	***11***	***11***	***11***	***11***	***12***	***12***	***12***	***13***	***13***	***13***	***14***	***14***	***14***	***15***	***15***	***15***	***16***	***16***	***17***	***17***	***17***
	Bulk Waste O&M Cost	*2,281*	***192***	***196***	***201***	***206***	***211***	***217***	***222***	***228***	***233***	***239***	***245***	***251***	***258***	***264***	***271***	***277***	***284***	***292***	***299***	***306***	***314***	***322***	***330***	***338***	***347***	***355***	***364***	***373***	***383***	***392***
11.	*Ash Disposal Fee($/ton)*	*1.025*	*16.91*	*17.34*	*17.77*	*18.21*	*18.67*	*19.13*	*19.61*	*20.10*	*20.61*	*21.12*	*21.65*	*22.19*	*22.75*	*23.31*	*23.90*	*24.49*	*25.11*	*25.73*	*26.38*	*27.04*	*27.71*	*28.41*	*29.12*	*29.84*	*30.59*	*31.35*	*32.14*	*32.94*	*33.77*	*34.61*
	Ash Disposal Cost		***1,206***	***1,236***	***1,267***	***1,299***	***1,331***	***1,364***	***1,398***	***1,433***	***1,469***	***1,506***	***1,544***	***1,582***	***1,622***	***1,662***	***1,704***	***1,746***	***1,790***	***1,835***	***1,881***	***1,928***	***1,976***	***2,025***	***2,076***	***2,128***	***2,181***	***2,236***	***2,291***	***2,349***	***2,407***	***2,468***
12.	*Capital Improvement Plan Management Fee*	*12.5%*		***4,062***	***4,062***	***2,031***																										
13.	*Contract Termination Fee*		***2,500***																													
	Total Waste-to-Energy Expenses		***16,926***	***18,848***	***19,218***	***17,566***	***15,924***	***16,322***	***16,730***	***17,148***	***17,577***	***18,016***	***18,467***	***18,928***	***19,401***	***19,886***	***20,384***	***20,893***	***21,415***	***21,951***	***22,500***	***23,062***	***23,639***	***24,230***	***24,835***	***25,456***	***26,093***	***26,745***	***27,414***	***28,099***	***28,801***	***29,521***
14.	***Pass Through Costs and Direct Pay***																															
	Consumable Chemicals		*928*	*956*	*985*	*1,014*	*1,045*	*1,076*	*1,108*	*1,141*	*1,176*	*1,211*	*1,247*	*1,285*	*1,323*	*1,363*	*1,404*	*1,446*	*1,489*	*1,534*	*1,580*	*1,627*	*1,676*	*1,726*	*1,778*	*1,832*	*1,887*	*1,943*	*2,001*	*2,062*	*2,123*	*2,187*
	Utilities		*731*	*475*	*487*	*500*	*512*	*827*	*538*	*551*	*565*	*579*	*935*	*609*	*624*	*639*	*655*	*1,058*	*689*	*706*	*723*	*742*	*760*	*779*	*799*	*819*	*839*	*860*	*881*	*904*	*926*	*949*
15.	*Ash Transportation Fee*	*1.025*	*7.84*	*8.04*	*8.24*	*8.44*	*8.66*	*8.87*	*9.09*	*9.32*	*9.55*	*9.79*	*10.04*	*10.29*	*10.55*	*10.81*	*11.08*	*11.36*	*11.64*	*11.93*	*12.23*	*12.54*	*12.85*	*13.17*	*13.50*	*13.84*	*14.18*	*14.54*	*14.90*	*15.27*	*15.66*	*16.05*
	Ash Transportation Cost paid by City		*92*	*94*	*97*	*99*	*102*	*104*	*107*	*109*	*112*	*115*	*118*	*121*	*124*	*127*	*130*	*133*	*137*	*140*	*144*	*147*	*151*	*155*	*159*	*163*	*167*	*171*	*175*	*179*	*184*	*188*
	Other Pass Through Costs (Insurance, Testing, etc.)		*532*	*548*	*564*	*580*	*597*	*614*	*632*	*651*	*670*	*690*	*710*	*731*	*752*	*774*	*797*	*821*	*845*	*870*	*896*	*924*	*952*	*981*	*1011*	*1041*	*1073*	*1106*	*1139*	*1174*	*1209*	*1245*
	Total Pass Through Costs and Direct Pay		***2,283***	***2,073***	***2,132***	***2,193***	***2,255***	***2,621***	***2,385***	***2,453***	***2,523***	***2,595***	***3,010***	***2,745***	***2,823***	***2,904***	***2,986***	***3,458***	***3,159***	***3,250***	***3,343***	***3,440***	***3,539***	***3,641***	***3,746***	***3,854***	***3,965***	***4,080***	***4,197***	***4,318***	***4,442***	***4,570***
	Revenue Sharing (electrical and recovered metals)																															
	Ferrous Metals Recovery Revenue Sharing	*50%*	*308*	*316*	*323*	*331*	*340*	*348*	*357*	*366*	*375*	*384*	*394*	*404*	*414*	*424*	*435*	*446*	*457*	*468*	*480*	*492*	*504*	*517*	*530*	*543*	*557*	*571*	*585*	*600*	*615*	*630*
	Non- Ferrous Metals Recovery Revenue Sharing	*45%*	*91*	*93*	*95*	*98*	*100*	*103*	*105*	*108*	*111*	*113*	*116*	*119*	*122*	*125*	*128*	*131*	*135*	*138*	*142*	*145*	*149*	*152*	*156*	*160*	*164*	*168*	*172*	*177*	*181*	*186*
	Electrical Revenue Sharing	*10%*	*907*	*929*	*952*	*976*	*1,066*	*1,048*	*1,120*	*1,148*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*
	Total Revenue Sharing		***1,305***	***1,338***	***1,371***	***1,406***	***1,506***	***1,499***	***1,582***	***1,622***	***1,204***	***1,216***	***1,199***	***1,241***	***1,254***	***1,268***	***1,282***	***1,266***	***1,310***	***1,325***	***1,340***	***1,356***	***1,342***	***1,388***	***1,405***	***1,422***	***1,439***	***1,428***	***1,476***	***1,495***	***1,514***	***1,534***
16.	***Consulting Fees***																															
	Engineer-of-Record Contract		*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*
	Other Engineering Contracts		*350*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*
	Legal Consultant Contract		*400*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*
	Bond Procurement Contract		*100*																													
	Total Consulting Fees		***1,150***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***
	TOTAL WASTE TO ENERGY EXPENSES		***21,664***	***22,760***	***23,222***	***21,665***	***20,185***	***20,942***	***21,197***	***21,723***	***21,804***	***22,327***	***23,176***	***23,414***	***23,979***	***24,558***	***25,152***	***26,118***	***26,385***	***27,025***	***27,683***	***28,358***	***29,020***	***29,759***	***30,486***	***31,232***	***31,997***	***32,753***	***33,587***	***34,412***	***35,258***	***36,126***
	Net Income Before Debt Service		***-10,309***	***-11,157***	***-11,366***	***-9,548***	***-7,151***	***-8,064***	***-7,577***	***-7,799***	***-12,151***	***-12,650***	***-13,767***	***-13,685***	***-14,223***	***-14,774***	***-15,340***	***-16,571***	***-16,515***	***-17,125***	***-17,751***	***-18,394***	***-19,313***	***-19,720***	***-20,409***	***-21,116***	***-21,840***	***-22,848***	***-23,346***	***-24,128***	***-24,930***	***-25,753***
	Net Disposal Cost per Ton (Without Debt Service) ($/Ton)		***33***	***36***	***37***	***31***	***23***	***26***	***24***	***25***	***39***	***41***	***44***	***44***	***46***	***48***	***49***	***53***	***53***	***55***	***57***	***59***	***62***	***64***	***66***	***68***	***70***	***74***	***75***	***78***	***80***	***83***
17.	***Debt Service***		***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***										
	Net Income/Loss		***(19,283)***	***(20,131)***	***(20,340)***	***(18,523)***	***(16,125)***	***(17,039)***	***(16,552)***	***(16,774)***	***(21,125)***	***(21,624)***	***(22,741)***	***(22,660)***	***(23,197)***	***(23,749)***	***(24,314)***	***(25,545)***	***(25,489)***	***(26,099)***	***(26,726)***	***(27,368)***	***(19,313)***	***(19,720)***	***(20,409)***	***(21,116)***	***(21,840)***	***(22,848)***	***(23,346)***	***(24,128)***	***(24,930)***	***(25,753)***
	Net Disposal Cost per Ton (With Debt Service) ($/Ton)		***62***	***65***	***66***	***60***	***52***	***55***	***53***	***54***	***68***	***70***	***73***	***73***	***75***	***77***	***78***	***82***	***82***	***84***	***86***	***88***	***62***	***64***	***66***	***68***	***70***	***74***	***75***	***78***	***80***	***83***
	Percent Annual Increase		***-4.7%***	***-4.4%***	***-1.0%***	***8.9%***	***12.9%***	***-5.7%***	***2.9%***	***-1.3%***	***-25.9%***	***-2.4%***	***-5.2%***	***0.4%***	***-2.4%***	***-2.4%***	***-2.4%***	***-5.1%***	***0.2%***	***-2.4%***	***-2.4%***	***-2.4%***	***29.4%***	***-2.1%***	***-3.5%***	***-3.5%***	***-3.4%***	***-4.6%***	***-2.2%***	***-3.3%***	***-3.3%***	***-3.3%***

Item Notes:

1. Proforma has a 30-year look-ahead starting with calendar year 2019. Assuming renegotiated contract in force in 2019 for comparison purposes, but likely will be later. Underlined years assume T-G outages. For years in red: 2026 is when the PPA expires and 2032 is when the current WMBI Agreement expires.
2. MSW Processed based on Facility Processing Guarantee of 310,000 tons per year. Assumes no increase due to growth that the City would not otherwise divert.
3. Ash % based on FY 2016 - FY 2017 average values.
4. KWh/Ton based on FY 2016 - FY 2017 average and assume degradation and increases around T-G outages. KWh/Ton is reduced for years 2020-2022 due to ongoing capital improvement projects.
5. Electrical Energy Fee is based on the actual FY 2017 rate and assumes 2.5% increase per year until the PPA ends in 2026. Upon PPA expiration, fee is reduced to 65% of contracted PPA, with no escalation rate.
6. Renewable Energy Credit is based on the actual FY 2017 rate and is escalated 2.5% as noted in the Seminole PPA. Upon PPA expiration, RECs are assumed not sold.
7. Ferrous Revenue is based on the actual $/gross ton from the Dec 2017 invoice with 2.5%/year escalation. Ferrous % of MSW is based on the FY 2016 - FY 2017 average recovery.
8. Non-Ferrous Revenue is based on the actual $/gross ton from the Nov 2017 invoice with 2.5%/year escalation. Non-Ferrous % of MSW is based on the FY 2017 average recovery.
9. Tip Fee Revenues for hopper and bulk waste are based on actual amounts received average from FY 2012 - FY 2017. Tip fee $/ton is based on actual current City rates without escalation. Tip fee for private MSW loads through the scale house is ignored for this model.
10. Base O&M Fee is estimated from other Facility fees and estimated cost for McKay, and will be dependent on negotiations. Rates escalated by their historical last 10 year average escalation factor of approximately 2.5%. Base fee threshold revised to 310,000 tons per year. Excess fee assumed to be half of base fee.
11. Ash Disposal Fee is based on the current fee of $16.50/ton and escalated by 2.5% per year.
12. Includes Capital Project Management Fee to Operator for management of planned, City funded capital projects related to the refurbishment.
13. Termination Fee paid to WMBI for contract termination.
14. Pass-Through Costs for chemicals and utilities are calculated on a separate sheet. Utilities costs are direct pay, except for natural gas. All chemicals and others are a pass-through under the WMBI contract.
15. Ash Transportation Fee is based on the City's share of the current fee (due to hauling range), escalated by 2.5% per year, and includes contractor's 5% markup.
16. Consulting fees are estimated at this time and include additional estimates for contract negotiation and bond procurement.
17. Debt service from Series 2013 and Series 2010 bonds combined with new bonds for City funded Facility refurbishment capital projects starting in 2020. Assuming bonds will be paid off in 2038.

ATTACHMENT G

Procure New Operator Worst Case Financial Projections

McKay Bay Proforma - Procure New Operator

Worst Case

Procure New Operator

				Term	13 years	Term	20 years	Term	30 years
Total Net Income, $000s					($294,240)		($499,730)		($769,364)
Average Net Disposal Cost Per Ton					$73.01		$80.60		$82.73
NPV Net Income, $000s	**NPV Rate**	3%			($238,920)		($363,125)		($489,500)
	NPV Rate	5%			($210,098)		($299,778)		($377,263)

			2019	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**	**2045**	**2046**	**2047**	**2048**
	PRO FORMA																															
	Solid Waste Generation (tons per year)	*Percentage of MSW*																														
2.	***MSW Processed (tons)***		***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***	***310,000***
3.	***Ash Produced (wet tons)***	*23%*	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***	***71,300***
	Net MSW (tons)		***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***	***238,700***
	System Income ($000s)	*Escalation Factor or Percentage of MSW*																														
	WTE Operating Revenues																															
4.	*Electrical Generation Rate (kWh/ton)*		*460*	*460*	*460*	*460*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*	*470*	*490*	*490*	*490*	*490*
	Net Electrical Generation (mwh/yr)		*142,600*	*142,600*	*142,600*	*142,600*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*	*145,700*	*151,900*	*151,900*	*151,900*	*151,900*
5.	*Electrical Energy Fee ($/kWh)*	*1.025*	*0.0612*	*0.0627*	*0.0643*	*0.0659*	*0.0676*	*0.0693*	*0.0710*	*0.0728*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*	*0.0473*
6.	*Renewable Energy Credits (RECs) ($/kWh)*	*1.025*	*0.0024*	*0.0024*	*0.0025*	*0.0025*	*0.0026*	*0.0027*	*0.0027*	*0.0028*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
	Electric Energy and RECs Revenues		*9,065*	*9,292*	*9,524*	*9,763*	*10,659*	*10,480*	*11,199*	*11,479*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*	*6,890*	*7,184*	*7,184*	*7,184*	*7,184*
7.	*Ferrous Market Revenue ($/gross ton)*	*1.025*	*72*	*74*	*75*	*77*	*79*	*81*	*83*	*85*	*87*	*90*	*92*	*94*	*96*	*99*	*101*	*104*	*107*	*109*	*112*	*115*	*118*	*121*	*124*	*127*	*130*	*133*	*136*	*140*	*143*	*147*
	Ferrous Market Revenue	*3.1%*	*616*	*631*	*647*	*663*	*680*	*697*	*714*	*732*	*750*	*769*	*788*	*808*	*828*	*849*	*870*	*892*	*914*	*937*	*960*	*984*	*1,009*	*1,034*	*1,060*	*1,086*	*1,114*	*1,141*	*1,170*	*1,199*	*1,229*	*1,260*
8.	*Non-Ferrous Market Revenue ($/gross ton)*	*1.025*	*810*	*830*	*851*	*872*	*894*	*916*	*939*	*963*	*987*	*1,011*	*1,037*	*1,062*	*1,089*	*1,116*	*1,144*	*1,173*	*1,202*	*1,232*	*1,263*	*1,295*	*1,327*	*1,360*	*1,394*	*1,429*	*1,465*	*1,501*	*1,539*	*1,577*	*1,617*	*1,657*
	Non-Ferrous Revenues	*0.09%*	*202*	*207*	*212*	*217*	*223*	*228*	*234*	*240*	*246*	*252*	*258*	*265*	*271*	*278*	*285*	*292*	*299*	*307*	*315*	*322*	*331*	*339*	*347*	*356*	*365*	*374*	*383*	*393*	*403*	*413*
	Total WTE Operating Revenues ($1000)		***9,882***	***10,130***	***10,383***	***10,643***	***11,561***	***11,405***	***12,147***	***12,451***	***8,180***	***8,205***	***7,936***	***8,256***	***8,283***	***8,311***	***8,339***	***8,074***	***8,397***	***8,428***	***8,459***	***8,491***	***8,229***	***8,557***	***8,591***	***8,626***	***8,662***	***8,405***	***8,737***	***8,776***	***8,816***	***8,857***
9.	***Tip Fee Revenues***	*Average Annual Amount*																														
	Tip Fee For MSW																															
	City Tip Fee for Hopper Waste ($/ton)		*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*	*1,101*	*1,102*	*1,103*	*1,104*	*1,105*	*1,106*	*1,107*	*1,108*	*1,109*	*1,110*
	Hopper Waste Revenues	*41*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*	*45*
	City Tip Fee for Bulk Waste ($/ton)		*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*101*	*102*	*103*	*104*	*105*	*106*	*107*	*108*	*109*	*110*
	Bulk Waste Revenues	*2,281*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*228*	*230*	*233*	*235*	*237*	*240*	*242*	*244*	*246*	*249*	*251*
	Total Tip Fee Revenues (not including MSW Tip Fee)		***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,473***	***1,477***	***1,482***	***1,486***	***1,490***	***1,494***	***1,499***	***1,503***	***1,507***	***1,512***	***1,516***
	TOTAL WASTE TO ENERGY REVENUES		***11,355***	***11,603***	***11,856***	***12,116***	***13,034***	***12,878***	***13,620***	***13,923***	***9,653***	***9,678***	***9,409***	***9,729***	***9,756***	***9,784***	***9,812***	***9,547***	***9,870***	***9,901***	***9,932***	***9,964***	***9,707***	***10,038***	***10,077***	***10,116***	***10,157***	***9,904***	***10,240***	***10,283***	***10,328***	***10,373***
	System Expenses ($000s)	*Escalation Factor or Average Annual Amount*																														
10.	***Waste-to-Energy Expenses***																															
	Base O&M Fee ($/ton)	*1.025*	*50.00*	*51.25*	*52.53*	*53.84*	*55.19*	*56.57*	*57.98*	*59.43*	*60.92*	*62.44*	*64.00*	*65.60*	*67.24*	*68.93*	*70.65*	*72.41*	*74.23*	*76.08*	*77.98*	*79.93*	*81.93*	*83.98*	*86.08*	*88.23*	*90.44*	*92.70*	*95.01*	*97.39*	*99.82*	*102.32*
	Base O&M Cost (for MSW Processed)		***15,500***	***15,888***	***16,285***	***16,692***	***17,109***	***17,537***	***17,975***	***18,425***	***18,885***	***19,357***	***19,841***	***20,337***	***20,846***	***21,367***	***21,901***	***22,449***	***23,010***	***23,585***	***24,175***	***24,779***	***25,399***	***26,034***	***26,684***	***27,351***	***28,035***	***28,736***	***29,455***	***30,191***	***30,946***	***31,719***
	Excess O&M Fee ($/ton)		*25.00*	*25.63*	*26.27*	*26.92*	*27.60*	*28.29*	*28.99*	*29.72*	*30.46*	*31.22*	*32.00*	*32.80*	*33.62*	*34.46*	*35.32*	*36.21*	*37.11*	*38.04*	*38.99*	*39.97*	*40.97*	*41.99*	*43.04*	*44.12*	*45.22*	*46.35*	*47.51*	*48.70*	*49.91*	*51.16*
	Excess O&M Cost																															
	Hopper Waste O&M Cost	*41*	***10***	***10***	***11***	***11***	***11***	***12***	***12***	***12***	***12***	***13***	***13***	***13***	***14***	***14***	***14***	***15***	***15***	***15***	***16***	***16***	***17***	***17***	***18***	***18***	***18***	***19***	***19***	***20***	***20***	***21***
	Bulk Waste O&M Cost	*2,281*	***228***	***234***	***240***	***246***	***252***	***258***	***265***	***271***	***278***	***285***	***292***	***299***	***307***	***314***	***322***	***330***	***339***	***347***	***356***	***365***	***374***	***383***	***393***	***403***	***413***	***423***	***433***	***444***	***455***	***467***
11.	*Ash Disposal Fee($/ton)*	*1.025*	*16.91*	*17.34*	*17.77*	*18.21*	*18.67*	*19.13*	*19.61*	*20.10*	*20.61*	*21.12*	*21.65*	*22.19*	*22.75*	*23.31*	*23.90*	*24.49*	*25.11*	*25.73*	*26.38*	*27.04*	*27.71*	*28.41*	*29.12*	*29.84*	*30.59*	*31.35*	*32.14*	*32.94*	*33.77*	*34.61*
	Ash Disposal Cost		***1,206***	***1,236***	***1,267***	***1,299***	***1,331***	***1,364***	***1,398***	***1,433***	***1,469***	***1,506***	***1,544***	***1,582***	***1,622***	***1,662***	***1,704***	***1,746***	***1,790***	***1,835***	***1,881***	***1,928***	***1,976***	***2,025***	***2,076***	***2,128***	***2,181***	***2,236***	***2,291***	***2,349***	***2,407***	***2,468***
12.	*Capital Improvement Plan Management Fee*	*12.5%*		***4,062***	***4,062***	***2,031***																										
13.	*Contract Termination Fee*		***2,500***																													
	Total Waste-to-Energy Expenses		***19,444***	***21,429***	***21,864***	***20,278***	***18,703***	***19,171***	***19,650***	***20,141***	***20,645***	***21,161***	***21,690***	***22,232***	***22,788***	***23,358***	***23,942***	***24,540***	***25,154***	***25,783***	***26,427***	***27,088***	***27,765***	***28,459***	***29,171***	***29,900***	***30,647***	***31,413***	***32,199***	***33,004***	***33,829***	***34,675***
14.	***Pass Through Costs and Direct Pay***																															
	Consumable Chemicals		*928*	*956*	*985*	*1,014*	*1,045*	*1,076*	*1,108*	*1,141*	*1,176*	*1,211*	*1,247*	*1,285*	*1,323*	*1,363*	*1,404*	*1,446*	*1,489*	*1,534*	*1,580*	*1,627*	*1,676*	*1,726*	*1,778*	*1,832*	*1,887*	*1,943*	*2,001*	*2,062*	*2,123*	*2,187*
	Utilities		*731*	*475*	*487*	*500*	*512*	*827*	*538*	*551*	*565*	*579*	*935*	*609*	*624*	*639*	*655*	*1,058*	*689*	*706*	*723*	*742*	*760*	*779*	*799*	*819*	*839*	*860*	*881*	*904*	*926*	*949*
15.	*Ash Transportation Fee*	*1.025*	*7.84*	*8.04*	*8.24*	*8.44*	*8.66*	*8.87*	*9.09*	*9.32*	*9.55*	*9.79*	*10.04*	*10.29*	*10.55*	*10.81*	*11.08*	*11.36*	*11.64*	*11.93*	*12.23*	*12.54*	*12.85*	*13.17*	*13.50*	*13.84*	*14.18*	*14.54*	*14.90*	*15.27*	*15.66*	*16.05*
	Ash Transportation Cost paid by City		*92*	*94*	*97*	*99*	*102*	*104*	*107*	*109*	*112*	*115*	*118*	*121*	*124*	*127*	*130*	*133*	*137*	*140*	*144*	*147*	*151*	*155*	*159*	*163*	*167*	*171*	*175*	*179*	*184*	*188*
	Other Pass Through Costs (Insurance, Testing, etc.)		*532*	*548*	*564*	*580*	*597*	*614*	*632*	*651*	*670*	*690*	*710*	*731*	*752*	*774*	*797*	*821*	*845*	*870*	*896*	*924*	*952*	*981*	*1011*	*1041*	*1073*	*1106*	*1139*	*1174*	*1209*	*1245*
	Total Pass Through Costs and Direct Pay		***2,283***	***2,073***	***2,132***	***2,193***	***2,255***	***2,621***	***2,385***	***2,453***	***2,523***	***2,595***	***3,010***	***2,745***	***2,823***	***2,904***	***2,986***	***3,458***	***3,159***	***3,250***	***3,343***	***3,440***	***3,539***	***3,641***	***3,746***	***3,854***	***3,965***	***4,080***	***4,197***	***4,318***	***4,442***	***4,570***
	Revenue Sharing (electrical and recovered metals)																															
	Ferrous Metals Recovery Revenue Sharing	*50%*	*308*	*316*	*323*	*331*	*340*	*348*	*357*	*366*	*375*	*384*	*394*	*404*	*414*	*424*	*435*	*446*	*457*	*468*	*480*	*492*	*504*	*517*	*530*	*543*	*557*	*571*	*585*	*600*	*615*	*630*
	Non- Ferrous Metals Recovery Revenue Sharing	*45%*	*91*	*93*	*95*	*98*	*100*	*103*	*105*	*108*	*111*	*113*	*116*	*119*	*122*	*125*	*128*	*131*	*135*	*138*	*142*	*145*	*149*	*152*	*156*	*160*	*164*	*168*	*172*	*177*	*181*	*186*
	Electrical Revenue Sharing	*10%*	*907*	*929*	*952*	*976*	*1,066*	*1,048*	*1,120*	*1,148*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*	*689*	*718*	*718*	*718*	*718*
	Total Revenue Sharing		***1,305***	***1,338***	***1,371***	***1,406***	***1,506***	***1,499***	***1,582***	***1,622***	***1,204***	***1,216***	***1,199***	***1,241***	***1,254***	***1,268***	***1,282***	***1,266***	***1,310***	***1,325***	***1,340***	***1,356***	***1,342***	***1,388***	***1,405***	***1,422***	***1,439***	***1,428***	***1,476***	***1,495***	***1,514***	***1,534***
16.	***Consulting Fees***																															
	Engineer-of-Record Contract		*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*	*300*
	Other Engineering Contracts		*350*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*	*150*
	Legal Consultant Contract		*400*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*	*50*
	Bond Procurement Contract		*100*																													
	Total Consulting Fees		***1,150***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***	***500***
	TOTAL WASTE TO ENERGY EXPENSES		***24,182***	***25,341***	***25,867***	***24,376***	***22,964***	***23,791***	***24,117***	***24,716***	***24,872***	***25,472***	***26,400***	***26,718***	***27,366***	***28,029***	***28,710***	***29,765***	***30,123***	***30,857***	***31,610***	***32,383***	***33,146***	***33,988***	***34,821***	***35,676***	***36,552***	***37,421***	***38,372***	***39,317***	***40,285***	***41,279***
	Net Income Before Debt Service		***-12,827***	***-13,738***	***-14,012***	***-12,260***	***-9,930***	***-10,913***	***-10,498***	***-10,793***	***-15,219***	***-15,794***	***-16,990***	***-16,989***	***-17,609***	***-18,246***	***-18,898***	***-20,218***	***-20,253***	***-20,956***	***-21,679***	***-22,420***	***-23,440***	***-23,950***	***-24,744***	***-25,559***	***-26,395***	***-27,517***	***-28,131***	***-29,033***	***-29,958***	***-30,906***
	Net Disposal Cost per Ton (Without Debt Service) ($/Ton)		***41***	***44***	***45***	***40***	***32***	***35***	***34***	***35***	***49***	***51***	***55***	***55***	***57***	***59***	***61***	***65***	***65***	***68***	***70***	***72***	***76***	***77***	***80***	***82***	***85***	***89***	***91***	***94***	***97***	***100***
17.	***Debt Service***		***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***	***8,974***										
	Net Income/Loss		***(21,801)***	***(22,712)***	***(22,986)***	***(21,235)***	***(18,905)***	***(19,888)***	***(19,472)***	***(19,767)***	***(24,194)***	***(24,769)***	***(25,965)***	***(25,964)***	***(26,584)***	***(27,220)***	***(27,872)***	***(29,192)***	***(29,227)***	***(29,931)***	***(30,653)***	***(31,394)***	***(23,440)***	***(23,950)***	***(24,744)***	***(25,559)***	***(26,395)***	***(27,517)***	***(28,131)***	***(29,033)***	***(29,958)***	***(30,906)***
	Net Disposal Cost per Ton (With Debt Service) ($/Ton)		***70***	***73***	***74***	***68***	***61***	***64***	***63***	***64***	***78***	***80***	***84***	***84***	***86***	***88***	***90***	***94***	***94***	***97***	***99***	***101***	***76***	***77***	***80***	***82***	***85***	***89***	***91***	***94***	***97***	***100***
	Percent Annual Increase		***-18.4%***	***-4.2%***	***-1.2%***	***7.6%***	***11.0%***	***-5.2%***	***2.1%***	***-1.5%***	***-22.4%***	***-2.4%***	***-4.8%***	***0.0%***	***-2.4%***	***-2.4%***	***-2.4%***	***-4.7%***	***-0.1%***	***-2.4%***	***-2.4%***	***-2.4%***	***25.3%***	***-2.2%***	***-3.3%***	***-3.3%***	***-3.3%***	***-4.3%***	***-2.2%***	***-3.2%***	***-3.2%***	***-3.2%***

Item Notes:

1. Proforma has a 30-year look-ahead starting with calendar year 2019. Assuming renegotiated contract in force in 2019 for comparison purposes, but likely will be later. Underlined years assume T-G outages. For years in red: 2026 is when the PPA expires and 2032 is when the current WMBI Agreement expires.
2. MSW Processed based on Facility Processing Guarantee of 310,000 tons per year. Assumes no increase due to growth that the City would not otherwise divert.
3. Ash % based on FY 2016 - FY 2017 average values.
4. KWh/Ton based on FY 2016 - FY 2017 average and assume degradation and increases around T-G outages. KWh/Ton is reduced for years 2020-2022 due to ongoing capital improvement projects.
5. Electrical Energy Fee is based on the actual FY 2017 rate and assumes 2.5% increase per year until the PPA ends in 2026. Upon PPA expiration, fee is reduced to 65% of contracted PPA, with no escalation rate.
6. Renewable Energy Credit is based on the actual FY 2017 rate and is escalated 2.5% as noted in the Seminole PPA. Upon PPA expiration, RECs are assumed not sold.
7. Ferrous Revenue is based on the actual $/gross ton from the Dec 2017 invoice with 2.5%/year escalation. Ferrous % of MSW is based on the FY 2016 - FY 2017 average recovery.
8. Non-Ferrous Revenue is based on the actual $/gross ton from the Nov 2017 invoice with 2.5%/year escalation. Non-Ferrous % of MSW is based on the FY 2017 average recovery.
9. Tip Fee Revenues for hopper and bulk waste are based on actual amounts received average from FY 2012 - FY 2017. Tip fee $/ton is based on actual current City rates without escalation. Tip fee for private MSW loads through the scale house is ignored for this model.
10. Base O&M Fee is estimated from other Facility fees and estimated cost for McKay, and will be dependent on negotiations. Rates escalated by their historical last 10 year average escalation factor of approximately 2.5%. Base fee threshold revised to 310,000 tons per year. Excess fee assumed to be half of base fee.
11. Ash Disposal Fee is based on the current fee of $16.50/ton and escalated by 2.5% per year.
12. Includes Capital Project Management Fee to Operator for management of planned, City funded capital projects related to the refurbishment.
13. Termination Fee paid to WMBI for contract termination.
14. Pass-Through Costs for chemicals and utilities are calculated on a separate sheet. Utilities costs are direct pay, except for natural gas. All chemicals and others are a pass-through under the WMBI contract.
15. Ash Transportation Fee is based on the City's share of the current fee (due to hauling range), escalated by 2.5% per year, and includes contractor's 5% markup.
16. Consulting fees are estimated at this time and include additional estimates for contract negotiation and bond procurement.
17. Debt service from Series 2013 and Series 2010 bonds combined with new bonds for City funded Facility refurbishment capital projects starting in 2020. Assuming bonds will be paid off in 2038.

ATTACHMENT H

City Operations of Facility Financial Projections

McKay Bay Proforma - City Operation Case

		Term	13 years	Term	20 years	Term	30 years
Total Net Income, $000s			($213,541)		($305,838)		($487,436)
Average Net Disposal Cost Per Ton			$52.99		$49.33		$52.41
NPV Net Income, $000s	**NPV Rate**	3%	($177,345)		($233,029)		($318,058)
	NPV Rate	5%	($158,275)		($198,432)		($250,532)

City Operation Case

			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
1.	***PRO FORMA***																															
	Solid Waste Generation (tons per year)	*Percentage of MSW*																														
2.	***MSW Processed (tons/yr)***		310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
3.	***Ash Produced (wet tons/yr)***	23%	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300
4.	***Net Electrical Generation (Mwh/yr)***		142,600	146,388	146,388	146,388	146,388	142,600	150,780	150,780	150,780	150,780	150,780	150,780	153,795	153,795	153,795	150,719	153,795	153,795	153,795	153,795	150,719	153,795	153,795	153,795	153,795	150,719	153,795	153,795	153,795	153,795
7.	***Ferrous Metals Recovered (tons/yr)***	3.1%	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610
8.	***Non-Ferrous Metals Recovered (tons/yr)***	0.09%	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279
	System Revenue ($000s)	*Escalation Factor or Percentage of MSW*																														
	WTE Operating Revenues																															
5.	*Electrical Energy Fee ($/kWh)*	1.025	0.0612	0.0627	0.0643	0.0659	0.0676	0.0693	0.0710	0.0728	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473
6.	*Renewable Energy Credits (RECs) ($/kWh)*	1.025	0.0024	0.0024	0.0025	0.0025	0.0026	0.0027	0.0027	0.0028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Electric Energy and RECs Revenues		9,065	9,539	9,777	10,022	10,272	10,257	11,116	11,394	7,131	7,131	7,131	7,131	7,273	7,273	7,273	7,128	7,273	7,273	7,273	7,273	7,128	7,273	7,273	7,273	7,273	7,128	7,273	7,273	7,273	7,273
7.	*Ferrous Market Revenue ($/gross ton)*	1.025	72	74	75	77	79	81	83	85	87	90	92	94	96	99	101	104	107	109	112	115	118	121	124	127	130	133	136	140	143	147
	Ferrous Market Revenue		616	631	647	663	680	697	714	732	750	769	788	808	828	849	870	892	914	937	960	984	1,009	1,034	1,060	1,086	1,114	1,141	1,170	1,199	1,229	1,260
8.	*Non-Ferrous Market Revenue ($/gross ton)*	1.025	810	830	851	872	894	916	939	963	987	1,011	1,037	1,062	1,089	1,116	1,144	1,173	1,202	1,232	1,263	1,295	1,327	1,360	1,394	1,429	1,465	1,501	1,539	1,577	1,617	1,657
	Non-Ferrous Revenues		202	207	212	217	223	228	234	240	246	252	258	265	271	278	285	292	299	307	315	322	331	339	347	356	365	374	383	393	403	413
	Total WTE Operating Revenues ($1000)		**9,882**	**10,377**	**10,636**	**10,902**	**11,174**	**11,182**	**12,064**	**12,366**	**8,127**	**8,152**	**8,177**	**8,203**	**8,372**	**8,400**	**8,428**	**8,312**	**8,486**	**8,517**	**8,548**	**8,580**	**8,467**	**8,646**	**8,680**	**8,715**	**8,751**	**8,643**	**8,826**	**8,865**	**8,905**	**8,946**
9.	***Tip Fee Revenues***	*Average Annual Amount*																														
	Tip Fee For MSW																															
	City Tip Fee for Hopper Waste ($/ton)		1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
	Hopper Waste Revenues	41	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
	City Tip Fee for Bulk Waste ($/ton)		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Bulk Waste Revenues	2,281	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228
	Total Tip Fee Revenues (not including MSW Tip Fee)		**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**
	TOTAL WASTE TO ENERGY REVENUES		**11,355**	**11,850**	**12,109**	**12,375**	**12,647**	**12,655**	**13,537**	**13,838**	**9,600**	**9,625**	**9,650**	**9,676**	**9,845**	**9,873**	**9,901**	**9,785**	**9,959**	**9,990**	**10,021**	**10,053**	**9,940**	**10,119**	**10,153**	**10,188**	**10,224**	**10,116**	**10,299**	**10,338**	**10,378**	**10,419**
	System Expenses ($000s)	*Escalation Factor*																														
	Operations Expenses																															
10.	*Payroll*		4,376	4,485	4,597	4,712	4,830	4,951	5,074	5,201	5,331	5,465	5,601	5,741	5,885	6,032	6,183	6,337	6,496	6,658	6,824	6,995	7,170	7,349	7,533	7,721	7,914	8,112	8,315	8,523	8,736	8,954
10.	*Miscellaneous Personnel Costs*		557	571	586	600	615	631	646	663	679	696	714	731	750	768	788	807	827	848	869	891	913	936	960	984	1,008	1,033	1,059	1,086	1,113	1,141
11.	*Repairs and Maintenance*	1.025	5,084	5,211	5,341	5,475	5,612	5,752	5,896	6,043	6,194	6,349	6,508	6,671	6,837	7,008	7,184	7,363	7,547	7,736	7,929	8,128	8,331	8,539	8,752	8,971	9,196	9,425	9,661	9,903	10,150	10,404
12.	Landscaping	1.025	22	23	24	24	25	25	26	27	27	28	29	29	30	31	32	33	33	34	35	36	37	38	39	40	41	42	43	44	45	46
13.	*Consumable Chemicals*		1,390	1,425	1,461	1,497	1,535	1,573	1,612	1,653	1,694	1,736	1,780	1,824	1,870	1,917	1,965	2,014	2,064	2,116	2,169	2,223	2,278	2,335	2,394	2,454	2,515	2,578	2,642	2,708	2,776	2,845
13.	*Utilities*		1,017	769	789	808	828	1,151	870	892	914	937	1,302	985	1,009	1,035	1,060	1,474	1,114	1,142	1,171	1,200	1,230	1,261	1,292	1,324	1,358	1,391	1,426	1,462	1,498	1,536
14.	*Insurance*	1.025	308	315	323	331	339	348	357	366	375	384	394	403	414	424	434	445	456	468	480	492	504	516	529	543	556	570	584	599	614	629
14.	*Environmental Testing & Permits*	1.025	308	315	323	331	339	348	357	366	375	384	394	403	414	424	434	445	456	468	480	492	504	516	529	543	556	570	584	599	614	629
15.	*Ash Disposal Fee($/ton)*	1.025	16.91	17.34	17.77	18.21	18.67	19.13	19.61	20.10	20.61	21.12	21.65	22.19	22.75	23.31	23.90	24.49	25.11	25.73	26.38	27.04	27.71	28.41	29.12	29.84	30.59	31.35	32.14	32.94	33.77	34.61
	Ash Disposal Cost		1,206	1,236	1,267	1,299	1,331	1,364	1,398	1,433	1,469	1,506	1,544	1,582	1,622	1,662	1,704	1,746	1,790	1,835	1,881	1,928	1,976	2,025	2,076	2,128	2,181	2,236	2,291	2,349	2,407	2,468
16.	*Ash Transportation Fee*	1.025	1,184	1,214	1,244	1,275	1,307	1,340	1,373	1,407	1,443	1,479	1,516	1,553	1,592	1,632	1,673	1,715	1,758	1,801	1,847	1,893	1,940	1,989	2,038	2,089	2,141	2,195	2,250	2,306	2,364	2,423
	Total Operations Expenses		**15,452**	**15,565**	**15,954**	**16,353**	**16,762**	**17,483**	**17,610**	**18,051**	**18,502**	**18,964**	**19,780**	**19,924**	**20,422**	**20,933**	**21,456**	**22,379**	**22,543**	**23,106**	**23,684**	**24,276**	**24,883**	**25,505**	**26,143**	**26,796**	**27,466**	**28,153**	**28,856**	**29,578**	**30,317**	**31,075**
17.	***Consulting Fees***																															
	Engineer-of-Record Contract		300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Other Engineering Contracts		150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
	Transition Plan Development and Assistance		700																													
	Legal Costs for Canceling Current O&M Agreement		50																													
	Legal Consultant Contract		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	Total Consulting Fees		**1,250**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**
	Other Costs																															
	Termination Payment for Cancelling O&M Agreement		2,500																													
	Capital Improvement Projects / Refurbishment		4,000	4,000	4,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	5,000																		
	Total Other Costs		**6,500**	**4,000**	**4,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**5,000**																		
	TOTAL WASTE TO ENERGY EXPENSES		**23,202**	**20,065**	**20,454**	**24,853**	**25,262**	**25,983**	**26,110**	**26,551**	**27,002**	**27,464**	**28,280**	**25,424**	**20,922**	**21,433**	**21,956**	**22,879**	**23,043**	**23,606**	**24,184**	**24,776**	**25,383**	**26,005**	**26,643**	**27,296**	**27,966**	**28,653**	**29,356**	**30,078**	**30,817**	**31,575**
	Net Income Before Debt Service		**-11,847**	**-8,215**	**-8,345**	**-12,478**	**-12,615**	**-13,328**	**-12,573**	**-12,712**	**-17,402**	**-17,840**	**-18,630**	**-15,748**	**-11,077**	**-11,560**	**-12,056**	**-13,095**	**-13,083**	**-13,617**	**-14,163**	**-14,723**	**-15,443**	**-15,886**	**-16,490**	**-17,108**	**-17,742**	**-18,536**	**-19,057**	**-19,740**	**-20,440**	**-21,157**
	Net Disposal Cost per Ton (Without Debt Service) ($/Ton)		**38**	**27**	**27**	**40**	**41**	**43**	**41**	**41**	**56**	**58**	**60**	**51**	**36**	**37**	**39**	**42**	**42**	**44**	**46**	**47**	**50**	**51**	**53**	**55**	**57**	**60**	**61**	**64**	**66**	**68**
18.	***Debt Service***		**13,859**	**13,435**	**13,436**																											
	Net Income/Loss		**(25,706)**	**(21,650)**	**(21,781)**	**(12,478)**	**(12,615)**	**(13,328)**	**(12,573)**	**(12,712)**	**(17,402)**	**(17,840)**	**(18,630)**	**(15,748)**	**(11,077)**	**(11,560)**	**(12,056)**	**(13,095)**	**(13,083)**	**(13,617)**	**(14,163)**	**(14,723)**	**(15,443)**	**(15,886)**	**(16,490)**	**(17,108)**	**(17,742)**	**(18,536)**	**(19,057)**	**(19,740)**	**(20,440)**	**(21,157)**
	Net Disposal Cost per Ton (With Debt Service) ($/Ton)		**83**	**70**	**70**	**40**	**41**	**43**	**41**	**41**	**56**	**58**	**60**	**51**	**36**	**37**	**39**	**42**	**42**	**44**	**46**	**47**	**50**	**51**	**53**	**55**	**57**	**60**	**61**	**64**	**66**	**68**
	Percent Annual Increase		**-95.0%**	**15.8%**	**-0.6%**	**42.7%**	**-1.1%**	**-5.7%**	**5.7%**	**-1.1%**	**-36.9%**	**-2.5%**	**-4.4%**	**15.5%**	**29.7%**	**-4.4%**	**-4.3%**	**-8.6%**	**0.1%**	**-4.1%**	**-4.0%**	**-4.0%**	**-4.9%**	**-2.9%**	**-3.8%**	**-3.8%**	**-3.7%**	**-4.5%**	**-2.8%**	**-3.6%**	**-3.5%**	**-3.5%**

Item Notes:

1. Proforma has a 30-year look-ahead starting with calendar year 2019. Underlined years assume T-G outages. For years in red: 2026 is when the PPA expires and 2032 is when the current WMBI Agreement expires.
2. MSW Processed based on Facility Processing Guarantee of 310,000 tons per year. Assumes no increase due to growth that the City would not otherwise divert.
3. Ash % based on FY 2016 - FY 2017 average values.
4. Net Electrical Generation is based on FY 2008 - FY 2017 average and assume degradation and increases around T-G outages. Generation is reduced for years 2020-2030 due to capital improvement projects.
5. Electrical Energy Fee is based on the actual FY 2017 rate and assumes 2.5% increase per year until the PPA ends in 2026. Upon PPA expiration, fee is reduced to 65% of contracted PPA, with no escalation rate.
6. Renewable Energy Credit is based on the actual FY 2017 rate and is escalated 2.5% as noted in the Seminole PPA. Upon PPA expiration, RECs are assumed not sold.
7. Ferrous Revenue is based on the actual $/gross ton from the Dec 2017 invoice with 2.5%/year escalation. Ferrous % of MSW is based on the FY 2016 - FY 2017 average recovery.
8. Non-Ferrous Revenue is based on the actual $/gross ton from the Nov 2017 invoice with 2.5%/year escalation. Non-Ferrous % of MSW is based on the FY 2017 average recovery.
9. Tip Fee Revenues for hopper and bulk waste are based on actual amounts received average from FY 2012 - FY 2017. Tip fee $/ton is based on actual current City rates without escalation. Tip fee for private MSW loads through the scale house is ignored for this model.
10. Payroll and Misc Personnel Expenses are calculated on the Payroll & Misc Costs tab. These costs are all estimated and based on similar calculations developed for the City's Emergency Planning.
11. R&M is estimated using an industry standard $/ton of waste processed. This value ranges between $15/ton to $20/ton and was estimated at $16/ton based on previous experience.
12. Landscaping is based on the actual subcontractor invoices to WMBI for the 2017 calendar year.
13. Costs for consumable chemicals and utilities are calculated on the Utilities and Chemicals Tab.
14. Insurance and Environmental Testing and Permits are estimated based on the actual costs passed through by WMBI to the City during FY 2017.
15. Ash Disposal Fee is based on the current fee of $16.50/ton and escalated by 2.5% per year.
16. Ash Transportation Fee is based on a $0.40/ton-mile hauling cost with a 40 mile trip to the Republic Landfill for disposal.
17. Consulting fees are estimated at this time.
18. Debt service from Series 2013 and Series 2010 bonds. Bonds are paid off in 2021.

ATTACHMENT I

City Operations of Facility with High CIP Financial Projections

McKay Bay Proforma - City Operation Case

High CIP Case

City Operation Case

		Term	13 years	Term	20 years	Term	30 years
Total Net Income, $000s			($216,541)		($336,838)		($558,436)
Average Net Disposal Cost Per Ton			$53.73		$54.33		$60.05
NPV Net Income, $000s	**NPV Rate**	3%	($179,367)		($252,021)		($355,942)
	NPV Rate	5%	($159,840)		($212,271)		($276,012)

			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
1.	***PRO FORMA***																															
	Solid Waste Generation (tons per year)	*Percentage of MSW*																														
2.	***MSW Processed (tons/yr)***		310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000	310,000
3.	***Ash Produced (wet tons/yr)***	23%	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300	71,300
4.	***Net Electrical Generation (Mwh/yr)***		142,600	146,388	146,388	146,388	146,388	142,600	150,780	150,780	150,780	150,780	150,780	150,780	153,795	153,795	153,795	150,719	153,795	153,795	153,795	153,795	150,719	153,795	153,795	153,795	153,795	150,719	153,795	153,795	153,795	153,795
7.	***Ferrous Metals Recovered (tons/yr)***	3.1%	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610	9,610
8.	***Non-Ferrous Metals Recovered (tons/yr)***	0.09%	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279	279
	System Revenue ($000s)	*Escalation Factor or Percentage of MSW*																														
	WTE Operating Revenues																															
5.	*Electrical Energy Fee ($/kWh)*	1.025	0.0612	0.0627	0.0643	0.0659	0.0676	0.0693	0.0710	0.0728	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473	0.0473
6.	*Renewable Energy Credits (RECs) ($/kWh)*	1.025	0.0024	0.0024	0.0025	0.0025	0.0026	0.0027	0.0027	0.0028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Electric Energy and RECs Revenues		9,065	9,539	9,777	10,022	10,272	10,257	11,116	11,394	7,131	7,131	7,131	7,131	7,273	7,273	7,273	7,128	7,273	7,273	7,273	7,273	7,128	7,273	7,273	7,273	7,273	7,128	7,273	7,273	7,273	7,273
7.	*Ferrous Market Revenue ($/gross ton)*	1.025	72	74	75	77	79	81	83	85	87	90	92	94	96	99	101	104	107	109	112	115	118	121	124	127	130	133	136	140	143	147
	Ferrous Market Revenue		616	631	647	663	680	697	714	732	750	769	788	808	828	849	870	892	914	937	960	984	1,009	1,034	1,060	1,086	1,114	1,141	1,170	1,199	1,229	1,260
8.	*Non-Ferrous Market Revenue ($/gross ton)*	1.025	810	830	851	872	894	916	939	963	987	1,011	1,037	1,062	1,089	1,116	1,144	1,173	1,202	1,232	1,263	1,295	1,327	1,360	1,394	1,429	1,465	1,501	1,539	1,577	1,617	1,657
	Non-Ferrous Revenues		202	207	212	217	223	228	234	240	246	252	258	265	271	278	285	292	299	307	315	322	331	339	347	356	365	374	383	393	403	413
	Total WTE Operating Revenues ($1000)		**9,882**	**10,377**	**10,636**	**10,902**	**11,174**	**11,182**	**12,064**	**12,366**	**8,127**	**8,152**	**8,177**	**8,203**	**8,372**	**8,400**	**8,428**	**8,312**	**8,486**	**8,517**	**8,548**	**8,580**	**8,467**	**8,646**	**8,680**	**8,715**	**8,751**	**8,643**	**8,826**	**8,865**	**8,905**	**8,946**
9.	***Tip Fee Revenues***	*Average Annual Amount*																														
	Tip Fee For MSW																															
	City Tip Fee for Hopper Waste ($/ton)		1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
	Hopper Waste Revenues	41	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
	City Tip Fee for Bulk Waste ($/ton)		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Bulk Waste Revenues	2,281	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228
	Total Tip Fee Revenues (not including MSW Tip Fee)		**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**	**1,473**
	TOTAL WASTE TO ENERGY REVENUES		**11,355**	**11,850**	**12,109**	**12,375**	**12,647**	**12,655**	**13,537**	**13,838**	**9,600**	**9,625**	**9,650**	**9,676**	**9,845**	**9,873**	**9,901**	**9,785**	**9,959**	**9,990**	**10,021**	**10,053**	**9,940**	**10,119**	**10,153**	**10,188**	**10,224**	**10,116**	**10,299**	**10,338**	**10,378**	**10,419**
	System Expenses ($000s)	*Escalation Factor*																														
	Operations Expenses																															
10.	*Payroll*		4,376	4,485	4,597	4,712	4,830	4,951	5,074	5,201	5,331	5,465	5,601	5,741	5,885	6,032	6,183	6,337	6,496	6,658	6,824	6,995	7,170	7,349	7,533	7,721	7,914	8,112	8,315	8,523	8,736	8,954
10.	*Miscellaneous Personnel Costs*		557	571	586	600	615	631	646	663	679	696	714	731	750	768	788	807	827	848	869	891	913	936	960	984	1,008	1,033	1,059	1,086	1,113	1,141
11.	*Repairs and Maintenance*	1.025	5,084	5,211	5,341	5,475	5,612	5,752	5,896	6,043	6,194	6,349	6,508	6,671	6,837	7,008	7,184	7,363	7,547	7,736	7,929	8,128	8,331	8,539	8,752	8,971	9,196	9,425	9,661	9,903	10,150	10,404
12.	Landscaping	1.025	22	23	24	24	25	25	26	27	27	28	29	29	30	31	32	33	33	34	35	36	37	38	39	40	41	42	43	44	45	46
13.	*Consumable Chemicals*		1,390	1,425	1,461	1,497	1,535	1,573	1,612	1,653	1,694	1,736	1,780	1,824	1,870	1,917	1,965	2,014	2,064	2,116	2,169	2,223	2,278	2,335	2,394	2,454	2,515	2,578	2,642	2,708	2,776	2,845
13.	*Utilities*		1,017	769	789	808	828	1,151	870	892	914	937	1,302	985	1,009	1,035	1,060	1,474	1,114	1,142	1,171	1,200	1,230	1,261	1,292	1,324	1,358	1,391	1,426	1,462	1,498	1,536
14.	*Insurance*	1.025	308	315	323	331	339	348	357	366	375	384	394	403	414	424	434	445	456	468	480	492	504	516	529	543	556	570	584	599	614	629
14.	*Environmental Testing & Permits*	1.025	308	315	323	331	339	348	357	366	375	384	394	403	414	424	434	445	456	468	480	492	504	516	529	543	556	570	584	599	614	629
15.	*Ash Disposal Fee($/ton)*	1.025	16.91	17.34	17.77	18.21	18.67	19.13	19.61	20.10	20.61	21.12	21.65	22.19	22.75	23.31	23.90	24.49	25.11	25.73	26.38	27.04	27.71	28.41	29.12	29.84	30.59	31.35	32.14	32.94	33.77	34.61
	Ash Disposal Cost		1,206	1,236	1,267	1,299	1,331	1,364	1,398	1,433	1,469	1,506	1,544	1,582	1,622	1,662	1,704	1,746	1,790	1,835	1,881	1,928	1,976	2,025	2,076	2,128	2,181	2,236	2,291	2,349	2,407	2,468
16.	*Ash Transportation Fee*	1.025	1,184	1,214	1,244	1,275	1,307	1,340	1,373	1,407	1,443	1,479	1,516	1,553	1,592	1,632	1,673	1,715	1,758	1,801	1,847	1,893	1,940	1,989	2,038	2,089	2,141	2,195	2,250	2,306	2,364	2,423
	Total Operations Expenses		**15,452**	**15,565**	**15,954**	**16,353**	**16,762**	**17,483**	**17,610**	**18,051**	**18,502**	**18,964**	**19,780**	**19,924**	**20,422**	**20,933**	**21,456**	**22,379**	**22,543**	**23,106**	**23,684**	**24,276**	**24,883**	**25,505**	**26,143**	**26,796**	**27,466**	**28,153**	**28,856**	**29,578**	**30,317**	**31,075**
17.	***Consulting Fees***																															
	Engineer-of-Record Contract		300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
	Other Engineering Contracts		150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
	Transition Plan Development and Assistance		700																													
	Legal Costs for Canceling Current O&M Agreement		50																													
	Legal Consultant Contract		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	Total Consulting Fees		**1,250**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**	**500**
	Other Costs																															
	Termination Payment for Cancelling O&M Agreement		2,500																													
	Capital Improvement Projects / Refurbishment		4,000	4,000	4,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
	Total Other Costs		**6,500**	**4,000**	**4,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**8,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**	**4,000**
	TOTAL WASTE TO ENERGY EXPENSES		**23,202**	**20,065**	**20,454**	**24,853**	**25,262**	**25,983**	**26,110**	**26,551**	**27,002**	**27,464**	**28,280**	**24,424**	**24,922**	**25,433**	**25,956**	**26,879**	**27,043**	**27,606**	**28,184**	**28,776**	**29,383**	**30,005**	**30,643**	**31,296**	**31,966**	**32,653**	**33,356**	**34,078**	**34,817**	**35,575**
	Net Income Before Debt Service		**-11,847**	**-8,215**	**-8,345**	**-12,478**	**-12,615**	**-13,328**	**-12,573**	**-12,712**	**-17,402**	**-17,840**	**-18,630**	**-14,748**	**-15,077**	**-15,560**	**-16,056**	**-17,095**	**-17,083**	**-17,617**	**-18,163**	**-18,723**	**-19,443**	**-19,886**	**-20,490**	**-21,108**	**-21,742**	**-22,536**	**-23,057**	**-23,740**	**-24,440**	**-25,157**
	Net Disposal Cost per Ton (Without Debt Service) ($/Ton)		**38**	**27**	**27**	**40**	**41**	**43**	**41**	**41**	**56**	**58**	**60**	**48**	**49**	**50**	**52**	**55**	**55**	**57**	**59**	**60**	**63**	**64**	**66**	**68**	**70**	**73**	**74**	**77**	**79**	**81**
18.	***Debt Service***		**13,859**	**13,435**	**13,436**																											
	Net Income/Loss		**(25,706)**	**(21,650)**	**(21,781)**	**(12,478)**	**(12,615)**	**(13,328)**	**(12,573)**	**(12,712)**	**(17,402)**	**(17,840)**	**(18,630)**	**(14,748)**	**(15,077)**	**(15,560)**	**(16,056)**	**(17,095)**	**(17,083)**	**(17,617)**	**(18,163)**	**(18,723)**	**(19,443)**	**(19,886)**	**(20,490)**	**(21,108)**	**(21,742)**	**(22,536)**	**(23,057)**	**(23,740)**	**(24,440)**	**(25,157)**
	Net Disposal Cost per Ton (With Debt Service) ($/Ton)		**83**	**70**	**70**	**40**	**41**	**43**	**41**	**41**	**56**	**58**	**60**	**48**	**49**	**50**	**52**	**55**	**55**	**57**	**59**	**60**	**63**	**64**	**66**	**68**	**70**	**73**	**74**	**77**	**79**	**81**
	Percent Annual Increase		**-95.0%**	**15.8%**	**-0.6%**	**42.7%**	**-1.1%**	**-5.7%**	**5.7%**	**-1.1%**	**-36.9%**	**-2.5%**	**-4.4%**	**20.8%**	**-2.2%**	**-3.2%**	**-3.2%**	**-6.5%**	**0.1%**	**-3.1%**	**-3.1%**	**-3.1%**	**-3.8%**	**-2.3%**	**-3.0%**	**-3.0%**	**-3.0%**	**-3.7%**	**-2.3%**	**-3.0%**	**-2.9%**	**-2.9%**

Item Notes:

1. Proforma has a 30-year look-ahead starting with calendar year 2019. Underlined years assume T-G outages. For years in red: 2026 is when the PPA expires and 2032 is when the current WMBI Agreement expires.
2. MSW Processed based on Facility Processing Guarantee of 310,000 tons per year. Assumes no increase due to growth that the City would not otherwise divert.
3. Ash % based on FY 2016 - FY 2017 average values.
4. Net Electrical Generation is based on FY 2008 - FY 2017 average and assume degradation and increases around T-G outages. Generation is reduced for years 2020-2030 due to capital improvement projects.
5. Electrical Energy Fee is based on the actual FY 2017 rate and assumes 2.5% increase per year until the PPA ends in 2026. Upon PPA expiration, fee is reduced to 65% of contracted PPA, with no escalation rate.
6. Renewable Energy Credit is based on the actual FY 2017 rate and is escalated 2.5% as noted in the Seminole PPA. Upon PPA expiration, RECs are assumed not sold.
7. Ferrous Revenue is based on the actual $/gross ton from the Dec 2017 invoice with 2.5%/year escalation. Ferrous % of MSW is based on the FY 2016 - FY 2017 average recovery.
8. Non-Ferrous Revenue is based on the actual $/gross ton from the Nov 2017 invoice with 2.5%/year escalation. Non-Ferrous % of MSW is based on the FY 2017 average recovery.
9. Tip Fee Revenues for hopper and bulk waste are based on actual amounts received average from FY 2012 - FY 2017. Tip fee $/ton is based on actual current City rates without escalation. Tip fee for private MSW loads through the scale house is ignored for this model.
10. Payroll and Misc Personnel Expenses are calculated on the Payroll & Misc Costs tab. These costs are all estimated and based on similar calculations developed for the City's Emergency Planning.
11. R&M is estimated using an industry standard $/ton of waste processed. This value ranges between $15/ton to $20/ton and was estimated at $16/ton based on previous experience.
12. Landscaping is based on the actual subcontractor invoices to WMBI for the 2017 calendar year.
13. Costs for consumable chemicals and utilities are calculated on the Utilities and Chemicals Tab.
14. Insurance and Environmental Testing and Permits are estimated based on the actual costs passed through by WMBI to the City during FY 2017.
15. Ash Disposal Fee is based on the current fee of $16.50/ton and escalated by 2.5% per year.
16. Ash Transportation Fee is based on a $0.40/ton-mile hauling cost with a 40 mile trip to the Republic Landfill for disposal.
17. Consulting fees are estimated at this time.
18. Debt service from Series 2013 and Series 2010 bonds. Bonds are paid off in 2021.

Arcadis U.S., Inc.

3109 West Dr. Martin Luther King Jr. Boulevard

Suite 350

Tampa

Florida 33607

Tel 813 903 3100

Fax 813 903 9115

www.arcadis.com