FISCAL SERVICES DEPARTMENT
PURCHASING DIVISION

Kent County Administration Building, 300 Monroe Avenue N.W., Grand Rapids, Michigan 49503-2289
Phone: (616) 632-7720 • Fax: (616) 632 -7715 • Email: purchasing@kentcountymi.gov

SOLICITATION

Requesting Agencies	Kent County
Solicitation Type	Request for Proposal (RFP)
Solicitation Number	4041
Description	Kent County Department of Public Works Sustainable Business Park Waste Conversion Project
Date of Issuance	6/10/2020
Inquiries Deadline Date & Time (local)	7/22/2020, 5 PM
Due Date & Time (local)	9/9/2020, 2 PM
Buyer Name	Brinks
Purchasing Website	www.accesskent.com/purchasing

Innovative Waste Conversion Project for the Sustainable Business Park

SCOPE
Exhibit A: Scope of Work

The Kent County Standard Submission Terms posted on the Bid Opportunities page of the Kent County Purchasing Division website are incorporated by reference into the solicitation.

Inquiries
Any and all communication regarding this solicitation shall be only with the Kent County Purchasing Division Inquiry Blog via the Bid Opportunities page or pre-submission conference. Kent County reserves the right to determine response format or to not respond, in its sole discretion.

PRE-SUBMISSION CONFERENCE

Conference Date	6/25/2020
Conference Time (local)	1 PM
Mandatory	No (no minutes provided)
Call-In/Log-In Option Only	Yes - Registration is required for conference attendees. Email purchasing@kentcountymi.gov by 5 pm local time the day prior to the scheduled conference to register and receive call-in/log-in information.

A pre-submission conference is scheduled for this request. Attendees should join the conference 5 minutes prior to start and mute their sound please. The conference purpose is to provide equal opportunity to seek clarifications and inquire about the location (if applicable). Attendees shall have fully reviewed all solicitation documents and correspondence prior to the conference. Attendee shall be an employee or authorized reseller of the Respondent with requisite knowledge, skill and abilities to participate.

Meeting attendees assume all possible technical issues associated with teleconferencing and deem the County and its service provider harmless and without fault regardless of the reason. Attendees requiring special services are asked to provide their requirements to the Kent County Purchasing Division at least forty-eight (48) hours in advance to allow for accommodations.

REQUEST FOR PROPOSAL SUBMISSION

Late, faxed, or emailed responses will NOT be considered. Submissions must be in the format outlined in Exhibit A - Scope of Work, Section 7 Submission Requirements.

Complete submissions must be received in the Kent County Purchasing Division, 300 Monroe Avenue NW, 2nd Floor receptionist, Grand Rapids, MI 49503 (or any other designated area) no later than the due date/time specified by the designated clock (local time).

The health and safety of the community is a top priority; therefore, Kent County Purchasing Division is shifting all Solicitations to electronic response only until further notice. Reponses may be submitted electronically by selecting the "Submit Online" icon on the Bid Opportunities page of the Kent County Purchasing Division's website. Respondent must submit on the County purchasing portal one complete proposal without pricing, and a second separate price proposal, both in non-password protected PFD documents.

The time required to upload a submission may vary. Respondent assumes all risks associated with electronic submission (including all possible technical issues) and deems the County and its service provider harmless and without fault regardless the reason. Successful electronic submissions are confirmed via Respondent's email. Respondent shall view the link in the confirmation email to determine accuracy prior to due date/time.

Kent County is not liable for cost incurred prior to award.

Submissions may only be withdrawn by written request if the request is received before the due date/time. Withdrawals subsequent to opening shall be subject to Kent County Fiscal Policy – Centralized Purchasing 5(i)(2).

Pricing Methodology

Provide a cost-effective pricing methodology with attention to detail and understandability that includes a properly designed and implemented all-inclusive response. The County understands only high-level estimates can be provided until detailed information regarding selection of equipment and additional discussion takes place. Although budget estimates will be considered, they still will be treated as such

and will not be considered binding in any respects. Binding cost proposals will be requested through a subsequent "best and final offer" Request for Proposal (RFP) process of County-selected Respondent finalists.

Respondent shall include pricing methodology for all costs necessary to implement the proposed solution. If any of these or other costs are not included in the proposal, Respondent shall state the reason why they are not included and project not-to-exceed budget estimates for all items necessary to successfully implement the project

Multiple Awards

Kent County reserves the right to issue multiple awards at its sole descretion resulting from this solicitation.

NO BID

Please provide feedback if you are electing not to participate in this solicitation.

Exhibit A

Request for Proposals

SCOPE OF WORK

KENT COUNTY
DEPARTMENT OF
PUBLIC WORKS

Kent County, Michigan

Innovative Waste Conversion Project

For the Sustainable Business Park

Contents

Glossary

Ash Monofill	Co-located with the South Kent Recycling & Waste Center, an Ash Monofill is utilized to dispose combustion residue from Waste to Energy.
Bottom Ash	Combustion residue composed of material that falls to the bottom of the boiler including ash-coated ferrous and non-ferrous metals
Bulky Waste	Oversized material such as mobile homes, boats, furniture, logs, mattresses, etc.
CESQG	Conditionally Exempt Small Quantity Generator. This would include companies that generate no more than 220 lbs. (100 kg) of hazardous waste per month.
Circular Economy	An economy based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.
Construction and Demolition (C&D)	Waste material generated as part of construction and/or demolition projects including inert material, dimensional lumber, roofing, cardboard, drywall, composite wood, etc.
Commercial Waste	Waste material generated from commercial establishments such as retail shopping outlets, local businesses, breweries, entertainment venues, etc.
Commercial Recyclables	Waste material source separated by commercial establishments and collected as part of a recycling program
Commingled Recyclables	Separation by generators of recyclable materials into a single container for collection. Compare to **source-separated**.
Diversion	For any given time period, the percentage of material delivered to the Facility that is recycled and/or converted into outputs/products for reuse (see text for definition of Facility)
Energy Generation	Processing waste material as a fuel/feedstock to generate energy in the form of steam, electricity, or heat (e.g., anaerobic digestion, gasification, pyrolysis, etc.) either for use in a Sustainable Business Park utilities system, or for export to the grid
End-market Use	Processing or supporting the processing of waste material after it has been recovered from the waste stream, and

	putting it towards beneficial use. Examples include product manufacturing using recycled plastic, wood or metals; composite product manufacturing; chill water to cool industrial equipment; district energy production; chemical intermediate production; academic/research interests, etc.
Municipal Waste Combustor Residue/ Fly Ash	Combustion residue composed of particulates captured in baghouses as part of the Waste to Energy facility's air pollution control system
Fuel/Feedstock Preparation:	Processing waste material to produce a solid, liquid, or gaseous fuel, or a production feedstock (e.g. refuse derived fuel, ethanol/methanol, bio-diesel, paper pulp, biomass)
HHW/Household Hazardous Waste	Household Hazardous Waste: Household products that contain hazardous substances such as pesticides, propane canisters, cleaning products, etc., categorized as flammable, corrosive or poisonous. Kent County's HHW program is termed SafeChem.
Industrial Non-hazardous Waste/IW	Waste material generated as part of manufacturing operations including out-of-spec product, process residues, etc. The Michigan EGLE defines this as non and low-hazard waste derived from industrial processes.
Linear Economy	A one-time system based on a 'take, make, dispose' model of production and consumption.
Material Re-use	Salvaging reusable waste material so it can be re-introduced into the consumer market, diverting the material from disposal (e.g. repair, salvaging bicycles, furniture, clothing, etc.)
Material Recycling	Processing waste material into a different form for re-introduction into the market (e.g. plastic re-manufacturing, mechanical material segregation, mattress recycling, pallet recycling, ash vitrification (ash to glass), composting, etc.);
MCW	Municipal solid waste and commercial waste
MRF	Material Recovery Facility
MSW	Municipal solid waste
Municipal solid waste	Waste generated by residents, offices, institutions, commercial businesses and other waste generators not producing special wastes.

P3	Public Private Partnership
Powder Coat	Powder coat is a dry finishing process based on polymer resin systems, combined with curatives, pigments, leveling agents, flow modifiers, all of which are mixed, cooled, and ground into a uniform powder similar to baking flour for the industrial finishing market.
RFP	Request for Proposals
Recycling Rate	The percentage of materials recovered for recycling relative to the amount of waste generated.
Residential Garbage	Post-consumer waste material generated by single-family and multi-family residences
Residential Recyclables	Post-consumer material source-separated and processed through the County's single stream Material Recovery Facility. Recovered materials are sold on the secondary material markets and residues are disposed.
Residential Yard Waste	Dry organic material generated by single-family units such as grass clippings, leaves, branches and other yard waste. Note: this material is not collected by DPW.
Residuals	Unrecoverable material received at the recycling centers and processing facilities.
Service Agreement	A mutually agreeable contract between Offeror and the DPW that will govern the construction, financing, maintenance and operation of the Facility for a period of at least 20 years.
Single-stream recycling	A collection method where recyclables are mixed together in curbside disposal and taken to a facility for sorting.
Solid waste	As defined by the Resource Conservation and Recovery Act, a broad term which includes garbage, refuse (e.g., metal scrap, wall board, etc.), sludge from treatment facilities, and other materials including solids, semisolids, liquids, or gaseous material from industrial, commercial, mining, agricultural, and community activities. Exceptions include domestic sewage, industrial wastewater, irrigation return flows, nuclear materials, and mining material not removed during the extraction process.

Source-separated	Separation by generators of recyclable materials into several containers for collection. Compare to **commingled**.
Special waste	Certain wastes which have disposal regulations that differ from **MSW.** Each special waste category has its own characteristics and handling requirements. Some examples of special waste are: incineration ash, fluorescent bulbs, hazardous waste, latex paint, Styrofoam, and appliances.
TPD	Tons per day
TPY	Tons per year
Tipping fee	The fee charged for disposing waste at a solid waste facility such as a transfer station/MRF, a landfill or incinerator.
Transfer station	A permanent facility that accepts waste and recyclable materials from self-haulers and/or franchised haulers. The waste is dumped and reloaded into larger trailers for transportation to its final destination such as the WTE or a landfill.
Waste reduction	To reduce, avoid, or eliminate the generation of wastes.
Waste stream	The entire spectrum of wastes produced by all waste generators.
Waste to Energy/WTE	Waste to Energy Facility
Yard Waste	Yard waste includes grass cuttings, weeds, leaves, shrubbery, twigs and small branches. Michigan banned yard waste disposal at MSW landfills in 1995.

1. Purpose

The Kent County, Michigan Department of Public Works (DPW) has established a policy goal to substantially reduce the flow of waste to its existing South Kent Landfill (SKL or Landfill), adopting ambitious targets to reduce overall waste to the landfill by 20% in 2020 and 90% by 2030. To that end, DPW is developing a Sustainable Business Park (SBP) adjacent to its Landfill in Byron Center, MI[1], which will be a home for emerging waste conversion, reuse and recycling technologies and stimulate the market for locally sourced manufacturing inputs.

The tenants of the SBP will catalyze the transition from the current status-quo material management economy to a Circular Economy (see DPW Objectives below) by establishing buildings, facilities and processes to produce inputs for re-introduction into industrial manufacturing supply chains. Carrying out the vision of the Circular Economy, the SBP will increase material diversion from disposal and work toward developing the local manufacturing economy required to sustain DPW's future solid waste management system.

The centerpiece of the SBP will be a solid waste conversion facility (Facility) to receive the MSW, MRF rejects and unprocessed MSW bypassed from the WTE that are currently deposited in the Landfill, and process those inputs to produce recyclable materials and useful products/outputs. This activity will divert tonnage from the Landfill. In 2019, the Landfill received approximately 315,000 tons of such wastes[2], and the DPW desires to divert initially a minimum of 50% of that waste from the Landfill.

The objective of this Request for Proposal (RFP) is to identify strong and innovative companies (Offerors) that have either Proven or Demonstrated Technologies[3] and operational skills; and to select one to partner with the DPW to implement waste processing technologies to help reduce waste disposal at the Landfill by 90% by 2030, the goal adopted by the DPW Board of Public Works. Offerors that respond to this RFP will position their companies as being on the leading-edge of helping localities address sustainable materials management and to implement Circular Economy principles.

An Offeror may propose to process solid waste obtained from sources other than the DPW, such as other regional municipalities and manufacturers, upon such terms as the Offeror and the other parties may negotiate. The DPW encourages a regional approach but the Offeror must be responsible for processing the contracted amount of DPW MSW first and foremost.

The desired Facility will likely be composed of a mixed waste processing "front-end" consisting of equipment (screens, shredders, conveyors, magnets, optical sorters, etc.) to remove recyclables for sale and sort the remaining waste into component streams (organics, mixed plastics, fibers, etc.) for further processing into multiple products and feedstocks (energy, compost, building materials, chemicals, aggregates, engineered fuel, paper pulp, etc.). Offerors shall design and construct the front-end using equipment from established suppliers, as listed in Attachment 1.[4] Offerors should employ proprietary

[1] The SBP Site is primarily located in Dorr Township, Allegan County, see Section 4.

[2] The Landfill also receives ash from the WTE facility and sewage sludge, both of which may be incorporated into the Facility as options. See Background Information for details of volumes.

[3] See Section 6.0 for the definitions of Proven and Demonstrated Technologies

[4] Offerors desiring to use equipment from other manufacturers must supply a justification for such use in their technical proposal.

"back-end" technology, processes, and equipment that, together with the front-end processes, are capable of converting at least 50% of the inbound waste materials into useful and valuable products for sale into the economy upon start-up of the Facility.

The preference of the DPW is to select firms or teams of firms that offer to produce multiple offtakes/products, rather than those that generate only a single product.

Offerors should submit a plan (the "Business Development Plan") of future technology, infrastructure and market activities which, if implemented at the Facility, could enable the Facility to achieve the DPW's 90% diversion goal by 2030. The DPW will be the sole arbiter of whether an Offeror's Business Development Plan is reasonable and adequate. To incorporate any element of the Business Development Plan into the Service Agreement will require the mutual consent of both Parties.

The Facility will be designed, built, permitted, operated, and maintained by the Offeror. The DPW will consider either of the two following options for Facility ownership and financing:

- **Public-Private Partnership Option.** The front-end, together with the scales, building(s), utilities and site improvements, will be owned and financed by the DPW. The "back-end" technologies used to convert component waste streams into useful products and feedstocks will be provided, financed, and owned by the Offeror. In the final design, a dividing line will be established to identify which parts of the facility are County-owned and which are Offeror-owned, or
- **The Private Option.** The front-end, together with the scales, building(s), utilities and site improvements, and the back-end will all be owned and financed by the Offeror. In this Option, the DPW would enter into a long-term site lease upon which the Facility would be built.

Offerors may propose to undertake either or both options in their proposals. Offerors must clearly state the option(s) selected for ownership/financing and complete the Cost Form(s) accordingly (see Attachment 7).

DPW Objectives

DPW's economic and environmental goals are to advance its vision of a Circular Economy, summarized here:

> The development of a SBP will stimulate the paradigm shift towards a Circular Economy, a value-added system in which virgin resource inputs, wastes, emissions, and energy leakages are minimized by slowing, closing, and narrowing material and energy loops to eliminate loss and reintroduction of useful materials back into commerce. This can be achieved through thoughtful design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling of stocks and materials flow. This approach contrasts the current one-time Linear Economy which is based on a 'take, make, dispose' model of production and consumption. See Figure 1 for a graphical depiction to further illustrate the comparison.

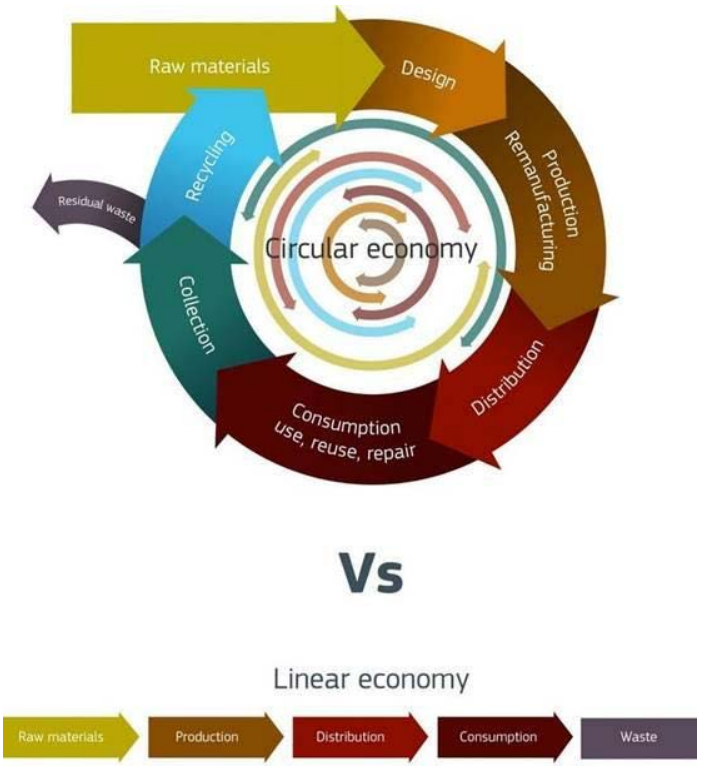


Figure 1 - Circular Economy vs. Linear Economy (Source: Circular Economy EU Plan 2016-2019)

Other SBP Tenants

In addition to the Facility being solicited under this RFP, the SBP will provide other opportunities for specialty projects that will significantly reduce the tonnage of material that require Landfill disposal, as well as at other disposal facilities in the region, and stimulate demand for recycled commodities across various sectors in the Midwest. While it is the DPW's priority to handle Kent County waste, it is also the DPW's desire to host at the SBP a variety of tenants and technologies to reuse or repurpose other counties' and regional waste streams, including the following:

- **A.** Other Municipal Solid Waste;
- **B.** Organic Waste;
- **C.** Bulky Waste;
- **D.** Construction & Demolition; and,
- **E.** Industrial Non-hazardous Waste.

See Section 2 Background Information below for more detailed material descriptions and quantities.

In addition to central waste conversion activity in the SBP, the DPW anticipates setting aside a dedicated SBP site for the installation of a Research, Development and/or Education facility as part of the SBP. This facility could serve temporary tenants, potentially in partnership with an educational institution, that are in the ideation and bench-scale stages of applicable technologies, common office, conference room space and shared warehouse/internal logistics services. As a means of providing a basis for temporary tenants to develop technologies to pilot-scale and advance the state-of-the-art conversion technologies, the Research, Development and/or Education facility would potentially be supported by revenues generated from the operation of the SBP.

More information about the SBP project can be found on our website:
http://www.reimaginetrash.org/vision/

Table 1 presents the RFP project timeline. See the front section of the RFP for details regarding website links and registration requirements.

Table 1 - RFP Timeline

Timeline Event	Date
DPW Issues RFP	June 10, 2020
Non-mandatory Preproposal Zoom Meeting	June 25, 2020 1pm
Offeror Deadline for Submitting Questions	July 22, 2020 5pm
DPW Deadline for Submitting Question Responses	August 4, 2020
Offeror Deadline for Submission	September 9, 2020 2pm
Notify Offerors of Next Steps for Facility Development	Expected December 2020

2. Background

Since the mid-1960s Kent County has overseen the siting, engineering, construction, operation, closure, monitoring and maintenance of four landfills, one of which is still in operation. In the mid-1980s DPW constructed a transfer station, which it continues to operate. DPW also facilitated the planning and construction and negotiated the contract to operate the Waste to Energy (WTE) Facility beginning in 1990. In that same year, DPW began operating a dual stream material recovery facility (MRF), ultimately seeing it through to the construction of a new single stream MRF in 2010, with new equipment upgrades in 2017 and 2020.

Kent County's integrated solid waste management system provides disposal, recycling and recovery services through the use of the following facilities, the locations of which can be found in Figure 2:

- South Kent Recycling & Waste Center (Landfill);
- North Kent Recycling & Waste Center (Transfer Station);
- Recycling & Education Center (MRF);
- Household Hazardous Waste (HHW) drop-off sites;
- Waste to Energy facility (WTE); and
- Recycling Stations.

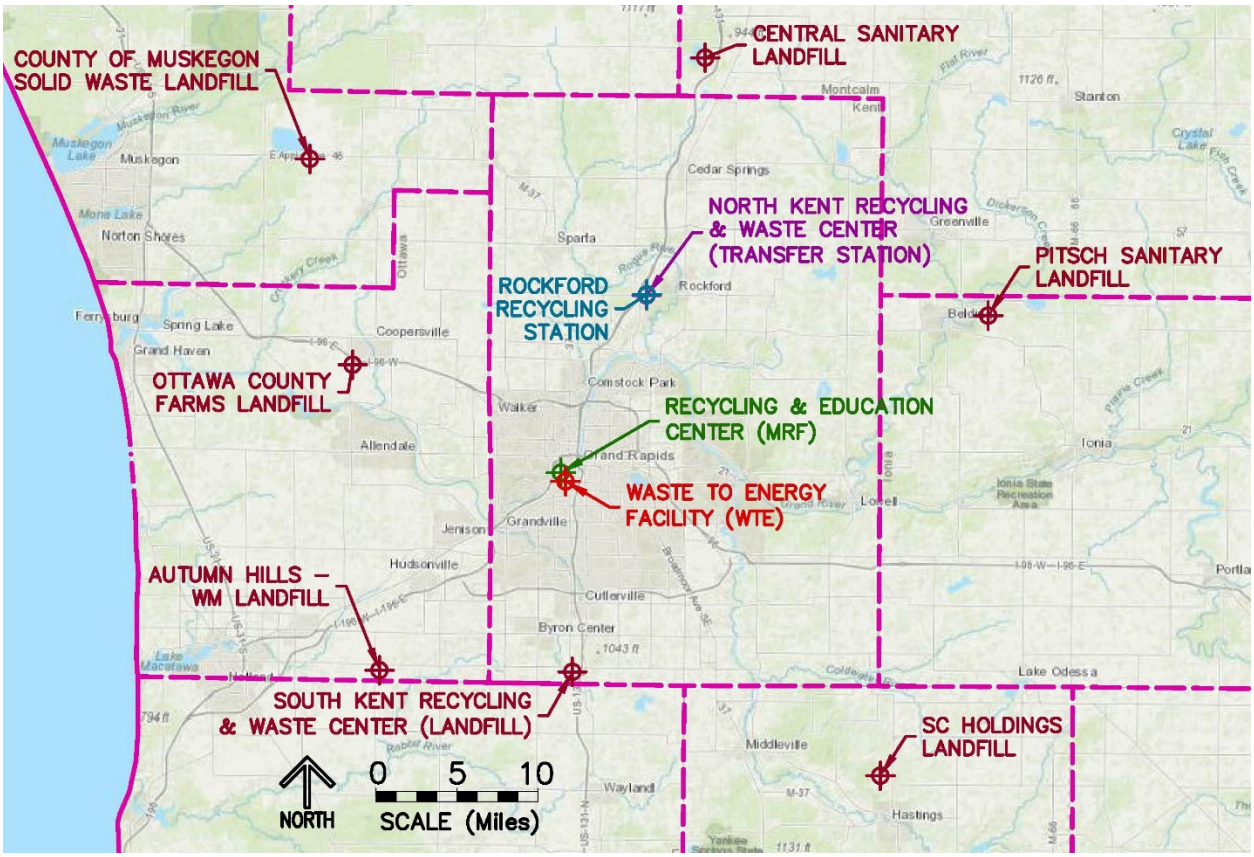


Figure 2 - Map of DPW Managed Assets and Key Solid Waste Facilities in the Region

Using its facilities, DPW handles nearly 680,000 tons of material per year. Estimated 2019 yearly tonnages of waste material managed by the DPW are displayed in Table 2.

Table 2 - 2019 Tonnage Summary

Tons of Material Managed at Each Kent County Facility (2019)						
		SKL	**WTE**	**NKT**	**MRF**	**TOTAL**
MSW	Delivered (Net)	228,170	180,000	92,505		500,675
	Transfer from WTE	85,732				85,732
	Transfer from NKT	6,646				6,646
	Transfer from MRF	1,870				1,870
Sludge		13,154				13,154
Ash		41,752				41,752
Recyclables (Net)					29,219	29,219
HHW (estimated)						700
	Total	**377,324**	**180,000**	**92,505**	**29,219**	**679,748**

Additionally, there are an estimated 332,000 tons of solid waste produced in Kent County but currently managed by entities generally located outside of Kent County[5]. It should be noted that it is the DPW's intention to make available approximately 300,000 tons to be delivered to the Facility at the SBP. Explicit definitions of the waste materials generated and managed in Kent County are defined in the Glossary above.

Table 3 lists the tipping fees at each of the DPW facilities:

Table 3 - Tipping Fees at DPW Facilities

Facility	Tipping Fee
South Kent Recycling & Waste Center (Landfill)	$43.64 per ton
North Kent Recycling & Waste Center (Transfer Station)	$43.64 per ton
Waste to Energy Facility (WTE)	$56.68 per ton
Recycling & Education Center (MRF)	$65-75 per ton

Additionally, over time there has been approximately one million tons of WTE ash placed into the ash monofill at the South Kent Landfill.

A previous study[6] in Kent County indicated that there are several local office furniture manufacturers regularly producing more than 30 tons of composite panel wood waste (cut-offs, sawdust, etc.) per day. Across four international furniture manufacturers in the region, the aggregate waste stream has been estimated at over 5,100 tons per month, of which a substantial amount of the composite panel wood waste has, in the past, been sent to the Genesee WTE facility in Flint, Michigan or to a local landfill. Powder coat and single use plastic waste is also commonly noted as problematic to recycle for manufacturers. There is estimated to be a minimum 250 tons per month of powder coat generated in the region, in mixed colors, mixed polymers, and mixed collection containers. Also, the survey estimated the regional generation of approximately 100 tons per month of food waste.

Michigan's Beverage Container Act,[7] also known as a bottle deposit or Bottle Bill, was designed to reduce littering and conserve resources. It requires a deposit at the time of purchase of soft drinks, soda water, carbonated natural or mineral water, other nonalcoholic carbonated drink, and beer, ale, or other malt drink of whatever alcoholic content in containers less than one gallon, regardless of the container's material composition. Currently the amount of deposit is $0.10; 75% of unredeemed deposit funds are distributed to statewide environmental programs, the remaining funds go to retailers. Since 1990 Michigan had maintained a redemption rate well above 90%[8], however the redemption rate dropped to 89% in 2018, and indications are that the rate may continue to decline.

[5] REPORT OF SOLID WASTE LANDFILLED IN MICHIGAN, October 1, 2018 - September 30, 2019 https://www.michigan.gov/documents/egle/SolidWasteAnnualReport_-_Fiscal_Year_2019FINAL_681416_7.pdf

[6] www.gbbinc.com/KentCountyZeroWasteToLandfill

[7] http://legislature.mi.gov/doc.aspx?mcl-Initiated-Law-1-of-1976

[8] Source: "Bottle Deposit Information." Michigan Department of Treasury, 2017.

For more information about Kent County and DPW operations such as the parameters of acceptable waste and hours of operations, as well the guiding principles and vision of the Reimagine Trash campaign, visit www.reimaginetrash.org

3. Current DPW Waste Management Facilities

South Kent Recycling & Waste Center (Landfill) (10300 South Kent Drive, Byron Center, MI 49315)

The South Kent Recycling & Waste Center is an active landfill with ancillary recycling services on-site including collection of white goods, tires, concrete, electronics, and small amounts of cardboard. The 350-acre property has a scale house with three scales, an office and maintenance building. The primary function at the site is the active landfill which in 2019 received approximately 315,000 tons of MSW, including transfers from the North Kent Transfer Station, MRF transfers and transfers/rejects from the WTE facility.

Also, on the property is an ash monofill which received 41,752 tons from the county-owned Waste to Energy Facility in 2019. In total it is estimated that approximately 1,000,000 tons of combustion residue have been placed into the monofill here that could be mined for the recovery of ferrous, non-ferrous,[9] precious metals and residue reuse. The Landfill also received 13,154 tons of sludge bringing the total of all waste disposed there to 369,935 tons in 2019. This represents an approximate 10% growth from the previous year, and an increase of more than 70% since 2010. An active gas collection system is located onsite that generates 3.2 megawatts of electricity fed directly into the grid on-site and a flare that is engaged during maintenance. More detailed information about the Landfill, including a breakdown of composition can be found in Attachment 2. Table 4 below shows the composition of MSW disposed at SKL which is generated in Kent County.[10]

[9] It is worth noting that the Bottle Bill may significantly impact the quantity of aluminum available here.

[10] This compositional estimate of waste delivered to the SKL was derived from a 2016 West Michigan Sustainable Business Forum (WMSBF) report. Per the WMSBF report, it should be noted that HDPE was characterized together with "plastic packaging" in their evaluation of each facility. This has no impact on the overall composition of plastic in the waste stream, however, HDPE as an individual material is not represented in their compositional estimate of materials disposed at the SKL. However, according to the WMSBF report, it is unlikely that HDPE exceeds a composition greater than 2% of the overall waste stream. For the purposes of this report however we have incorporated their conceptual estimate of HDPE (which was based on other statewide characterization reports) into our analysis. Note: Only packer trucks, not roll-offs, were sampled therefore actual data may vary. *Source:* Schoonmaker, D., Lowen, A., Isely, P., and Kneisel, A. Michigan Municipal Solid Waste Characterization and Valuation: Opportunities for Economic and Environmental Impact. West Michigan Sustainable Business Forum; Grand Valley State University, 2016.

Table 4 - Composition of MSW Disposed at SKL

Composition of Disposed MSW Disposed at SKL (mean % by weight)	
Material	**Percentage**
Paper	
Mixed	12.00%
Newsprint	0.99%
Corrugated	8.56%
Subtotal Paper	**21.55%**
Plastic	
Plastic (#3,4,5,7)	3.52%
Plastic Bags	2.23%
Plastic Packaging (#2-5, 7)	5.51%
PET Beverage (#1)	0.91%
Polystyrene	0.70%
Subtotal Plastic	**12.87%**
Metals	
Ferrous	3.17%
Aluminum	0.44%
Subtotal Metals	**3.61%**
Other Wastes	
Textiles	2.20%
Bulk Items	0.83%
Other Inorganics	18.37%
Subtotal Other Wastes	**21.40%**
Organics	
Food Waste	12.62%
Yard Waste	5.62%
Soil	1.88%
Wood	6.48%
Other Organics	8.80%
Subtotal Organics	**35.40%**
MI Deposits	**0.30%**
Glass	**2.86%**
Household Hazardous	**0.72%**
Electronics	**1.31%**
Total	**100%**
Vehicles Sampled	**27**

North Kent Recycling & Waste Center (2908 Ten Mile Road, Rockford, MI 49341)

The North Kent Recycling & Waste Center (Transfer Station) is an active solid waste transfer station adjacent to the closed North Kent Landfill with ancillary recycling services onsite including collection of white goods, tires and electronics. The facility consists of a closed landfill, scale house with 2 scales, transfer building with two in-floor compactors that fill walking floor transfer trailers, outdoor recycling

drop-off station, outdoor SafeChem (household hazardous waste) station, and outdoor storage area for white goods. A material handler was added in 2020 to begin to segregate some C&D material, particularly wood, vinyl siding, metal and cardboard.[11]

Kent County Recycling & Education Center (977 Wealthy SW, Grand Rapids, MI 49504)

The Kent County Recycling & Education Center is a single stream material recovery facility (MRF) built on 5 acres just outside downtown Grand Rapids. The facility opened for operation in 2010, replacing an aging dual-stream recycling facility. The facility is owned and operated by Kent County DPW and processed 31,089 tons in 2019. Approximately 10% of the incoming material was discarded as process residue. Recyclables received at the MRF are from curbside collection by the City of Grand Rapids and private haulers within an eight-county region around Kent County. DPW's recycling drop-off stations also contribute to the overall tonnage. Recent equipment upgrades at the facility include a Harris baler, MSS optical scanner (cartons and HDPE) and OCC screen.

Services co-located on this property include electronics recycling and a recycling drop-off station. The site includes a scale, scale house, 5,000 square foot education center with museum-quality exhibits that hosted nearly 8,161 people in 2019 and an ancillary 10,000 square foot building that is currently used for equipment storage and electronics recycling.

Recycling Drop-Off Stations are operated by at two of DPW's facilities:

- **Rockford Recycling Station** at North Kent Recycling & Waste Center
- **Grand Rapids Recycling Station** at the Recycling & Education Center

Recyclables from the drop-off centers currently are recovered in 30-yard roll off containers. More information about the MRF and Drop-off Stations can be found in Attachment 2.

SafeHomes Programs (chemicals, medications, sharps)

DPW administers the SafeHomes suite of programs that include SafeChem, SafeMeds and SafeSharps to ensure safe disposal of chemicals, medications, and needles (sharps) from Kent County residents.

SafeChem Centers for HHW are located in four distinct areas of Kent County to provide convenient access to safe disposal of leftover home chemicals.

- **Rockford SafeChem Center** is co-located at the North Kent Recycling & Waste Center.
- **Grand Rapids SafeChem Center** is co-located at the DPW Administrative Offices.
- **Kentwood SafeChem Center** is co-located at the City of Kentwood Public Works facility.
- **Wyoming SafeChem Center** is co-located at the City of Wyoming Clean Water Plant.

The SafeChem Centers each have a hazardous material storage building with UL Approved secondary containment and fire suppression systems with three distinct storage areas to keep incompatible materials segregated. Each Center is open two to four hours per week (based on the time of year) on a rotating basis and no appointments are required.

It should be noted that DPW will be expanding their HHW service to include CESQG waste within the next two years.

[11] From visual inspection of incoming loads, it is estimated that 17% is C&D material.

The **SafeMeds Program** accepts expired and unneeded prescription and over-the-counter medicines for safe destruction in the DPW's Waste to Energy Facility. The DPW is the administrator of the Program with partners that include wastewater treatment facilities, pharmacies and law enforcement agencies.

The **SafeSharps Program** is a collaboration between the DPW and Kent County Health Department to ensure safe and confidential disposal of needles and other residential sharps. Containers are distributed empty and received full through the Health Department clinic sites around Kent County and the program is administered by the DPW.

Waste-to-Energy Facility (950 Market Ave, Grand Rapids, MI 49503)

The WTE facility is owned by the DPW and operated under contract by Covanta, Inc. The facility opened for commercial operation in 1990 with a processing capacity of 625 tons per day, generating up to 18 megawatts of electricity and up to 116,000 pounds of steam per hour. The facility recovers ferrous but does not recover non-ferrous metals from the combustor residue.

The DPW's responsibilities for management of the facility include:

- Oversight of Covanta operations and maintenance services;
- Operation of the facility scale house;
- Management of the tip floor at the facility, including loading of any bypass material;
- Operation of compactor and waste transfer functions at the facility; and,
- Waste transfer from the Facility to Landfill.

More detailed information about the WTE Facility, including a breakdown of composition can be found in Attachment 2.

4. Sustainable Business Park Site

The 250-acre SBP site (Site) is located in the southwest quarter of Section 36 of Byron Township (Town 5 North, Range 12 West) and the West Half of Section 1 of Dorr Township (Town 4 North, Range 12 West). These areas are bounded by a railroad embankment and the South Kent Recycling & Waste Center (Landfill) to the north; US-131 to the east; 146th Avenue and agricultural land to the south; and Clyde Park Avenue/14th Street and agricultural land to the west, as shown in Figure 3 below.

Parcels available to be used for siting the Facility are those highlighted in Figure 3 (PUD parcels 1 - 6) and Figure 4 shows the intended Phasing Plan. The DPW will work with the selected Offeror on the siting of the Facility to harmonize the objectives of the DPW and the Offeror.

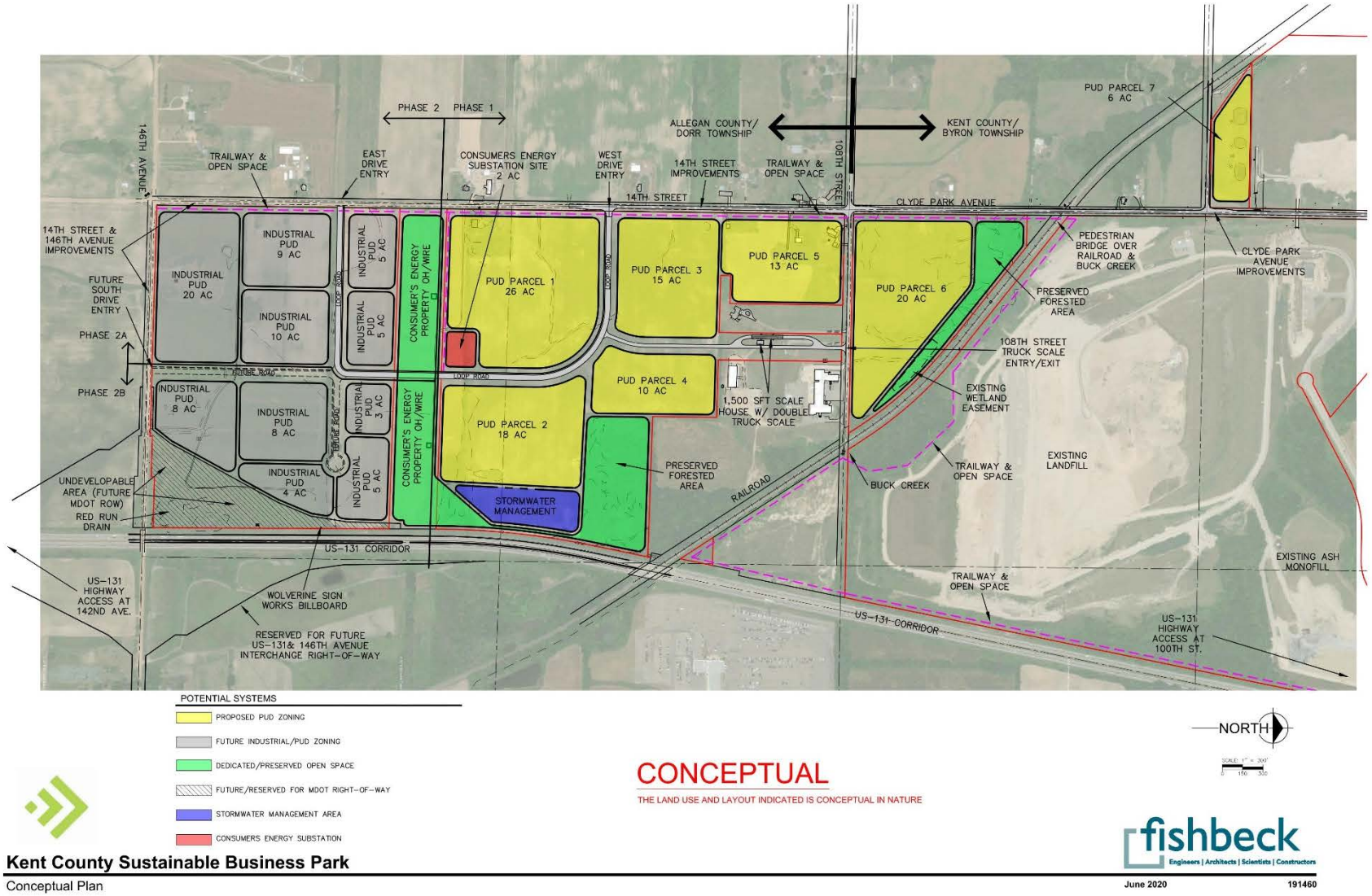


Figure 3 - Kent County Sustainable Business Park Site Conceptual Plan

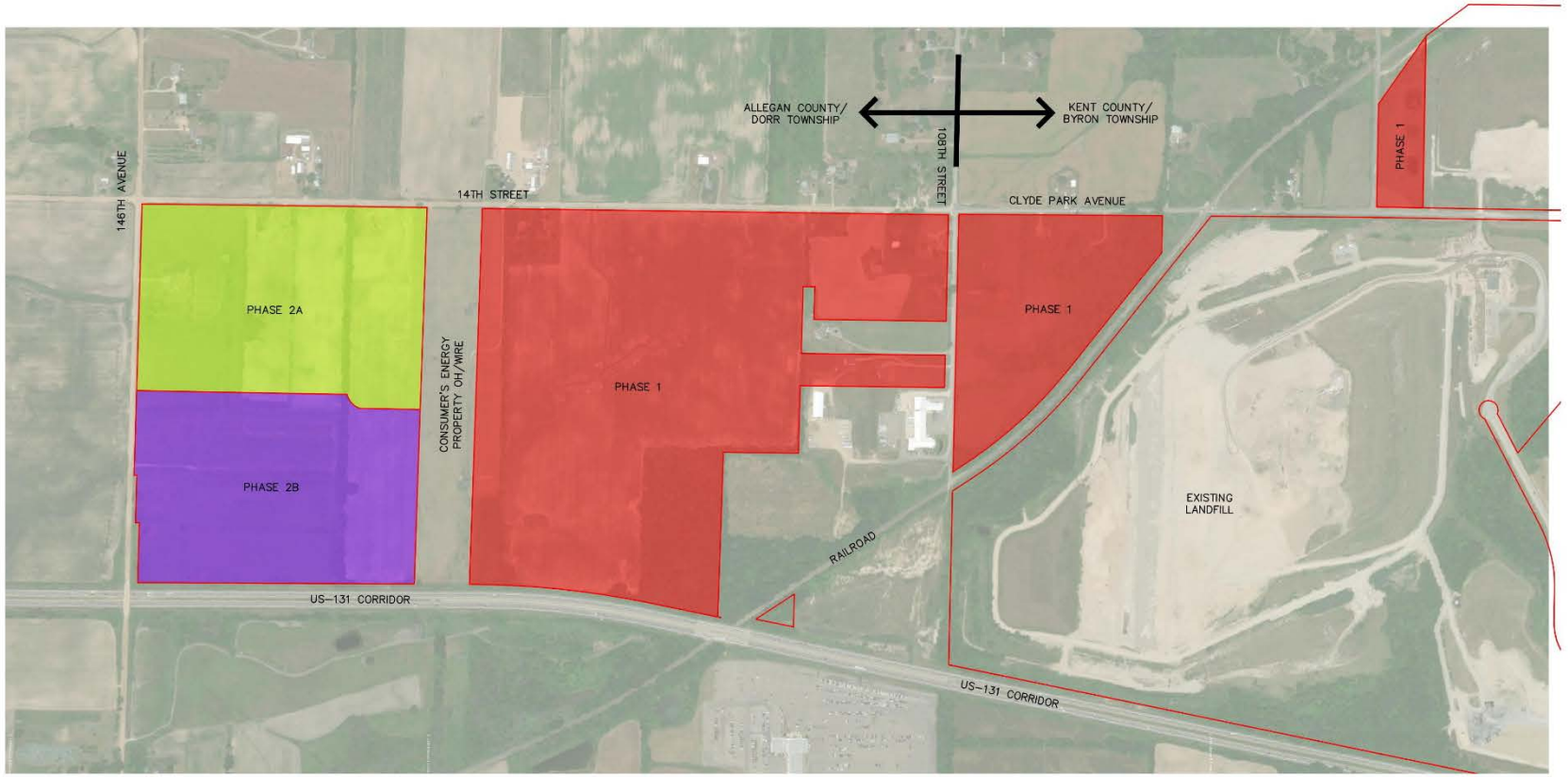


Figure 4 - Kent County Sustainable Business Park Site Phasing Plan

The preliminary Site layout is divided into the originally permitted area (known as the existing Landfill), and those areas designated to house future tenants of the SBP. The property will be developed in a phased approach that will first focus on the northerly properties and then expand toward the south. The current property is zoned for the proposed use. The property will be developed using a Planned-Unit-Development zoning approach, which will front-load the review and approval process for the overall park and parcels and will then streamline and minimize the Site Plan Approval process for each individual parcel.

The SBP property is being developed initially with the infrastructure required for new tenants to access, construct and connect to within their chosen parcel. The new infrastructure in the SBP will be developed with all access, utilities and amenities expected in a public right-of-way.

Existing utility connections will be extended to the SBP from the north, including Byron-Gaines Utility-owned sanitary sewer and watermain, Consumers Energy's owned electricity distribution system and DTE-owned natural gas utility. A high voltage transmission line bisects the Site as well as a natural gas interconnection with Consumer's Energy in the south of the landfill. Stormwater management will be handled on a regional basis. Individual parcel developments within the SBP will be required to collect, treat and discharge their stormwater runoff to the regional management/detention systems.

Preliminary geotechnical information (see Attachment 3) for the properties indicate that "most, if not all, site investigate appear feasible for development using conventional construction methods".

Design Standards

The Preliminary Layout (see Figure 3) sets a coherent basis for development of the Park. It is important that a unified image be maintained throughout the Park. Development throughout the Park will be expected to enhance and contribute to a positive image for the Park. It shall be the design intent of each proposed project to maintain and strengthen this character as well.

While it is important that the Park be perceived as a unit, a 'whole' within the Dorr and Byron Community, it is equally important that individual expression of specific users within the Park not be precluded. A balanced approach of providing unity and flexibility in development control is the goal. The design philosophy to achieve this goal dictates that treatment affecting the common areas of the SBP be well defined while those dealing with individual building and site design are more flexible.

To achieve a unified Park image, **Site Design Standards** are developed for those design elements which are exposed to public view and have the greatest impact on the overall Park image. **Architectural Design Guidelines** are proposed for the individual sites and buildings that recommend an approach for cohesion with overall Park character but allow individual expression. **Sustainability** is also encouraged in the design strategies and products used in the property development.

Site Design Standards will include the following:

Signage/Entity Identification
Site Lighting
Building Siting and Open Spaces
Landscaping
Irrigation

Drainage
Soil Erosion and Sedimentation Control
Topography
Parking Lot Design/Location
Fencing and Walls
Utilities/Park Road Right-of-Way Corridor
Sustainable Products

Architectural Design Guidelines will include the following:

Building Design Intent and Context
Architectural Concept
Building Articulation
Building Materials
Building Entries
Mechanical and Electrical Equipment
Services Areas

Sustainability

Sustainability is encouraged in the design, maintenance and operation of the facilities and sites as part of this development. Sustainable design strategies and products should be considered and implemented into each property and building development. Sustainable Certification programs are encouraged as part of this project. Examples of programs include but are not limited to ISI EnVision Sustainable Infrastructure, LEED and Sustainable SITES Initiative.

5. Project Business Relationship and Responsibilities

The business relationship between the DPW and the Offeror will be governed by a Service Agreement. The Service Agreement will conform to the example set of contract principles presented in Attachment 4.[12] The agreement will include a Service Fee arrangement whereby the Offeror receives a monthly fee set to recover the Offeror's operating costs at the rated capacity of the Facility. The Service Fee will be adjusted each month for pass-through costs, debt service on the Offeror-owned facilities, and other costs and credits as more fully described in Attachment 4. The initial term of the Service Agreement is proposed to be 20 years.

Table 5 illustrates the desired division of responsibilities.

[12] The Example set of Contract Principals in Attachment 4 is familiar to DPW and worked successfully for another waste conversion public-private partnership. It is the intent of the DPW to negotiate in good faith a mutually-acceptable service agreement.

Table 5 - Facility Division of Responsibilities

		P3* Option		Private Option	
		DPW	Offeror	DPW	Offeror
Common Buildings and improvements					
	Design/Build		√		√
	Own/Finance	√			√
Front-End Mixed Waste Processes					
	Design/Build		√		√
	Own/Finance	√			√
Back-End Proprietary Processes					
	Design/Build		√		√
	Own/Finance		√		√
Operate and Maintain			√		√
Product Marketing			√		√
DPW Process Residual Disposal		√		√	

*Public Private Partnership

The DPW will provide and operate the scale house associated with the Facility.

Offeror Responsibilities

The successful Offeror will have complete responsibility for the design, construction, operation and maintenance of the Facility. Ideally the Facility will have an initial receiving and processing capacity of 300,000 tons per year which can be expanded to 600,000 tons per year through the construction of additional processing modules and the extension of operating hours. Among other requirements, the design of the Facility must conform to the SBP Design Guidelines (see Section 4). The Offeror will also be responsible for applying for and securing all required permits, approvals and permissions. The construction and operation of the Facility must integrate with the operations of the Landfill and other current components of the solid waste system.

Under the Public Private Partnership (P3) Option, the Offeror will be responsible for the financial arrangements solely for its "back-end" proprietary equipment. Under the Private Option, the Offeror will be responsible for the financing of the entire Facility. It is anticipated that the Offeror will finance its portion of the Facility through a combination of equity and project bonds with no recourse to the DPW or Kent County. Under both options, the Offeror will be responsible for the marketing and sale of the offtake products. If the Offeror is proposing the sale of electricity to the grid, it will be required to complete all arrangements with the utility, including the interconnection and a power purchase agreement.

DPW Responsibilities

DPW is prepared to provide the following in support of the project:

a. Up to 300,000 tons per year of MSW (plus other feedstocks as negotiated with the Offeror) The DPW is willing to enter into a Service Agreement with guaranteed volume deliveries;

b. The DPW will maintain ownership of the Facility site, and will enter into a long-term land-lease agreement with the Offeror;
c. Access to the site, necessary site infrastructure, access to waste material managed by DPW;
d. For DPW delivered waste only, the disposal of process residues, non-hazardous bypass waste and unacceptable waste at the Landfill;
e. Under the P3 Option, bond financing for the "front-end" equipment, site improvements, utilities, buildings, scales and related support facilities with a term coincident with the initial term of the Offerors proposed Service Agreement;
f. Cooperation in obtaining permits, approvals and permissions, including zoning, site plan, other land use or operating permits needed from state or local units of government; and
g. Assistance with grant applications or financial incentive programs. See Attachment 5 for descriptions of available Michigan state and local incentive programs.

6. Technology Maturity Definitions

In respect to this RFP process there are three maturation levels of technology: Proven, Demonstrated and Emerging. The DPW will only consider technologies that in its sole discretion it determines meets the standard of Demonstrated or Proven as further defined below. The DPW may consider Emerging technologies later and encourages the developers of emerging technologies to monitor future DPW solicitations or submit letters of interest to the DPW at this time. Emerging Technologies may be considered herein if they are part of a comprehensive proposal.

In general, the DPW considers the municipal mixed waste processing technology, systems and equipment as provided by the suppliers listed in Attachment 1 to be Proven. The DPW will evaluate the Offeror's experience in converting the outputs of a mixed waste processing system into useful products using the Offeror's proprietary processes, systems and equipment.

For a proprietary technology to be considered Proven, it must have at least one reference facility of a size at least 50% of that being offered. The size requirement may be measured at the process unit level, i.e. for a proposed Facility with three, 50 ton per hour processing lines (150 TPH total) the reference facility should have at least one 25 ton per hour processing line. The reference facility should have demonstrated at least 2 years of successful operation under the assumed operating mode of the proposed facility. Example 1: with a technology proposed to operate continuously (24 hrs./day x 7 days /wk.) with an assumed 90% availability, the reference facility should have demonstrated at least 15,768 hours of successful operation (8,760 x 2 x 0.9). Example 2: For a technology proposed to operate 5 days per week, 16 hours per day, the reference facility should have demonstrated at least 8,320 hours of successful operations (5 days/wk. x 16 hrs. / day x 52 wks./yr. x 2 yrs.).

For a proprietary technology to be considered Demonstrated, it must have at least one reference site of a size at least 10 percent (10%) of that being proposed (measured at the process unit level as described above) and have at least 2,000 hours of successful operation.

7. Submission Requirements

In order to provide Offerors an equal opportunity for consideration, adherence to a standardized submission format is required as part of this RFP, including 12-point font and 1-inch margins. The format of each submission must contain the following elements in the order listed below, organized into these

separate numbered chapters, for DPW to consider the submission complete and responsive, with a maximum of 60 pages. Responses shall be submitted electronically. See the front section of the RFP for details regarding upload requirements. A page allocation is suggested below by chapter but can be adjusted by the Offeror as needed to meet the 60-page maximum. There is no minimum page requirement.

1. Cover Letter (3 pages)
2. Description of Proposed Technology (10 pages)
3. Proposed Plan and Project Understanding (5 pages)
4. Diversion and Environmental Impact (3 pages)
5. Offeror Experience and Qualifications (8 pages)
6. Key Team Personnel (5 pages)
7. Financial Capability (5 pages)
8. Cost Proposal (3 pages)—*upload as a separate PDF*
9. Supporting Material if needed (18 pages)

Submissions should not include the disclosure of confidential or proprietary information at any point as all submissions are subject to Michigan's Freedom of Information Act[13].

The following descriptions provide guidelines to each Offeror for the information to provide in its submission.

Cover Letter

The cover letter must be on Offeror letterhead and signed by an Offeror representative empowered to enter into contracts with the DPW on the Offeror's behalf. The cover letter will also serve as an executive summary of the proposal. It must contain at least the following information:

- Full name and location of the Offeror;
- Identification of any other member organization of the Offeror Team and a discussion of the planned role for each firm;
- A brief summary of the proposal, including the proposed processes and technologies, describing their outputs/products, installed capacity, technology status, the locations at which the processes or technologies have been used, any outstanding features of the process or technology and their applicability as part of the SBP.
- Acknowledgement of the receipt of all RFP addenda, if any.

Description of Proposed Process or Technology

The description of Offeror's proposed process or technology shall detail the type of waste conversion technology or process being proposed, including the methodology, scalability, major equipment, proposed throughput (ton/day and ton/year), inputs (feedstocks) and outputs. The description shall include a process flow diagram, building size and layout, equipment arrangement, mass balance, energy balance and system performance data. As applicable, the need for interconnection with utilities shall be identified. Any unique or outstanding feature of the technology shall be presented, along with a description and amounts of the energy/products produced, the types of air emissions, waste products

[13] It should also be noted that submitting a response to this RFP in no way constitutes or implies a contract or agreement in any way.

generated and how they will be managed, any pre-processing of material required prior to its introduction to the technology, and the nature and amount of process residue produced.[14] The amount of acreage needed to host the Facility, including proposed expansions, shall be specified and a site plan of the initial and expanded Facility shall be included. Offeror shall describe the number and type of full-time equivalent (FTE) employees to be hired. The material presented should be descriptive only – any calculations, formulae, academic papers, articles, test results, press releases or other supporting material shall be referenced and included in the Supporting Material section described below.

Proposed Plan and Project Understanding

The Offeror shall provide a narrative explanation evidencing its understanding of the Project, including each of the following items:

1. The technical and managerial scope of this project, including an estimated milestone schedule of Project tasks from contract award to operations start;
2. The DPW's objectives and requirements;
3. The key project issues, constraints, challenges and opportunities, including the operating and management environment that will be encountered.

In addition, Offerors shall include information about their outputs (products/services and by-products or residues) from the system processes and identify potential customers for their outputs. Offerors shall also identify the locations of potential customers and how they anticipate marketing and transporting their outputs.

Diversion and Environmental Impact

In this section Offerors shall highlight their Facility's ability to divert waste material from the Landfill, including a targeted diversion rate and any constraints on the ability of the technology to achieve the targeted diversion levels. Offerors are reminded that the DPW requires a minimum diversion rate of 50% of the incoming MSW to the Facility. Offerors shall include a Business Development Plan that outlines how in the future the Facility might contribute to achieving the DPW's 90% Diversion goal through technology enhancements and market development activities.

In addition, Offeror shall estimate the following for the Facility:

- air emissions;
- wastewater and stormwater generation; and
- greenhouse gas emissions.

Finally, each Offeror should provide a plan to produce the following minimum environmental performance documents:

- Social responsibility report that is available to the public;
- Energy management system;
- Environmental management system; and
- Greenhouse gas assessment that is available to the public.

[14] Note: Michigan EGLE is drafting new Part 115 guidance for solid waste facility designations; currently the residue threshold is 10%, proposed is 15%.

Offeror Experience and Qualifications

The purpose of this section is to provide the DPW with an overview description of the Offeror's organization and the Offeror's current and prior experience in applying its technology to waste conversion. The Offeror shall:

- Summarize the organization of the company and provide a brief business history, current principal place of business, size, number and types of employees, and any other relevant organizational information. If the Offeror Team includes other organizations (e.g., major technology providers, joint venture partners, guarantors, etc.), such information shall be provided for each Offeror Team organization.
- Present the Offeror's experience record in applying the technology, including the location, size (ton/day, ton/year, etc.), feedstock, operating history and performance characteristics of at least one reference facility. Offeror shall provide enough information to allow the DPW to determine whether the technology(ies) is Proven or Demonstrated (see Section 6).
    - For each reference facility, Offeror shall describe:
        - the nature of its involvement with project development, construction and operation,
        - the name of the owner and/or host of the facility, if not the Offeror,
        - the length of time that the facility has been in operation, including the start date and end date (if no longer in operation), and if not currently operating, the reason for the cessation. If an installation cited is not the Offeror's, then the Offeror shall identify the entity that developed that installation and the relationship of that entity to the Offeror. Offerors may cite installations that did not use MSW as their primary feedstock.

Key Team Personnel

This section shall include the qualifications of the key management and technical staff of the Offeror, especially those involved with the development and operation of the technology that would be located at the SBP. For each individual, include a resume or description of his/her education, professional experience and role for this project.

Financial Capability

In this section, the Offeror should provide financial information that the DPW can use to determine the Offeror's financial capabilities. Such information includes, as available:

a. Documentation and discussion of the financial condition and capacity of the Offeror and its financial resources. Any annual reports or financial filings should be included only as supplemental information to the Offeror's RFP in Section 9;

b. Financial statements, including income statements, balance sheets, and changes in financial position, for the past three (3) years;

c. Current credit rating of the firm's senior and subordinate debt, if any and any rating agency reports issued during the last five years.

d. A plan for how the Offeror will guarantee the construction of the DPW owned front end portion of the Facility at the proposed Fixed Price. The guarantee may be in the form of a Construction Performance Bond, Parent Company Guaranty, or other financial

instrument suitable to the DPW.

If an Offeror is proposing to use a parent company or financial guarantor in order to demonstrate sufficient financial ability to undertake this project, then such financial information must be provided for the guaranteeing organization. It is the sole responsibility of the Offeror to provide sufficient financial information to DPW so that DPW can make a determination as to whether the Offeror or its guarantor is qualified financially to develop this project.

An Offeror must provide information that demonstrates its ability to obtain financing for this project. A generalized financing plan should be presented identifying sources and amounts of debt and equity financing, together with letters of support or other documentation attesting to the availability of such financing. The financing plan should also include any grant or other financial incentive programs that the Offeror intends to pursue to help finance its project (see, for example, Attachment 5).

Cost Proposal

Using the formula and definitions of the Service Fee (in Attachment 4), Offerors are required to complete the Cost Information Form in Attachment 7 for each option it is proposing. The Offeror may propose on the P3 Option, the Private Option, or both.

To enable fair comparisons of cost information among Offerors, the DPW has standardized several entries in the Cost Information Form, notably the unit prices for recyclables and the assumed debt service rate for Company debt. Other key points to use when completing the form:

- The drawdown schedule in Item #2 should be consistent with the milestone schedule presented by the Offeror in Section 3 above of its proposal.
- The Base Charge (Item #3) should be based on the capacity/annual throughput that the Offeror used in its technical proposal
- The Equipment Replacement value used in Item #4 should be used for the P3 Option only, and should include only the DPW-owned assets/equipment and should be based on the useful lives of those assets over the initial term of the Service Agreement. Please note, these funds will be deposited directly into a Reserve Account held by the Indenture trustee established as a part of the County's bond financing and will remain the property of the County and be returned to the County at the end of the bond financing. An initial capitalization of this Reserve Fund will be included as a part of the County's bond financing.

Offeror should also specify the method of fee escalation method that it is proposing.

Supporting Materials

In this section, Offerors can include material that details or supplements the description of its technology and experience. Offerors can subdivide this section in any way that conveniently organizes its supporting material and should provide contact information for any available references.

8. Proposal Evaluation

All proposals shall be evaluated by the DPW based on the evaluation criteria described below. All required proposal elements are deemed to be material unless otherwise excused by the DPW. The DPW

may request from any or all of the Offerors additional material, clarification, confirmation, or modification of any submitted proposal, including proposals that are incomplete or nonconforming as submitted.

Proposers may be invited for interviews to discuss their proposal elements in more detail at the request of the DPW. Any interviews will also form a critical piece of the overall evaluation of each responsive proposal.

The DPW will base the evaluation of proposals on the following criteria, giving each proposal a score of up to 100 points:

Maximum Points	Criterion
30	Technology Maturity and Suitability
30	Diversion Rate, Business Development Plan, and Environmental Benefit
20	Qualifications/Capability – Organization, Financial, Key Personnel
15	Net Cost to DPW
5	Project Plan and Understanding
100	

The DPW may make such reasonable investigations as it deems proper and necessary to determine the ability of the Offeror to provide the services. The DPW and/or its representative(s) reserve the right to inspect the Offeror's installation(s) to satisfy questions regarding the Offeror's capabilities.

Attachment 1: List of Established Equipment Suppliers

Equipment Categories	Approved Vendors
Complete Systems	BHS (Bulk Handling System), CP Group, Machinex, Sparta, Stadler, Van Dyk, Vecoplan
2D/3D Separation (Ballistic)	Machinex, Sparta, Stadler,
2D/3D Separation (Disk Screen)	BHS, CP Group, Van Dyk
Air Density Sorting	Impact Air, Nihot, Walair
Baler	Bollegraaf, Harris, IPS/Harris, Marathon, Sierra
Conveyors	In-House, Marathon, Superior
Disk/Other Screens	BHS, CP Group/Krause, Lubo/Bollegraaf
Magnetics (Belted, Drum, ECS)	Bunting, Dings, Eriez, Industrial Magnetics, Steinert
Optical Sorters	Machinex, MSS, National Recovery Technologies (NRT), Pellenc, RedWave, Steinert, Tomra
Robotics	AMP Robotics, BHS/Max-Ai, Bollegraaf RoBB-AQC, Machinex/SamarAi, Waste Robotics, ZenRobotics
Shredders	Lindner, Metso, Saturn/Granutech, SSI Shredding Systems, Untha, Vecoplan
Storage Bunker Walking Floor	Keith Walking Floors
Trommel	CP Group, Komptech, Lubo
Vibratory Screens	Action, General Kinematics, Spaleck

The above vendor list includes most of the well-known manufacturers and vendors of recycling and MSW processing equipment in North America. It may not be a complete list and alternative equipment may be supplied by the proposer under the following conditions:

- Any equipment included in the proposal that will be owned by the DPW and is not included in the above list, or equipment from vendors not used in the appropriate category, will need to be approved by the DPW.
- The DPW reserves the right to ask for additional information and references for the proposed use of any equipment not listed above.
- In-house manufacturing of any equipment categories outside of conveyors that are not listed in the specific category will also need approval by DPW.

Attachment 2: Waste Stream Analysis

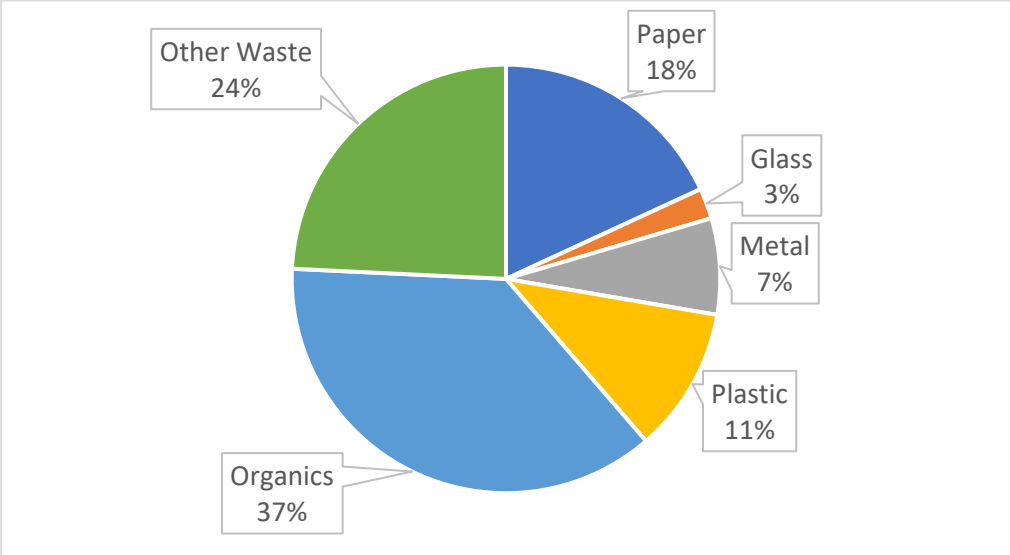
The following components of the DPW-managed waste stream are described in detail below, organized by the following solid waste management facilities:

1. South Kent Recycling & Waste Center (Landfill)
2. Waste-to-Energy
3. Recycling & Education Center (Materials Recovery Facility)

South Kent Recycling & Waste Center

Excluding C&D material, ash (generated at the WTE facility), electronic waste and tires,[15] and sludge the pie chart below depicts the composition of MSW by tons of all MSW disposed at the South Kent Recycling & Waste Center. This compositional estimate is derived from the 2016 West Michigan Sustainable Business Forum (WMSBF) report, and in this context "Other Waste" includes textiles, bulky and oversized items, and HHW.[16]

Composition of MSW Disposed at South Kent Recycling & Waste Center



Clean cement and aggregate is accepted at no charge at the South Kent Recycling & Waste Center. However, there exists little to no processing capacity for C&D mixed materials within Kent County, meaning that all C&D material is disposed at the Landfill or leaves the County (likely also to landfill disposal). In 2018, DPW began visual inspection of incoming loads and determined that approximately 17% of the loads were C&D material.

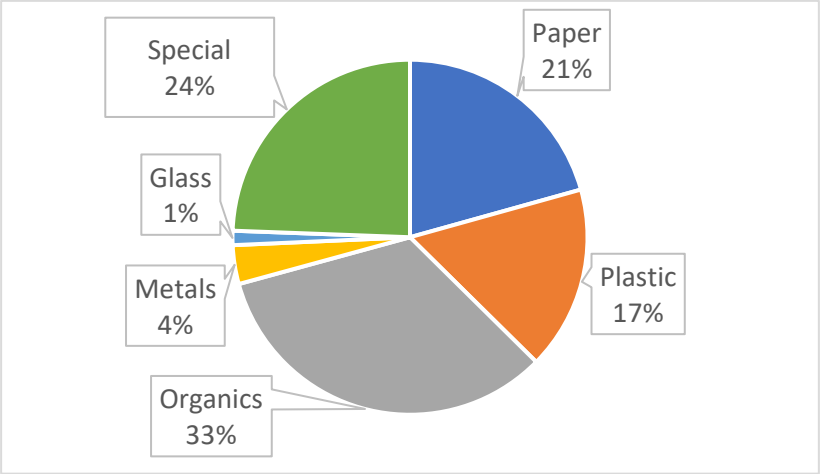
[15] In 2016, the Landfill reportedly received 10.75 tons of source separated electronic waste and over 61 tons of tires which were recycled off-site.

[16] Schoonmaker, D., Lowen, A., Isely, P., and Kneisel, A. Michigan Municipal Solid Waste Characterization and Valuation: Opportunities for Economic and Environmental Impact. West Michigan Sustainable Business Forum; Grand Valley State University, 2016.

Waste-to-Energy

The composition of materials delivered to the WTE facility was derived from a 2017 waste characterization study conducted by GBB,[17] and is presented in the pie chart below. As defined in the Glossary section, "special waste" refers to material that is non-combustible at the WTE and/or requires unique or special treatment due to size or composition.[18]

Composition of Total Waste at WTE by Sort Category



At the WTE facility, food waste (10%) and "other compostable organics" (14%) account for nearly a quarter of the County's total waste. A relatively small amount of yard waste is present in the waste stream, which is unsurprising since Michigan banned yard waste disposal at MSW landfills in 1995. The substantial prevalence of wood waste was primarily in the form of pallets and related commercial waste materials. The vast majority of paper waste is non-recyclable, a positive sign for overall diversion. However, the significant presence of corrugated cardboard (8% of total waste) indicates that there is room for improvement. Plastic film and "other plastics" represent almost all the plastic waste observed and should also be noted as materials for which a market or processing could potentially be implemented.

The combustion residue that is generated at the WTE facility is trucked to the ash monofill located at the South Kent Recycling & Waste Center. The bottom ash is processed using a rare earth magnet to separate saleable ferrous metals.

Recycling & Education Center

Recyclables received at the Recycling & Education Center are from curbside collection by the City of Grand Rapids and private haulers within a ten-county region around Kent County. DPW's recycling drop-off stations also contributed to the overall tonnage.

[17] Kent County Waste-to-Energy Facility Solid Waste Characterization Study, GBB Solid Waste Management Consultants, August 2017.

[18] Examples of Special Waste includes HHW, medical waste, kitchen appliances, compact-fluorescent lightbulbs, mattresses, etc.

The Kent County MRF processes 18-20 tons per hour for approximately 9 hours per day, 6 days per week. Sorting labor at the facility is provided through a partnership with the County's Work Release program. The table below lists recyclable materials acceptable at the facility and the following pie chart depicts the breakdown of materials recovered and marketed from the MRF.

Accepted Recyclables at MRF

Accepted Recyclables at MRF	
Category	**Materials**
Paper	Mail and Office Paper, Magazines and Catalogs, Newspaper and Phone Books, Cardboard, Paperboard, Cartons
Plastic	#1-7 Plastics
Glass	Bottles and Jars
Metal	Cans and Foil
See more information on accepted materials http://www.reimaginetrash.org/recycle/recycling-accepted-material/.	

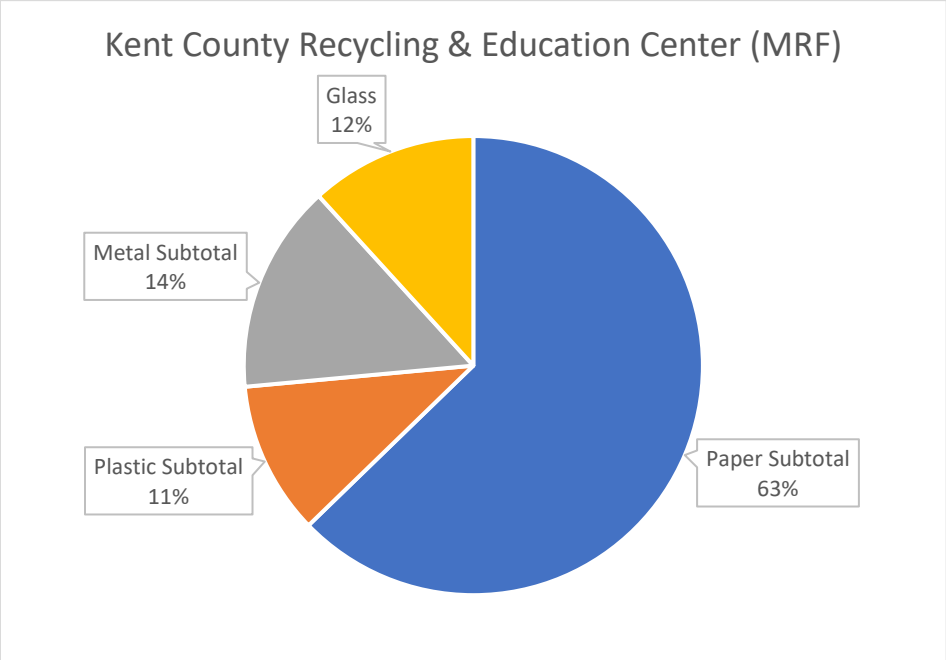


Figure 6 - Breakdown of Materials at MRF[19]

The materials that are not recovered and marketed from the MRF include residue material such as fines and small plastics that elude the sorting process.

[19] Kent County Department of Public Works, MRF Outbound Tonnage. 2019

Attachment 3: Preliminary SBP Geotechnical Site Report

MTC MATERIALS TESTING CONSULTANTS

PRELIMINARY GEOTECHNICAL REPORT
KENT COUNTY SUSTAINABLE BUSINESS PARK
DORR AND BYRON TOWNSHIPS, MICHIGAN

Prepared For:

FISHBECK
Grand Rapids, Michigan

Prepared By:

MATERIALS TESTING CONSULTANTS, INC.
Grand Rapids, Michigan

April 2020
MTC Project No. 191826

April 20, 2020
Project No. 191826

Fishbeck
1515 Arboretum Drive SE
Grand Rapids, Michigan

Attention: Ryan Musch, P.E.
Senior Civil Engineer

Reference: Report of Preliminary Geotechnical Investigation
Kent County Sustainable Business Park
Dorr and Byron Townships, Michigan

Dear Mr. Musch:

We have completed a preliminary geotechnical investigation for the above-referenced project. The purpose of this investigation has been to evaluate the subsurface conditions in the vicinity of the conceptual development as part of a preliminary geotechnical investigation and provide preliminary geotechnical considerations. This work has been performed as described in our scope and fee email dated March 9, 2020.

Presented herein are descriptions of our understanding of the preliminary design considerations, the preliminary geotechnical investigation, encountered conditions and preliminary engineering considerations. The Appendix contains the report limitations and data collected during this investigation.

DESIGN CONSIDERATIONS

Available Information

We have been provided the following documents and information for use in this investigation:

- A Conceptual Site Plan, dated February 2020, prepared by Fishbeck, indicating the existing and conceptual future land use on the properties.
- A Current Property Ownership and Zoning Map, dated February 2020, prepared by Fishbeck.
- Various email correspondence and a project meeting on March 4, 2020 with Mr. Ryan Musch, P.E. of Fishbeck regarding the conceptual project and preliminary geotechnical study.

Project Description

The Kent County Department of Public Works and Fishbeck are in the conceptual planning stages for a Sustainable Business Park with the goal of diverting 90 percent of Kent County-generated trash currently going to landfills by 2030. The proposed Kent County Sustainable Business Park will assist in reaching this goal through development of approximately 250 acres of sustainable business practices designed to localize recycling and conversion processes, expand research and generate and use renewable energy in lieu of conventional landfill expansion.

The development will be located immediately south of the existing South Kent Landfill located in Kent County at 10300 South Kent Drive SW, Byron Center, Michigan. The development will extend south to 146th Avenue and will generally be bounded to the west and east by 14th Street and US-131, respectively, with exception to a proposed solar array/power generation site which will be located immediately northwest of the existing landfill. We understand the project is currently in the conceptual design phase and, therefore, design phase considerations such as existing/proposed site grades, finish floor elevations, structural loads and traffic loads are not available currently for consideration. Based on the Conceptual Site Plan provided, the following development components are proposed:

- Solar array/power generation – 6 acres, Byron Township
- C&D processing/composting – 20 acres, Byron Township
- End-use operation – 13 acres, Dorr Township
- Pilot/research/development/university – 15 acres, Dorr Township
- Mixed waste processing – 37 acres, Dorr Township
- Organic processing – 30 acres, Dorr Township
- Industrial – 77 acres, Dorr Township
- Various new pavement areas for drives and parking

We should be informed of any changes between the actual design conditions and those described herein as this information may affect our recommendations.

PRELIMINARY INVESTIGATION METHODOLOGY

Hand auger borings, dynamic cone penetrometer testing (ASTM STP 399), pocket penetrometer testing and field engineering reconnaissance were used to investigate the subsurface conditions. Boring locations are shown on Figure No. 1. Investigation procedures, soil classification information and boring logs are provided in the Appendix.

Number of Borings	6
Boring Depth Range, ft.	5 to 10

Borings were drilled and other sampling was conducted solely to obtain indications of subsurface conditions as part of a preliminary geotechnical exploration program. No services were performed to evaluate subsurface environmental conditions.

Laboratory

Soil samples were reviewed by one of our engineers and technically classified according to the methods of ASTM D 2488 "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)". Calibrated penetrometer tests were performed on cohesive samples to obtain an indication of unconfined compressive strength values.

INVESTIGATION RESULTS

Regional Geology

The *Map of the Surface Formations of the Southern Peninsula of Michigan,* published by the State of Michigan, indicates the site is in an area of glacial moraines bordered by glacial outwash channels. Moraines are typically found to contain an unsorted mixture of clay, silt, sand and gravel with outwash deposits commonly found to consist of primarily granular soil (sand, gravel, cobble, boulder).

Based on a review of available topographic information for the area, we anticipate existing site grades range from el 750 to 800 ft. The *Map of Bedrock Topography of the Southern Peninsula of Michigan* indicates bedrock of the Marshall Sandstone Formation to be at approximately el 600 ft, approximately 150 to 200 ft below the existing ground surface.

Site Conditions

Currently, the project area is zoned “Rural Agriculture” or “Agriculture,” and at the time of our field work, the area of investigation was primarily being utilized for agricultural purposes. Site grades appeared to slope up towards the south from 108th Street for approximately ¼ mile followed by a gradual downward slope towards 146th Avenue with relatively flat east-west grades.

The site contains surficial drainage features including Buck Creek, located near the north extent of the project with accompanying wetland areas. Due to the preliminary nature of the investigation and relative size of the project area, a comprehensive building and site survey was not performed.

Subsurface Conditions

A description of the encountered subsurface conditions is summarized below. The relative density of granular soil is based on recorded equivalent SPT N-values while the consistency of cohesive soil is based on estimates of the unconfined compressive strength obtained with a calibrated penetrometer.

Boring B-1, Solar Array/Power Generation

Boring B-1 encountered 6 inches of topsoil underlain by hard lean clay (CL) to the explored depth of 6.3 ft (el 740.9 ft). Groundwater was not encountered.

Boring B-2, C&D Processing/Composting

Boring B-2 encountered 8 inches of topsoil underlain by medium dense poorly graded sand with silt (SP-SM) to the explored depth of 5 ft (el 769.1 ft). Groundwater, possibly perched, was encountered at a depth of 1.5 ft (el 772.6 ft) and resulted in auger refusal at 5 ft due to wet collapsing sand.

Boring B-3, Mixed Waste Processing

Boring B-3 encountered 12 inches of topsoil underlain by stiff to very stiff lean clay (CL) to the explored depth of 8.5 ft (el 775.7 ft) where auger refusal was encountered on suspected coarse gravel or cobble. Seepage groundwater was encountered at a depth of 6 ft (el 778.2 ft) in the form of wet silt seams.

Boring B-4, Organics Processing

Boring B-4 encountered 7 inches of topsoil underlain by stiff to hard lean clay (CL) to the explored depth of 10 ft (el 791.9 ft). Groundwater was not encountered.

Boring B-5, Industrial

Boring B-5 encountered 10 inches of topsoil underlain by stiff lean clay (CL) to the explored depth of 8.5 ft (el 774.2 ft). Seepage groundwater was encountered at a depth of 1 ft (el 781.7 ft) in the form of wet silt seams. Auger refusal due to caving soil conditions was encountered at 8.5 ft.

Boring B-6, Industrial

Boring B-6 encountered 10 inches of topsoil underlain by very stiff to hard lean clay (CL) to the explored depth of 10 ft (el 765.3 ft). Groundwater was not encountered.

Based on our experience in the area, we anticipate the lean clay soil is likely in an overconsolidated stress state which should be confirmed during future design-phase geotechnical studies.

Groundwater levels may fluctuate due to seasonal variations such as precipitation, snowmelt, nearby river or lake levels and other factors that may not be evident at the time of measurement. Groundwater levels may be different at the time of construction.

This section has provided a generalized description of the encountered subsurface soil conditions. The boring logs located in the Appendix should be reviewed for detailed soil descriptions. Some variation between boring locations may be expected.

PRELIMINARY GEOTECHNICAL CONSIDERATIONS

Based on the subsurface conditions encountered, the preliminary geotechnical study concludes most, if not all, sites investigated appear feasible for development using conventional construction methods including conventional shallow foundations and slabs supported on-grade. However, due to the presence of primarily cohesive soil encountered in the hand auger borings, the stiff to hard clay consistency range measured and groundwater, primarily in the form of seepage, encountered in 3 of the 6 completed hand auger borings between 1 and 6 ft below the existing ground surface, key geotechnical considerations during the design are anticipated to include long term settlement of clay subgrade and selection of appropriate finish grades to minimize fill-related settlement and minimize potential groundwater impact on future development.

Total settlement associated with fill placement, foundations and floor slab loading will require evaluation during the design phase geotechnical study relative to stipulated tolerable settlement criteria. Significant fill placement or structural loading may facilitate the need for specialty ground improvement or alternative foundation systems.

The geotechnical considerations presented in the following sections are based on limited design information and should be viewed as preliminary. Further investigation will be required for a design-phase geotechnical study, which would include additional soil borings, laboratory testing and a detailed evaluation of settlement. Additional soil borings may encounter unforeseen conditions which may facilitate the need for different foundation systems. The considerations provided herein should not be used for final design.

Foundations

Considering minimal fill placement, column loads on the order of 100 to 200 kips and wall loads on the order of 5 kips per lineal foot or less, allowable net foundation bearing pressures on the order of 2500 to 4000 psf appear feasible for preliminary shallow spread and continuous foundation design. Foundations for structures are expected to primarily bear upon stiff to hard lean clay (CL) as encountered in the borings or on approved engineered fill following subgrade preparation. Foundation recommendations would be based on a safety factor to resist bearing capacity failure of at least 3.0 and a maximum anticipated total foundation settlement of 1 inch or less.

Groundwater

Groundwater was encountered in Borings B-2, B-3 and B-5 at depths ranging from 1 to 6 ft corresponding to elevations ranging from 772.6, 778.2 and 781.7 ft, respectively. The groundwater encountered is anticipated to consist of seepage in Borings B-3 and B-5 and may represent a static groundwater level or perched groundwater at Boring B-2. Groundwater may be encountered during site preparation, utility installation and possibly foundation construction. Relatively shallow treatment methods would be anticipated.

Perimeter footings drains around buildings, edge drains around pavements and underdrains around catch basins could be anticipated.

Concrete Floor Slabs and Pavement Areas

In general, the soil conditions encountered in our preliminary geotechnical investigation are expected to be suitable for slab-on-grade construction. Site and subgrade preparation will be required in proposed slab and pavement areas and is expected to consist of topsoil stripping, proof-rolling and compaction of the exposed subgrade. We recommend placing a minimum 4 inches of granular engineered fill directly beneath floor slabs.

Careful attention should be given to the moisture content prior to constructing pavement and floor slab areas, especially if the Contractor completes this work during wet or cold weather periods. Excessive moisture in the pavement subgrade soil could contribute to detrimental volume changes and pavement/slab performance after repeated freeze-thaw cycles. In areas where yielding clayey subgrade is present, feasible subgrade improvement methods include discing and drying the subgrade to reduce the moisture content, treating the subgrade with quick lime to reduce the moisture content and increase the unconfined compressive strength, or overexcavation of unsuitable soil and replacement with engineered fill.

The management of stormwater surface runoff and drainage will be critical to long-term pavement performance. Subgrade in proposed pavement areas should be sufficiently sloped during site preparation to promote drainage. Underdrains should be provided within the sand

subbase, at proposed pavement edges and tied into proposed catch basins to further assist with drainage to stormwater outlets.

CLOSURE

In this report, descriptions of the preliminary geotechnical investigation, encountered conditions and preliminary considerations for the design of foundations, pavement and floor slabs have been provided. The limitations of this study are described in the Appendix.

The preliminary considerations presented in this report are based upon a limited number of subsurface samples obtained from various sampling locations. The samples may not fully indicate the nature and extent of the variations that actually exist between sampling locations. Further investigation is required for a design phase geotechnical study, which would include additional soil borings, laboratory testing and settlement evaluation. Additional soil borings may encounter differing conditions which may facilitate the need for different foundation systems. The recommendations provided herein should not be used for final design.

We appreciate the opportunity to provide this service to you on this project. Should you have any questions or require further assistance, please contact our office.

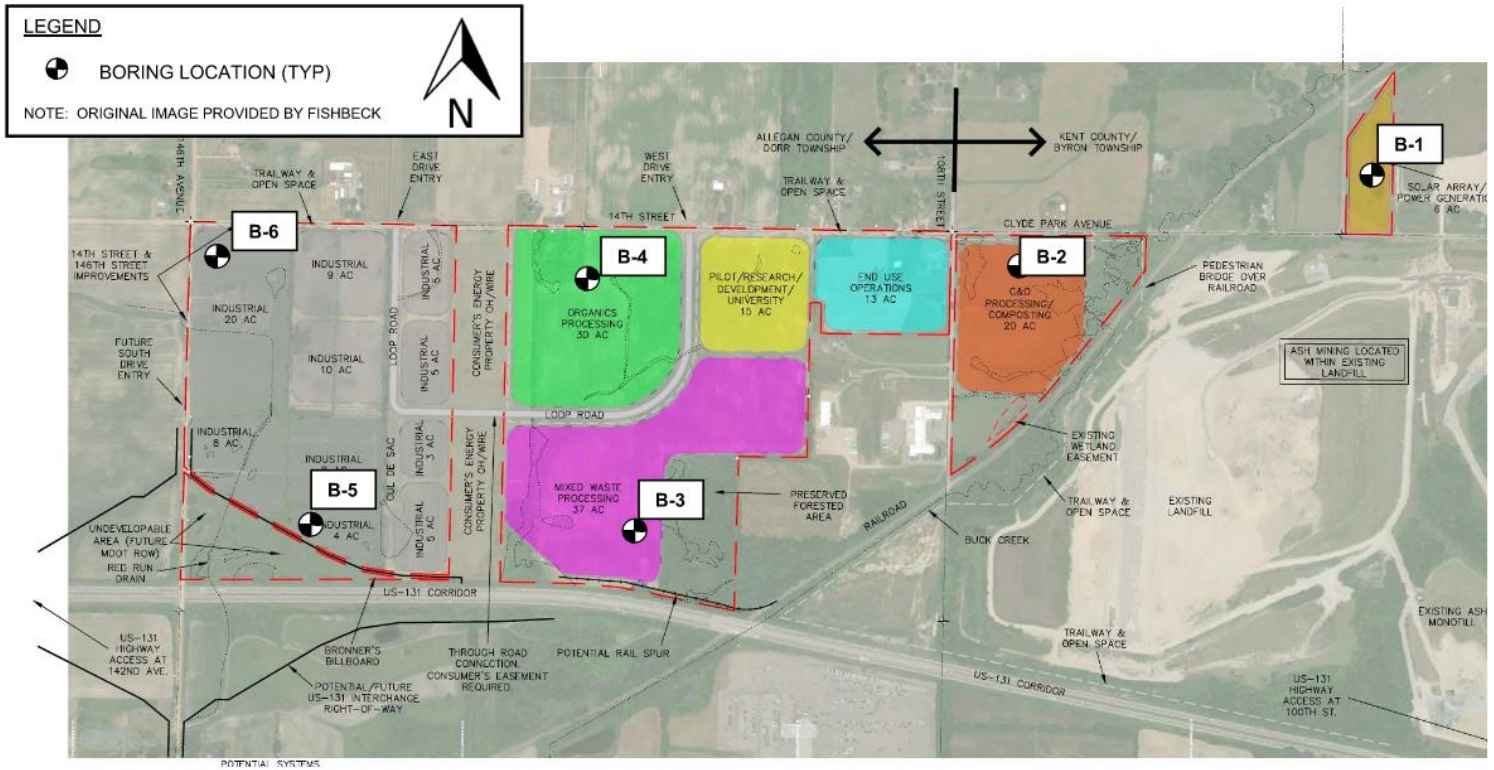
Sincerely,

MATERIALS TESTING CONSULTANTS, INC.

Todd D. Munger, P.E.
Senior Project Manager

Douglas W. Sabin, P.E.
Principal

Attachments: Figure No. 1 - Boring Location Plan
Appendix
- Limitations
- Boring Log Terminology and Classification Outline
- Boring Logs



SITE VICINITY MAP
NOT TO SCALE

TITLE: BORING LOCATION PLAN		PROJECT: KENT COUNTY SUSTAINABLE BUISNESS PARK	
SCALE: NS	DATE: 4/4/20	PROJECT NO.: 191826	MTC MATERIALS TESTING CONSULTANTS
FIG. NO.: 1	DR. BY: JO	REV. BY: TM	

APPENDIX

- Limitations
- Boring Log Terminology and Classification Outline
- Boring Logs

LIMITATIONS

Soil Variations

The recommendations in this report are based upon the data obtained from the soil borings. This report does not reflect variations which may occur between these borings, and which would not become evident until construction. If variations then become evident, it would be necessary for a re-evaluation of recommendations of this report, after performing on-site observations.

Warranties

We have prepared this report in accordance with generally accepted soil and foundation engineering practices. We make no other warranties, either expressed or implied, as to the professional advice provided under the terms of our agreement and included in this report. This report is prepared exclusively for our client and may not be relied upon by other parties without written consent from our office.

Boring Logs

In the process of obtaining and testing samples and preparing this report, we follow reasonable and accepted practice in the field of soil engineering. Field logs maintained during drilling describe field occurrences, sampling locations, and other information. The samples obtained in the field are subjected to additional testing in the laboratory and differences may exist between the field logs and the final logs. The engineer reviews the field logs and laboratory test data, and then prepares the final boring logs. Our recommendations are based on the contents of the final logs.

Review of Design Plans and Specifications

In the event that any changes in the design of the building or the location, however slight, are planned, our recommendations shall not be considered valid unless modified or approved in writing by our office. We recommend that we be provided the opportunity to review the final design and specifications in order to determine whether changes in the original concept may have affected the validity of our recommendations, and whether our recommendations have, in fact, been implemented in the design and specifications.

BORING LOG TERMINOLOGY AND ASTM D 2488 CLASSIFICATION OUTLINE

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE-GRAINED SOILS (major portions retained on No. 200 sieve): includes (1) clean gravel and sands and (2) silty or clayey gravels and sands. Condition is rated according to relative density as determined by laboratory tests or standard penetration resistance tests.

Descriptive Terms	Relative Density	SPT Blow Count
Very loose	0 to 15 %	< 4
Loose	15 to 35 %	4 to 10
Medium dense	35 to 65 %	10 to 30
Dense	65 to 85 %	30 to 50
Very dense	85 to 100 %	> 50

Per ASTM D2487, the following conditions must be met based on laboratory testing to justify the label 'well graded' in a soil description.

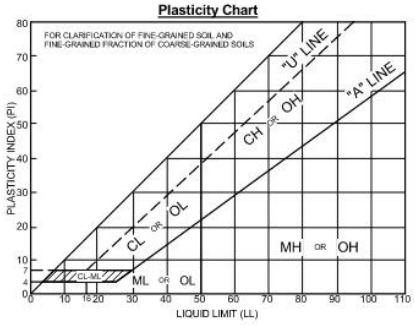
Gravel: $C_U = \frac{D_{60}}{D_{10}}$ greater than 4; $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3

Sand: $C_U = \frac{D_{60}}{D_{10}}$ greater than 6; $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3

FINE-GRAINED SOILS (major portions passing on No. 200 sieve): includes (1) inorganic and organic silts and clays, (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings, SPT blow count, or unconfined compression tests.

Descriptive Terms	Unconfined Compressive Strength kPa	SPT Blow Count
Very soft	< 25	< 2
Soft	25 to 50	2 to 4
Medium stiff	50 to 100	4 to 8
Stiff	100 to 200	8 to 15
Very stiff	200 to 400	15 to 30
Hard	> 400	> 30

Plasticity Chart



MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LESS THAN 15% FINES	GW		WELL-GRADED GRAVELS WITH OR WITHOUT SAND
			GP		POORLY-GRADED GRAVELS WITH OR WITHOUT SAND
		GRAVELS WITH 15% OR MORE FINES	GM		SILTY GRAVELS WITH OR WITHOUT SAND
			GC		CLAYEY GRAVELS WITH OR WITHOUT SAND
	SANDS MORE THAN HALF COARSE FRACTION IS FINER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 15% FINES	SW		WELL-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP		POORLY-GRADED SANDS WITH OR WITHOUT GRAVEL
			SP-SM		POORLY-GRADED SANDS WITH SILT WITH OR WITHOUT GRAVEL
		SANDS WITH 15% OR MORE FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OL		ORGANIC SILTS OR CLAYS OF LOW TO MEDIUM PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			CH		INORGANIC CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
			OH		ORGANIC SILTS OR CLAYS OF HIGH PLASTICITY WITH OR WITHOUT SAND OR GRAVEL
HIGHLY ORGANIC SOILS			PT/OL		PEAT AND OTHER HIGHLY ORGANIC SOILS

GENERAL NOTES

1. Classifications are based on the United Soil Classification System and include consistency, moisture, and color. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate.
2. "Grades with" or "Grades without" may be used to describe soil when characteristics vary within a stratum.
3. Preserved soil samples will be discarded after 60 days unless alternate arrangements have been made.

GROUNDWATER OBSERVATIONS:

During - indicates water level encountered during the boring
End- indicates water level immediately after drilling
Date and Depth - Measurements at indicated date

SAMPLE TYPES AND NUMBERING

S	SPT, split barrel sample, ASTM D1586
U	Shelby tube sample, ASTM D1587
R	Rock core run
*S	Other than 2" split barrel sample
L	SPT with liner, ASTM D1586
A	Auger cuttings
G	Geoprobe liner

MINOR COMPONENT QUANTIFYING TERMS

Less than 5%	TRACE
5 to 10%	FEW
15 to 25%	LITTLE
30 to 40%	SOME
50 to 100%	MOSTLY

GRAIN SIZE

BOULDER	>12"
COBBLE	12" to 3"
COARSE GRAVEL	3" to 0.75"
FINE GRAVEL	0.75" to No. 4
COARSE SAND	No. 4 to No. 10
MEDIUM SAND	No. 10 to No.40
FINE SAND	No. 40 to No. 200

MTC	LOG OF BORING	Project No.: 191826 Boring No.: B-1 Sheet: 1 of 1

Project: Kent County Sustainable Business Park
Client: Fishbeck
Location: Byron Township
Drill Type: Hand Auger
Crew Chief: Field Eng.: ST Rev. By: JO
Coordinates: N=467781.7 E=12769495.9 (MI South ift)
Elevation: 747.2 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 03/23/2020 Date End: 03/23/2020

Tooling	Type	Dia.	Groundwater, ft.	
Casing	Hand Auger	3 1/4"	During	None
Sampler			End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 6.3 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
746.7	0.5					6" dark brown clayey Topsoil 0.5				
746.2	1.0					Brown lean CLAY; mostly clayey fines, few coarse to fine sand, few coarse to fine gravel, moist	4.0			
745.7	1.5									
745.2	2.0									
744.7	2.5									
744.2	3.0	A-1			CL		4.5			
743.7	3.5									
743.2	4.0									
742.7	4.5									
742.2	5.0									
741.7	5.5						4.5			
741.2	6.0					6.3				
						End of Boring				Refusal on possible coarse gravel / COBBLE

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

LOG OF BORING

Project No.: 191826
Boring No.: B-2
Sheet: 1 of 1

Project: Kent County Sustainable Business Park
Client: Fishbeck
Location: Byron Township
Drill Type: Hand Auger
Crew Chief: Field Eng.: ST Rev. By: JO
Coordinates: N=465428.5 E=12770206.4 (MI South ift)
Elevation: 774.1 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 03/23/2020 Date End: 03/23/2020

Tooling	Type	Dia.	Groundwater, ft.	
Casing	Hand Auger	3 1/4"	During	1.5
Sampler			End	1.5
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 5.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
773.6	0.5					8" dark brown sandy silt Topsoil 0.7				
773.1	1.0				SP-SM	Brown poorly graded SAND with silt; mostly fine sand, few silty fines, wet				
772.6	1.5									
772.1	2.0									
771.6	2.5	A-1		16						
771.1	3.0									
770.6	3.5									
770.1	4.0									
769.6	4.5									
769.1	5.0					5.0				
						End of Boring				Refusal at 5.0' due to wet collapsing sand

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

MTC	LOG OF BORING	Project No.: 191826 Boring No.: B-3 Sheet: 1 of 1

Project: Kent County Sustainable Business Park
Client: Fishbeck
Location: Dorr Township
Drill Type: Hand Auger
Crew Chief: Field Eng.: MS Rev. By: JO
Coordinates: N=462669.8 E=12771909.4 (MI South ift)
Elevation: 784.2 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 03/23/2020 Date End: 03/23/2020

Tooling	Type	Dia.	Groundwater, ft.	
Casing	Hand Auger	3 1/4"	During	6.0
Sampler			End	NA
Core			Seepage	6.0
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 8.5 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
783.7	0.5					12" brown clayey Topsoil				
783.2	1.0					1.0				
782.7	1.5	A-1				Brown lean CLAY; mostly clayey fines, few fine sand, trace fine gravel, moist	1.25			
782.2	2.0									
781.7	2.5									
781.2	3.0									
780.7	3.5									
780.2	4.0									
779.7	4.5									
779.2	5.0				CL					
778.7	5.5									
778.2	6.0	A-2					3.25			
777.7	6.5					Grades with wet silt seams				
777.2	7.0									
776.7	7.5									
776.2	8.0									
775.7	8.5					8.5				
						End of Boring				Auger refusal at 8.5 ft due to coarse gravel, cobble or hard clay.

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

MTC	LOG OF BORING	Project No.: 191826 Boring No.: B-4 Sheet: 1 of 1

Project: Kent County Sustainable Business Park
Client: Fishbeck
Location: Dorr Towhship
Drill Type: Hand Auger
Crew Chief: Field Eng.: MS Rev. By: JO
Coordinates: N=462465.2 E=12770295.3 (MI South ift)
Elevation: 801.9 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 03/23/2020 Date End: 03/23/2020

Tooling	Type	Dia.	Groundwater, ft.	
Casing	Hand Auger	3 1/4"	During	None
Sampler			End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 10.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
801.4	0.5					7" brown clayey Topsoil 0.6				
800.9	1.0	A-1				Brown gray mottled lean CLAY; mostly clayey fines, trace fine sand and gravel, moist	1.75			
800.4	1.5									
799.9	2.0									
799.4	2.5									
798.9	3.0									
798.4	3.5									
797.9	4.0									
797.4	4.5									
796.9	5.0									
796.4	5.5	A-2			CL		4.0			
795.9	6.0					Grades with wet silt seams				
795.4	6.5									
794.9	7.0									
794.4	7.5									
793.9	8.0									
793.4	8.5									
792.9	9.0									
792.4	9.5									
791.9	10.0					10.0				
						End of Boring				

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

MTC	LOG OF BORING	Project No.: 191826 Boring No.: B-5 Sheet: 1 of 1

Project: Kent County Sustainable Business Park
Client: Fishbeck
Location: Dorr Township
Drill Type: Hand Auger
Crew Chief: Field Eng.: MS Rev. By: JO
Coordinates: N=460589.5 E=12770091.4 (MI South ift)
Elevation: 782.7 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings.

Date Begin: 03/23/2020 Date End: 03/23/2020

Tooling	Type	Dia.	Groundwater, ft.	
Casing	Hand Auger	3 1/4"	During	1.0
Sampler			End	NA
Core			Seepage	1.0
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 8.5 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
782.2	0.5					10" brown clayey Topsoil				
781.7	1.0					0.8				
781.2	1.5	A-1				Brown lean mottled CLAY; mostly clayey fines, trace fine sand, moist with wet silt seams	1.25			
780.7	2.0									
780.2	2.5									
779.7	3.0									
779.2	3.5									
778.7	4.0									
778.2	4.5									
777.7	5.0				CL					
777.2	5.5	A-2					1.25			
776.7	6.0					Grades with trace fine gravel				
776.2	6.5									
775.7	7.0									
775.2	7.5									
774.7	8.0									
774.2	8.5					8.5				
						End of Boring				Auger refusal due to caving soil conditions.

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

MTC	LOG OF BORING	Project No.: 191826 Boring No.: B-6 Sheet: 1 of 1

Project: Kent County Sustainable Business Park
Client: Fishbeck
Location: Dorr Township
Drill Type: Hand Auger
Crew Chief: Field Eng.: ST Rev. By: JO
Coordinates: N=459971.5 E=12770091.4 (MI South ift)
Elevation: 775.3 ft Datum: NAVD 88 (GPS Observation)
Notes:

Plugging Record: Backfilled borehole with compacted cuttings. Cave in at 8.0 ft.

Date Begin: 03/23/2020 Date End: 03/23/2020

Tooling	Type	Dia.	Groundwater, ft.	
Casing	Hand Auger	3 1/4"	During	None
Sampler			End	NA
Core			Seepage	
Tube			Date	Depth, ft.
SPT Hammer				

Depth Drilled: 10.0 ft.

Component Percentages: Trace < 5%, Few 5-10%, Little 15-25%, Some 30-45%, Mostly 50-100%

QP = Calibrated Penetrometer (tons/sq. ft.)

Elev. FT.	Depth FT.	Sample Number	Recov. FT.	Dyn. Cone Eq. "N": ASTM STP 399	*USCS Group Symbol	*DESCRIPTION	QP tsf	MST %	DD pcf	REMARKS
774.8	0.5					10" brown clayey Topsoil				
774.3	1.0					0.8				
773.8	1.5					Brown gray lean CLAY; mostly clayey fines, trace coarse to fine sand, trace fine gravel, moist				
773.3	2.0						3.0			
772.8	2.5									
772.3	3.0									
771.8	3.5						4.0			
771.3	4.0									
770.8	4.5									
770.3	5.0	A-1								
769.8	5.5				CL	Grades brown				
769.3	6.0									
768.8	6.5						4.5			
768.3	7.0									
767.8	7.5									
767.3	8.0						4.5			
766.8	8.5									
766.3	9.0									
765.8	9.5									
765.3	10.0					10.0				
						End of Boring				

* Visual estimate following ASTM D 2488 unless laboratory testing has been performed. Stratification changes are approximated between samples.

Attachment 4: Example Set of Contract Principles

[Note: These Principles were adopted from the Service Agreement of the DPW's waste-to-energy facility which is a successful Public Private Partnership wherein the Offeror designed, built, and operates the Facility while the DPW retains ownership. The DPW is committed to good faith negotiations of mutually acceptable terms with the successful Offeror.]

Article I
Definitions

[This Article provides defined terms used throughout the Agreement]

"**Acceptance**" or **Accepted**" means that the Full Performance Standard has been met or, if the Full Performance Standard cannot be met, that the Minimal Performance Guarantee has been met, as determined in accordance with sections 2.13 and 2.14.

"**Acceptance Date**" means the date on with the Acceptance of the Facility occurred.

"**Acceptance Test**" or "**Acceptance Testing**" means the tests as described in the test plan developed pursuant to Section 2.13 (a), as approved by the County or as determined pursuant to Section 10.01 together with the procedures specified in Schedule 3.

"**Agreement**" means this Service Agreement dated as of _____ between the Company and the County, including the Schedules and any written amendments hereto executed by the Company and the County.

"**Annual Debt Service**" means the total Debt Service for any Billing Year.

"**Billing Month**" means each calendar month in each Billing Year, except that the last Billing Month shall end concurrently with the end of the term of this Agreement

"**Billing Period Guaranteed Tonnage**" means, for each Billing Month, one twelfth (1/12) of the Guaranteed Tonnage, as adjusted for exiting inventory and scheduled maintenance periods.

"Billing Year" means for each Billing Year, the twelve calendar month periods commencing on the first Day of January and ending on the last Day of December, and each twelve-calendar month period thereafter

"Boards authorized Representative" means the Director of the Department of Public Works or his successor or any other person named in a certified resolution of the Board of Public Works file with the Company from time to time during the term of this Agreement.

"**Board of Commissioners**" or "**Board**" means the elected nineteen-member board pursuant to State Law, which Board is the governing body of the County, or its successor.

"**Board of Public Works**" or **"BPW**" means the Kent County Board of Public Works established pursuant to the provisions of Act 185.

"Bonds" means the outstanding bonds issued or to be issued by the County from time to time under the Indenture, or any supplemental indenture, to finance the Project, including such additional amounts as are or were required to pay the costs of issuance of the Bonds, interest during construction, and to fund any reserves required to be funded form Bond proceeds, including any evidences of indebtedness issued pursuant to Section 7.12 as defined in the Indenture.

"**Business Day**" means each Monday, Tuesday, Wednesday, Thursday, Friday and Saturday which is not a Holiday.

"**Bypassed Waste**" means the Tons of Processable Waste calculated pursuant to Section 4.09 (b) (iii).

"**Change-in-Law**" means either (a) the enactment, adoption, promulgation, modification or repeal after the Contract date of any Federal, State, County or other local law, ordinance, code, rule or regulation or other similar legislation or (b) the imposition, after the Contract Date, of any material conditions in the issuance or renewal of any official permit, license or approval necessary for construction start-up, Acceptance Testing or operation of the Project, which, in either case, increases the capital cost of the Project or increase the Operation and Maintenance Charge by establishing requirement with respect to the construction, Acceptance Testing or operation of the Project which are more burdensome than the most stringent requires;

(i) In effect on the Contract Date.
(ii) Agreed to by the County and the Company in any applications for office permits, licenses or approvals for the Project, other than any requirement set forth in said applications to comply with future laws, ordinance, codes, rules, regulation or similar legislations; or,
(iii) Contained in any official permits, license or approval with respect to the Project, other than any requirements set forth in said permits to comply with future laws, ordinance, code, rules, regulation or similar legislation.

For Purposes of part (a) of this definition, no enactment, adoption, promulgation or modification of laws, ordinance, codes, rules, regulation or similar legislation shall be considered a Change in Law if, as of the Contract Date, such law, or ordinance, code, rule, regulation or other similar legislation was officially proposed, with an effective date on or before the Contract Date and the comment period with respect to which has expired on or before the Contract Date and any required hearings have been concluded on or before the Contract Date in accordance with applicable administrative procedures. In no event shall a change in Federal, State or local tax law, or any other tax law, be consider a Change in Law

"Company" means _____.

"Company Fault" means the Company's unexcused failure to perform any obligation under this Agreement or the negligent or willful act or omission of an agent, employee, contractor or independent contractor of the Company, which prevents or delays the County from performing its obligations, if any, or which deprives the County of any of its right under this Agreement.

"**Company's Authorized Representative**" means the Person or Persons designated by the Company.

"**Construction Date**" means the date on which all the condition's precedent set forth have been met or waived as evidence by executed acknowledgements by the County and the Company.

"**Construction Fund**" means that fund establish in Sections ___ of the Indenture.

"**County Consultant"** means _____, or any other recognized consulting company with demonstrated experience in the area of Solid Waste Management which shall be selected by the County from time to time in its sole discretion

"**Contract Date**" means _____.

"**Cost Substantiation**" means with respect to any cost incurred by either Party, a certificate signed by either the Board's Authorized Representative with respect to Direct Costs incurred by the County or the Company's Authorized Representative with respect to Direct Costs incurred by the Company, statin the reason for incurring such Direct Cost, the amount of such Direct Cost, and, if applicable with Direct Costs incurred by the Company for which payment is made by the Count with Bond proceeds the certification required by Section 2.10 the event or Section of this Agreement giving rise to the Party's right to incur such Direct cost and that such Direct Cost is at a competitive price for the service or materials supplied. If the other Party does not object, in writing, to any such certificate provide by the other Party within thirty (30) Days after receipt thereof, such Direct cost shall be deemed accepted by such Party and shall be payable in accordance with the terms of this Agreement. With respect to Direct costs incurred by the Company, the amount shall be increased to provide for the payment of a profit only when expressly allowable pursuant to the term of this Agreement. Such amount shall be equal to ten (10) percent of such Direct Costs, exclusive of the costs of travel and subsistence incurred by any employee of the Company.

"**County**" means the County of Kent Michigan, acting by and through its Board of Commissioners or its Department of Public Works.

"**County Fault**" means the County's unexcused failure to perform any obligation under this Agreement or the negligent or willful act or omission of an officer, agent, employee, contractor or independent contractor for the County, other than the Company which prevents or delays the Company form performing its obligations, if any, or which deprives the Company of its right under this Agreement.

"**Department of Public Works**" means the Kent County Department of Public Works established pursuant to the provisions of Act 185.

"**Direct Costs"** means, in connection with the performance by either Party of the work subject to Cost Substantiation, the sum of (i) the costs of payroll consisting of compensation and fringe benefits, including vacation, sick leave, holiday, retirement, Worker's Compensation Insurance, Federal and State unemployment taxes and all medical and insurance benefits, time 1.1 plus (ii) the costs of materials and supplies purchased in connection with any such work, plus (iii) the costs of travel and subsistence incurred buy any employee of either Party, plus (iv) the costs of any payment to subcontractors in connection with such work.

"**Event of Default**" has the meaning specified in Article IX.

"**Extension Period**" has the meaning specified in Section 2.14 (b).

"**Facility**" means that portion of the Project to be designed, constructed and tested by the Company pursuant to this Agreement, including the design, construction and Acceptance Testing of the ___ and functionally related facilities all as specified in this Agreement.

"**Facility Price**" means the price of the Facility set forth in Section 2.02 and as adjusted pursuant to Section 2.04.

"**Guaranteed Tonnage**" means the number of Tons of Processable Waste to be delivered by or on behalf of the County to the Facility in any Billing Year, which number shall be _____ Tons or such lesser amount as may result from (i) Processing Guarantee reduction due to Uncontrollable Circumstance, or (ii) an Uncontrollable Circumstance which prevents delivery of Processable Waste, or (iii) Acceptance of the Facility at less than the Full Acceptance Standard; provide however that for a Billing Year of less than fifty-two (52) weeks, the Guaranteed Tonnage shall be proportionately reduced to reflect the number of weeks in said billing Year.

"**Hazardous Waste**" means any material or substance which, as of the Contract Date and by reason of its composition or characteristic, is (a) toxic or hazardous waste as defined in…

"**Holiday**" means the holidays as set forth in Schedule 6 or as may be mutually agreed to from time to time.

"**Indenture**" means the Indenture of Trust dates as of ____ between the County and _____ as Trustee on the date hereof, or any supplemental indenture, pursuant to which the Bonds, or any additional bond have been or may be issued.

"Initial Operation and Maintenance Charge" means the amount of XXXX as of _____.

"**Landfill Costs"** has the meaning specified in Section 7.05.

"**Minimal Acceptance Standard**" means ____ percent of the Full Acceptance Standard for the Monthly Guaranteed Capacity.

"**Monthly Damages**" has the meaning specified in Section ____.

"**Monthly Guaranteed Capacity**" means the Company's guarantee specified in paragraph __ of Schedule 18.

"**Nonprocessable Waste**" means that portion of Solid Waste, exclusive of Hazardous Waste, that is not Processable Waste.

"Operation and Maintenance Charge "has the meaning specified in Section 7.02.

"**Parent**" means _____.

"**Parent Guarantee**" means the guaranty executed by the Parent for the benefit of the County as set forth in Schedule 11.

"**Party**" or "**Parties"** means either the County or the Company, as the context of the usage of such term may require.

"**Pass Through Costs**" has the meaning specified in Schedule 14.

"Process," "Processed" or Processing means _____.

"Process Residue" means the material which remains after Processable Waste is Processed.

"**Processable Waste**" means that portion of Solid Waste which can be Processed, having a composition with characteristics such as that collected and disposed of as part of normal municipal collection of Solid Waste in the County as well as portions of commercial and industrial Solid Waste which may be Processed, expecting however Nonprocessable Waste and Hazardous Waste.

"Processing Guarantee" means the Processing of at least the number of Tons of Processable Waste per Billing Year specified in Schedule 18, or such lesser amount as may result from (i) a reduction in capacity due to an Uncontrollable Circumstance, (ii) an Uncontrollable Circumstance which prevent delivery of Processable Waste, or (iii) Acceptance of the Facility at less than the Full Acceptance Standard; provided however, that for a Billing Year of less than fifty-two (52) weeks, the Processing Guarantee shall be proportionately reduced to reflect the number of weeks in said Billing Year.

"Project" means the improvement, enlargement and extension of the System by the acquisition by the County of the Facility.

"Scheduled Acceptance Date" means 12:01 am on the _____ Day from the Construction Date, plus the number of Day of extension pursuant to Section 2.09.

"**Service Fee**" has the meaning specified in Article VII.

"**Source Separated Materials**" means recyclable materials (including but not limited to, bottles, cans, newspapers, corrugated containers, metals grass, leaves, brush and yard trimmings) that are separated from Solid Waste prior to the collection of Solid Waste from a site of generation.

"**Solid Waste**" means all materials or substances that, as of the Contract Date or any subsequent date, were generally discarded or rejected as being spent, useless, worthless or in excess to the owners at the time of such discard or rejection, including Garbage, Rubbish, Ashes, incinerator ash, incinerator residue, street cleanings, municipal and industrial sludges, solid commercial and solid industrial waste, and animal waste; provided, however, that this definition shall not include Hazardous Waste, Source Separated Materials, human body waste, liquid or other waste regulated by statue, ferrous or nonferrous scrap direct to a scrap metal process or to a reuse of ferrous or nonferrous products an slag or slag product direct to a slag process or to a reuser of slag or slag products.

"Start-up Date" means 12:01 a.m. on the day which the Company specifies in the notice to the County referred to in Section 2.13 as the first Day on which the Facility is capable of Processing Processable Waste.

"State" means the State of Michigan and all of its appropriate administrative, contracting and regulatory agencies and offices.

"**System**" means the Kent County Refuse Disposal System established by resolution of the Board of Commissioners on June 5, 1968 pursuant to Act 185, and any improvements or extension of the System.

"Ton" means a "short ton" of 2,000 pounds.

"**Trustee**" means _____ as trustee under the Indenture, including any successor trustee.

"Uncontrollable Circumstance" means any acts, events or conditions, other than a labor strike, that have a direct material adverse effect on the rights or the obligation of a Party under this Agreement, if such act. Event or condition is beyond the reasonable control of the Party relying thereon as justification for not performing an obligation or complying with any condition required of such Party under this Agreement. Such acts, events or condition may include, but shall not be limited to, the following"

(a) An Act of God, landslide, hurricane, tornadoes, blizzards, lighting, earthquake, fire, explosion flood, acts of a public enemy, war, blockade, insurrection, riot or civil disturbance, sabotage or similar occurrence (but no including reasonably anticipated weather condition for the geographic area of the Project);

(b) the order, injunction or judgment of any federal, state or local court, administrative agency or governmental body with jurisdiction in the County, including any exercise of the power of eminent domain, police power, condemnation or other taking by on behalf of any public, quasi=public or private entity; excepting decisions interpreting Federal, state and local tax

laws; provide, however, that such order or judgment shall not arise in connection with or be related to the willful or negligent act of inaction of such Party;

(c) the failure to issue, or the suspension, termination, interruption, denial or failure of renewal or issuance of any permit, license, consent, authorization or approval essential to the construction, start-up, Acceptance Testing of the Facility; provided, that such act or event shall not arise in connection with or be related to the willful or negligent action or inaction of the Party relying thereon and that neither the contesting in good faith of any such order nor the reasonable failure to so contest shall be constructed as a willful or negligent action or inaction of such Party;

(d) a Change in Law.

(e) the loss of or inability to obtain any utility services, including water, natural gas, sewerage, sewage disposal, cooling water and electric power purchase from any Perso other than that generated by the Facility, any of which is necessary for (i) the construction, start-up, Acceptance Testing or operation of the Facility or (iii) the operation of the Landfill, directly resulting in a partial or total curtailment of the Operation at the Facility.

(f) The unavailability of Landfill capacity sufficient for disposal of all Process Residue.

(g) The failure of any subcontractor or supplier, other than a Company subsidiary or affiliate, to furnish services, material or equipment on the dates agreed to: provided (i) such failure is (A) caused by an act, event or condition materially and adversely affecting the performance of such subcontractor or supplier that would be an Uncontrollable Circumstance if it directly affected the Company, and (B) materially, adversely affects the Company's ability to perform its obligations, and (iii) the Company is not able reasonably to obtain substitute services, material or equipment on the agreed upon date; and

(h) Any subsurface condition including the presence of hazardous Waste at the Project Site, which shall prevent, or require a redesign or change in, the construction, or adversely affect the Work completion schedule for, the Facility; provided, however that the condition was unknown to the Company and could not have been discovered with reasonable diligence by the Company, on or before the Contract Date.

"**Work**" means the design and construction of the Facility.

"**Work Change**" means (i) a change in the Facility specification as set forth in Schedule 8, or (ii) a repair, reconstruction or alteration of the Facility that requires additional capital expenditures, an increase in the Facility Price or an increase in the operation and maintenance charge, and, in either case, is the result of the County's request, Uncontrollable Circumstances or County Fault. A Work Change necessitated by County Fault shall be treated as a Work Change to Uncontrollable Circumstance pursuant to Section 2.06 except that such a Work Change shall not be subject to the Disposal Cost Increase Limitation, and for any Work Change due to County Fault involving a change in the Facility Price or the Operation and Maintenance change, the Company shall be entitled to payment of its Direct Costs to the extent of Cost Substation, include profit.

Article II
Construction of the Facility

[This Article will define the Companies obligation to construct and commission the Facility. It will:

- **specify the Company's Fixed Price to Construct the Facility**
- **specify under what conditions and procedures the Facility Fixed Price might be adjusted due to a County request or Uncontrollable Circumstances.**
- **stipulate the manner and timing of the County's progress payments to the Company during the Facility construction period.**
- **Specify utility connections.**
- **Specify the Commence of Work (Notice to Proceed)**
- **How Acceptance Testing of the Facility will occur.**
- **How the Facility Fixed Price may be adjusted if the Company fails to reach the Full Acceptance Standard**
- **Other terms and conditions relating to the Construction and testing of the Facility**

2.01 Agreement to Construct.

(a) The Company agrees, on and after the Construction Date to cause the Facility to be designed constructed , started-up and Acceptance Tested and to cause the Facility to be designed and constructed in accordance with the requirement of this Article II and as set forth in Schedules 3, 8, and 18.

(b) The County agrees to pay the Company the Facility Price for the Work pursuant to Schedule 10. The proceeds of the Bonds deposited in the Construction Fund pursuant to the Indenture to be applied to the payment of the Facility Price, will be paid as provided in Section __ of the Indenture. The Company shall provide the County with a monthly invoice setting forth the information described in Section 2.03 and 2.10, to monitor construction progress in accordance with said Section 2.03, to verify the Company's right to payment of the Facility Price in accordance with, and as limited by Schedule 10. The Company shall not be entitled to payment in excess of the rate of payment specified in said Schedule 10.

2.02 Facility Price

The facility Price shall be the fixed price of $_____, which Facility Price shall be valid through _____, together with the amount of any changes in such Facility Prices as a result of (a) the occurrence of an Uncontrollable Circumstance occurring on and after the Contract Date, as provided in Section 2.04 (a); (b) County Work changes request pursuant to Section 2.04 (b); (c) County Fault described in Section 2.04)(c); and (d) adjustment to the Facility Price pursuant to Section 2.04 (d) after _____.

If the Construction Date has not occurred on or before _____ then this Agreement shall be terminated as provided in Section 3.04 as of 12:01 a.m. on _____, unless a new Facility Price is otherwise mutually agreed to by the Parties by written amendment to this Agreement.

2.03 Construction and Progress Monitoring; Payment of Invoices

The Company shall design, construct, start-up and Acceptance Test the Facility and shall design and construct the Facility in accordance with Section 2.01. In performing its obligations under Section 2.01, the Company may enter into contracts and subcontracts, which contracts and subcontracts shall neither supersede nor abrogate any of the terms or provisions of this Agreement.

The County and County Consultant shall have reasonable access to the Facility site during construction. The Company shall review the design and construction of the Facility with the County so that the County may verify that the Work and plans and specifications do not materially deviate from Schedule 8.

The Company shall provide the County with the critical path method schedule ("CPM Documents") developed the Company with respect to the design, construction, start-up and Acceptance Testing of the Facility and the design and construction of the Facility at least two (2) months prior to the estimated Construction Date, and the Company shall provide the Count with monthly updates of the CPM Documents.

The Company agrees to cooperate with all reasonable requests made by the County Constant in connection with the performance of such duties for the County.

The Company warrants and guarantees that title to all Work, materials and equipment covered by an application for payment will have passed to the County either by incorporation into the Facility or upon receipt by the Company of payment.

Based upon applications for payment submitted by the Company to the County by the tenth (10^{th}) Day of each month, the County shall make progress payments to the Company on account of the Facility Price.

Schedule __ shall be used as a basis for the Company's applications for payment and the County's review thereof.

The County shall within ten (10) days after receipt of the Company application for payment, either approve, in writing, such application for payment or notify the Company in writing of its reason for withholding such approval.

2.04 Adjustments to the Facility Price

If, on and after the Contract Date, an Uncontrollable Circumstance shall necessitate a Work Change, or a delay resulting in an increase or decrease in the cost of the Facility due to change or delay the Facility Price shall be adjusted.

If the County request a Word Change pursuant to Section 2.05 and accepts the Company's proposal the Facility Price shall be adjusted

The Facility Price shall be adjusted to the extent of Cost Substantiation, including profit, to reflect the capital costs resulting from Work Changes or delay due to County Fault.

2.05 County's Work Change Requests

Any Work Change request by the County shall be submitted in writing by the County to the Company.

2.06 Uncontrollable Circumstance Work Changes

If an Uncontrollable Circumstance necessitates a Work Change or causes construction of the Facility to be delayed, the Company obligation to design construct, start-up and Acceptance Test the Facility shall be modified as provided in the Section.

2.07 Costs for Preparation of Work Change Requests

2.08 Company Work Changes

2.09 Scheduled Acceptance Date Extension.

2.10 Certification of Payment of Facility Price and Direct Costs

2.11 Utility Connections.

The County shall obtain all necessary easements for sewer, potable water, cooling water, natural gas, to the location at the perimeter of the Facility site.

The Company shall be responsible for providing for electricity connections utilized during construction of the Facility.

2.12 Commencement of Work.

Promptly on or after the Construction Date, the Company shall commence or cause to be commend the construction of the Facility in accordance with the Schedule set forth in Schedule 10.

2.13 Acceptance Testing of the Facility

The Company shall be responsible for the preparation for, and the performance and execution of, Acceptance Tests and shall furnish all labor, supervision, materials, services and equipment necessary to execute such tests.

(a) Test Plan.
Within (X) months after the Construction date, the Company shall prepare and submit a test pan to the County for review and approval. The test plan shall define a test program as to each test objective and procedure described in Schedule X and shall set forth in detail the procedure to be used, the specific measurement to be made, the proposed usage of permanent and temporary instrumentation, the organization of the test team, staffing and monitoring requirements during start-up, shakedown and acceptance Test.

(b) Notice of Acceptance Test.
The Company shall give the County ninety (90) Days prior written notice of the approximate Start-up Date in preparation for the conduct of Acceptance testing.

(c) Inspection.
The County and the County Consultant shall have the right, at the County's expense, to verify the preparation for and the conduct of Acceptance Testing pursuant to the test plan.

(d) Test Results.
The Company, upon completion of the Acceptance Tests shall furnish the County with a written report certified by the Company describing the Acceptance Test.

2.14 Minimal acceptance Standard for the Facility and Extension Period.

Minimal Acceptance Standard. If, at any time after the Construction Date and on or before the Scheduled Acceptance Date, or, if applicable, on or before the last day of the Extension Period and except as provided in Section x, the Company's written certification submitted pursuant to Section x, states that the Facility has been demonstrated to operate at a standard equal to or greater than the Minimal Acceptance Standard and if said certification is determined to be correct pursuant to said Section x, then the Facility shall be deemed to have achieved Acceptance and the Acceptance Date shall be established as of the date of the Company's certification hereunder and, if the Facility was Accepted at less than the Full Acceptance Standard for the Monthly Guaranteed Capacity, the Facility shall be derated as provided by the provisions of Section 2.14(d), and, if the Facility was Accepted at less than the Full Acceptance Standard for the Energy Efficiency Guarantee then the Company shall be obligated for the payment of Monthly Damages during the Energy Inefficiency Period.

2.15 Early Acceptance

2.16 Sales or Use Tax Exemption

2.17 Utility Utilization During Construction

2.18 Permits for Construction or Operation

2.19 Groundwater Contamination

2.20 As Built Drawings

The Company shall provide the County with as-built drawings of the Facility and such as-built drawings shall replace each of the drawings specified in paragraph 5 of Schedule 8.

Article III
Conditions Precedent and Financing

[This Article will describe any Conditions Precedent required to be resolved after the Contract signing date but prior to the Construction Date notification. It will also describe the County's issuance of bonds to finance its payment of the Facility Fixed Price]

3.01 Conditions Precedent

3.02 Conditions to County Obligations

3.03 Conditions to Company Obligations

3.04 Satisfaction of Conditions Precedent.

3.05 Issuance of Bonds

The County, acting by and through [To be Determined] will issue Bonds and provided other moneys in an aggregate principal amount sufficient to pay, pursuant to the terms of the Indenture, the cost of the

Project including, but not limited to, such additional amount as may be required to pay costs of issuance of the Bonds and interest during construction and to fund any reserves required to be funded out of Bond proceeds with respect to the Bonds, less estimated allowable investment earnings on the bond proceeds during construction and may, from time to time, issue additional Bonds for such purposes as may be permitted by the Indenture, or any supplemental indenture.

Article IV
Operation of the Facility; Delivery and Processing of Processable Waste

[This Article will describe the normal operation of the Facility including the delivery and processing of Processable Waste]

4.01 Operation Prior to Acceptance; Delivery of Processable Waste; Disposal fees

(a) On and after the Start-up Date and throughout the start-up operations, shake-down and Acceptance Testing pursuant to Section 2.13, and, if applicable, prior to the last Day of the Extension Period specified in Section 2.14 (b), the County shall use reasonable efforts to deliver or cause to be delivered to the Facility Processable Waste in such amount and at such times as the Company request pursuant to Section 2.13.

(b) Subsequent to the Company's notices of the approximate deliver schedules and quantities of Processable Waste required by Section 2.13 (b), the Company shall provide the County with at least fourteen (14) Days prior written notice of the Start-up Date and of the initial quantity of Processable Waste to be delivered by the County and the requested initial delivery schedule of such Processable Waste to the Facility for Processing and shall further notify the County of any subsequent material change in such quantity or schedule request by the Company at least two (2) days prior to the effective date of any such request change.

4.02 [Not applicable]

4.03 Operation of the Project after Acceptance

(a) On and after the Acceptance Date, the County shall deliver or cause to be delivered to the Facility the Guaranteed Tonnage during each Billing Year. If the Guaranteed Tonnage is not delivered to the Facility, the County nevertheless shall be responsible for payment of the Service Fee, including damages, if any, as provided in Article VII. The Company, however, shall use all reasonable efforts to mitigate any shortfall in tonnage by obtaining Processable Waste from any other source. Any and all Processable Waste Processed at the Facility, regardless of source, shall be credited to the guaranteed Tonnage. The County shall pay the Company for its Direct Costs incurred in obtaining such Processable Waste, to the extent of Cost Substantiation, include profit. The County and Company agree to cooperate and use reasonable efforts to deliver or cause to be delivered to the Facility for Processing to the maximum extent of available Facility Processing capacity, consistent with sound engineering practices and procedures, subject to the Company's rejections rights.

(b) After the acceptance Date and subject to Section 4.09, the Company shall receive Processable during the Receiving Hours, and shall process all Processable Waste which is delivered to the Facility throughout the term of the Agreement

(c) After the Acceptance Date, the Company shall operate and maintain the Facility in such manner as to ensure that the Facility will receive and Process Processable Waste in accordance with this agreement, will maximize the generation of Recover Resources.

(d) On and after the Start-up Date, and throughout the term of this Agreement, unless prevented by an Uncontrollable Circumstance of County Faut, the company shall operate the Facility so as to comply with all applicable federal, State and local law rules or regulations.

4.04 Facility Personnel.

4.05 Facility Equipment and Indenture Requirements.

4. 06 Processable Waste.

The Company may operate the Facility in order to Process Processable Waste to the full extent of available Facility Processing capacity; provided, however, that the Company shall, at all time, be obligated to accept and Process Processable Waste delivered by or on behalf of the County.

4.07 Authorized Representative; Facility safety and Maintenance; Public Relations

(a) Authorized Representatives

(i) The County shall designate in writing a person or person to act as the Board's Authorized Representative with respect to matters which may arise during the performance of this Agreement.

(ii) The Company shall designate in writing a Person or Persons to act as the Company Authorized Representative with respect to matters which may arise during the performance of this Agreement.

(b) Facility Safety and Maintenance.

(i) Safety of Persons and Property. The Company shall in a manner consistent with all applicable laws and good safety practices including the regulation and requirements of OSHA and other relevant agencies and standards, establish and maintain safety procedures, including the contingency plan in accordance with Schedule XX.

(ii) Repair and Maintenance. The Company shall keep the Facility in good repair and maintain the Facility, including an adequate reserve of spare parts, to assure that the Facility is operated in accordance with this Agreement and in accordance with good engineering practices and procedure for waste processing and Resource Recovery facilities. The Company shall maintain the exterior and interior of the Facility in a clean, orderly and litter-free fashion consistent with the level of maintenance and orderliness proved a facility similar to the Facility.

[Language will need to be developed to describe the process for which funds may be drawn from the Equipment Replacement and Improvement Reserve Account to refurbish, replace and improve County owned equipment and facilities]

(c) Public Relations

The Company shall be responsive to requests for information from the public and after the Acceptance Date will designate a person to conduct the public on tours on a reasonable basis of the

Facility. The County shall have, at any time during the term of the Agreement and upon prior reasonable notice to the Company, the right to visit and to take visitors through the Project in order to observe, and to permit others to observe.

4.08 Inspection of the Facility; Record Keeping and Reporting

The County may at its cost and expense and with the full cooperation of the Company, inspect the Facility including the right to test the Facility to determine whether the Company is substantially in compliance with all of its obligations under this Agreement. If such inspection shall reveal that the Company is not substantially in compliance with such obligation, the Company shall have thirty (30) Days from receipt of written notice by the County of such noncompliance to correct or take appropriate steps to commence the correction of such noncompliance.

4.09 Receipt of Processable Waste; Rejection Rights; Processable Waste Composition; Nonprocessable Waste

(a) Guaranteed Tonnage After the Acceptance Date, the County shall deliver to the Facility at least the Guaranteed Tonnage for each Billing Year in Accordance to This Article IV.

(b) Rejection of Deliveries

(i) Company's Rejection Rights. The Company may reject tenders of (1) Processable Waste delivered at hours other than the Receiving time; (2) Processable Waste delivered in excess of XXXX Tons per week; (3) Processable Waste which the Facility is unable to accept as a result of (A) an Uncontrollable Circumstance or (B) County Fault; (4) Hazardous Waste; and (5) Nonprocessable Waste.

(ii) Effect of Company's Rejection Rights. All Processable Waste which is rejected by the Company pursuant to clauses (1), (2), and (3) (B) and all Processable Waste delivered in excess of XXX Tons per week shall not be credited to the Guaranteed Tonnage.

(ii) Bypassed Waste At the end of any Billing Month, if the sum of (1) the Tons of Processable Waste Processed and (2) the Tons of Processable Waste which are credited to the Guaranteed Tonnage pursuant to Section 4.09 (ii) plus … said amounts shall be Bypassed Waste. For each Billing Month, the Company shall be obligated to pay the County for each Ton of Bypassed Waste the sum of (x) the Landfill Costs specified in Section 7.05 and (y) the Direct Costs incurred by the County for increase costs of transportation of each such Bypassed Ton to the Landfill for disposal.

(c) Composition of Processable Waste.

Nothing in this Agreement shall be construed to mean that the County guarantees the composition of any Processable Waste as it pertains to the proportion of any material contained therein, the energy value thereof, or any other physical or chemical property thereof, nor shall the requirement set forth in Schedules XX and XX be diminished due to any variation in the composition of Processable Waste.

(d) Inadvertent Deliveries of Nonprocessable Waste

(i) The County and, when applicable pursuant to Sections 4.01 (c) and 4.03, the Company shall use reasonable efforts, in good faith, to cause only Processable Waste to be delivered to the Facility and to minimize the quantities of Nonprocessable Waste included therein. However the Company and the County agree that inadvertent deliveries of other than Processable

Waste to the Facility shall not constitute a breach of the County's or the Company's obligations hereunder and shall not be deemed to be a County Fault or a Company Fault.

4.10 Receiving and Operating Hours

4.11 Weighing of Processable Waste; Operation of the Scale House; Invoicing for Facility Disposal Fees; Testing of Scales

(a)

(i) The company shall construct, and the County shall operate and maintain, weighting facilities at the Facility Site for the purpose of determining the total Tons of Processable Waste delivered to the Facility and the Tons of Process Residue, Bypassed Waste, and Recovered Resources which leave the Facility site. The Company shall have the right to have an employee present from time to time in the Facility scale house during operating hours to observe scale house operations.

(ii) Each vehicle delivering Processable Waste to the Facility shall be weighed in and any Processable Waste delivered that the Company is obligated to Process or which is Processed by the Company pursuant to this Agreement shall be credited to the Guaranteed Tonnage. In addition, each vehicle delivering Processable Waste shall have the vehicle identification number and the gross and tare weights conspicuously displayed on the exterior of the vehicle in a location designated by the County and reasonably visible to the operator of the scale house at the Facility Site. The County shall maintain a weight record containing the weight, date, time and vehicle identification of each vehicle entering and exiting the Facility Site. The County may determine the weight of vehicles leaving the Facility Site by weighing such vehicles as they exit the Facility Site or by establishing and relying on a system of posted tare weight measurements with regard to such vehicles.

(iii) Vehicles transporting Processable Waste originating from a Participating Municipality shall have an identification specified by the County, which, in addition to satisfying the requirements of Section 4.ll(a) (ii), shall also conspicuously identify the vehicle as one delivering Processable Waste which originates in a Participating Municipality.

(iv) To the extent that Nonprocessable Waste is delivered to the Facility but is not Processed, the Company may separate and deposit such Nonprocessable Waste in a suitable container as set forth in Section 4.09(d) for collection and transport to the Landfill by the County and the County shall weigh such Nonprocessable waste as it is leaving the FACILITY. The Tons of such Nonprocessable waste shall be subtracted from the Tons of Processable Waste delivered to the Facility during any such Billing Month

(b)

(i) Except for the first Billing Month when all of the information required by this Section 4.ll(b)(i) shall be estimated by the County and shall be the basis for the first invoice, which estimate shall be adjusted in any succeeding Billing Month when such information becomes available to the County, and for each calendar month following the Start-Up Date in which the Company is entitled to payment pursuant to Section . 4.0l(d), the County shall provide the Company with the following data necessary for preparation of the Company's invoice for payment, no later than seven (7) Days after the first Day of each calendar month, if applicable, and of each Billing Month: (1) the total quantity of Processable Waste Processed and the quantity of Processable Waste Transferred during the preceding calendar month, if applicable, or the preceding Billing

Month; (2) the total quantity of Process Residue and Residue generated at the Facility during the preceding calendar month, if applicable, or the preceding Billing Month; (3) the quantities of Bypassed Waste and Non Processable Waste delivered to the Landfill during the preceding calendar month, if applicable, or the preceding Billing Month; (4) the quantity of Residue delivered to the Landfill during the preceding calendar month, if applicable, or the preceding Billing

(ii) The County shall be responsible for the preparation, mailing and collection of all invoices for disposal fees payable for delivery of Processable Waste to the Facility.

(c)

The County at its expense, shall test and recalibrate the Facility Site weigh scales as often as may be required by State law. Either Party may request more frequent testing of the weigh scales at the requesting Party's cost and expense. If, at any time, testing of the weigh scales indicates that the scales do not meet the accuracy requirements of applicable State law, adjustments of scale records actually recorded during the preceding thirty (30) Days shall be negotiated by the Parties. If there is a dispute as to such adjustment, the Parties shall resolve such dispute pursuant to Section 10.01. If all weigh scales are incapacitated or are being tested, the Parties shall estimate the quantity of Processable Waste delivered on the basis of truck volumes and estimated data obtained from historical information pertinent to the County. These estimates shall take the place of actual weighing records during the scale outage. The County shall provide copies of all weight records to the Company. Copies of all daily weight records shall be maintained by the County for a period of at least two (2) years.

4.12 Storage

4.13 Title to Hazardous waste and Non Processable Waste

4.14 Daily Verification of Performance

Verification of continued efficient Facility operations will be based upon a daily monitoring and recording of the operating parameters specified in Schedule X. The Company shall provide the County with a daily listing of all Operating Parameters exceeded and any noncompliance with applicable air quality permit conditions.

Following the first Billing Year, the Parties agree to review, in good faith, Company's operating conditions and tolerances in view of the Acceptance Testing results pursuant to which the Facility was accepted and actual operating conditions to determine whether, by mutual agreement, the Company's operating conditions set forth in Schedule X should be adjusted in light of such Acceptance Test results and operating history. If the Parties are unable to mutually agree to any such adjustment, then the operating conditions shall not be adjusted, and such dispute shall not be subject to arbitration pursuant to Section 10.1

4.15 Testing of the Facility

4.16 Scheduled Maintenance. Scheduled Maintenance periods for the Facility established pursuant to Section 4.09(a) and Schedule 4 shall be performed by the Company during such designated periods for scheduled maintenance unless, in the Company's reasonable engineering judgement, it is necessary that such scheduled maintenance be performed at a time other than the originally-scheduled period. The

Company shall notify the County and the Consulting Engineer of such change in scheduled maintenance period and such notice shall specify the basis for such change.

4.17 Testing At End of Term.

(a) During the penultimate Billing Year during the term of this Agreement and at least six (6) Months prior to the last Day of said Billing Year, the Company shall conduct a test of the Facility in accordance with Schedule 3 to determine whether the Facility meets the Full Acceptance Standard, or such lesser standard at which the Facility was accepted pursuant to Section 2.14.(

b) If such test demonstrates that the Facility is not capable of meeting the Full Acceptance Standard, or such lesser performance standard at which the Facility was Accepted pursuant to Section 2.14, then the Company shall be obligated, at its cost and expense, to repair, modify or otherwise alter, or to commence the repair, modification or alteration, of the MBI in order that it may meet the said levels of performance specified in this Section 4.17 prior to termination of this Agreement. Such obligation to repair, modify or alter the Facility shall not include refurbishment costs of the Facility due to ordinary wear and tear resulting from operation of the Facility, but shall include all costs necessary to meet the Company's obligations pursuant to this Section 4.17.

4.18 Strikes

4.19 Removal of Process Residue

Article V
Not Applicable

[In the original document this Article described the interconnect of the Facility with a District Energy System]

Article VI
Landfill and Related Matters; Hazardous Waste

[To be developed at a later date]

Article VII
Service Fee Payments

7.01 Service Fee Payments

(a)

Commencing with the first Billing Month and for each Billing Month thereafter, the Company shall be paid a Service Fee by the County for operating and maintain the Facility excluding the weight scales pursuant to the terms of this Agreement in accordance with the follow formula;

$$SF = OM + ER + DS + PT + EW – HF – RRR – BW – MD$$

Where:

OM is the Operations and Maintenance charge

ER is the Equipment Replacement and Improvement charge, [the ER will be deposited directly with the trustee defined within the Indenture and will remain the property of the County]

DS is the Debt Service expense for Company provided debt,

PT is the Pass-Through costs,

EW is the Excess Waste charge,

HF is the Host Fees payable to the County for the acceptance of non-County Processable waste accepted by the Company,

RRR is the revenue sharing with the County for the sale of products from the Facility,

BW is the expense of the disposal cost any Bypass Waste, if any, and

MD is the damages for Company nonperformance, if any.

(b) For the period of time, if any, following the Acceptance Date until the first Day of the first Billing Month, the Company shall be paid an amount equal to the sum of (A) the Operation and Maintenance Charge times a fraction, the numerator of which is the number of Days from the Acceptance Date to the first Day of the first Billing Month, and the denominator of which is the number of Days in the calendar month in which the Acceptance Date occurred, plus (B) the Pass Through Costs incurred for such period of time prior to the first Day of the first Billing Month, plus (CJ the Energy Credit payable to the Company for such period of time prior to the first Day of the first Billing Month. Such amounts shall be included in the Company's invoice for the first Billing Month.

7.02 Operation and Maintenance Charge. For any Billing Month, the Operation and Maintenance Charge shall be one-twelfth (1/12) of the Initial Operation and Maintenance Charge as of XXX,X, 20XX as adjusted by the Adjustment Factor, plus or minus amounts calculated pursuant to Section7.08(c).

7.03 Pass Through Costs.

Pass Through Costs for any Billing Month shall be the sum of the costs and expenses for the items set forth in Schedule 14, Part B, which were incurred by the Company during such Billing Month, to the extent of Cost Substantiation, excluding profit. All costs for utility usages in excess of the maximum limits set forth in paragraphs 4, 5, 9, and 10 of Schedule 18 shall be paid by the Company as part of the Monthly Damages.

7.04 Recovered Resources Revenues

a) For the purpose of this Agreement, "gross revenues", when used in connection with the sale of Recovered Resources, shall mean total revenues derived from the sale of any Recovered Resources, and "net revenues" shall mean gross revenues less (i) administrative costs charged by purchasers of Recovered Resources and (ii) all commissions, or similar charges plus all Direct Costs paid by the Company in connection with the sale of any Recovered Resources to the extent of Cost Substantiation, excluding profit. Gross revenues and net revenues from the sale of Recovered Resources to an affiliate of the Company, if any, shall be determined on the basis of an arm's length price

(c) The Recovered Resources Revenues component of the Service Fee calculated pursuant to Section 7.01 (a) for each Billing Month shall be equal to (i) the net revenues from the sale of any Recovered Resources, times (ii) the County’s percentage payment of such revenues specified in Schedule XX.

7.05 Landfill Costs.
Landfill Costs during any Billing Month for Bypassed Waste pursuant to Section 4.09(b)(iii), and subject to Section 4.09(b)(iv), shall be an amount equal to Fifty Dollars ($50.00), adjusted in accordance with the Adjustment Factor, for each Ton of Bypassed Waste.

7.06 Monthly Damages.
[To be determined]

7**.07 Billing and Payment of Company's Invoices**.
(a) The Company shall render a statement to the County for each calendar month, if the Company is entitled to payment pursuant to Section 4.0l(d), and for each Billing Month, seven (7) Days after receipt from the County of the information maintained by the County pursuant to Section 4.ll(b)(i), reflecting each element necessary to calculate the payment due to the Company pursuant to Section 4.0l(d) or to calculate the Service Fee payment due to the Company pursuant to Section 7.0l(a). The Company's statement shall identify the following items, if applicable:

(i) Any balance due to the County or the Company as a result of the annual adjustment pursuant to Section 7.11;

(ii) Any amounts due to the Company for a Work Change pursuant to Sections 2.05 or 2.06;

(iii) The operating data required to be maintained by the Company pursuant to Section 4.0B(b);

(iv) The Facility and Landfill weigh scale data required to be maintained by the County and provided to the Company pursuant to Sections 4.ll (a) and (b); and,

(v) Any insurance proceeds payable to the Company.

(vi) To the extent that the actual value of any item in any statement for a Billing Month cannot be accurately determined as of the Billing Month statement date, such item shall be billed on an estimated basis, calculated in good faith, and an adjustment shall be made to reflect the difference between such estimated value and the actual value of such item on the Billing Month statement next following the date on which the Company or the County knows the exact value of any such item. The County shall pay the Company the amount, if any, due to the Company set forth in such statement within seven (7) Days after receipt by the County of the said statement provided by the Company for any Billing Month. Any balance due to the County, shall be paid by the Company within seven (7) Days of the date of the Company's statement to the County. (b) Five (5) Billing Months prior to the end of each Billing Year, the Company shall provide the County with a written statement setting forth its reasonable estimate of the aggregate Service Fee for the next Billing Year, which statement shall not be binding on the Company. (c) The County shall provide the Company with contemporaneous copies of each statement rendered to the purchaser of electric energy pursuant to the Power Purchase Agreement and to any purchaser pursuant to any other agreement with the County for the sale of Recovered Resources.

7.08 Uncontrollable Circumstance and Performance.
(a) If, after the Acceptance Date, either Party fails to perform any of its obligations under this Agreement, and if such failure to perform was caused by an Uncontrollable Circumstance, then the Parties shall cooperate to remove, reduce or eliminate the adverse effect of such Uncontrollable Circumstance and the Company shall receive, Process or Transfer Processable Waste to the extent of the remaining Processing capability of the Facility The County shall deliver, or cause to be delivered,

Processable Waste to the extent of its ability to cause such delivery to the Facility The County shall pay the Company the Service Fee, and shall provide for the disposal of Processable Waste not Processed at the Facility at no cost to the Company. During the occurrence of an Uncontrollable Circumstance, the Company shall (i) use all reasonable efforts to continue to Process or Transfer Processable Waste and (ii) consistent with its contractual and long-term operating and maintenance requirements, use all reasonable efforts to reduce its operating costs, in which case, the Operation and Maintenance Charge shall be reduced by the aggregate amount of any such savings. (b) If, after the Acceptance Date, the County is unable to deliver Processable Waste to the Facility due to the occurrence of an Uncontrollable Circumstance, the County shall nevertheless pay the Service Fee. (c) If, after the Acceptance Date, there is a decrease or increase in the Company's costs of operation and maintenance of the Facility due to the occurrence or continued effect of an Uncontrollable Circumstance, then the Operation and Maintenance Charge shall be adjusted accordingly, to the extent of Cost Substantiation, excluding profit; provided, however, that any increase in the Disposal Cost shall be subject to the provisions of Section 7.12.

7.09 Company Non-Performance.

(a) If, during any Billing Year, the Company, due to Company Fault, does not Process at least the lesser of the Tons of Processable Waste delivered to the MBI or the Guaranteed Tonnage and said failure to Process was not the result of an Uncontrollable Circumstance or County Fault, then in addition to Company's responsibility to pay the County the Landfill Costs during any Billing Month of said Billing Year pursuant to Section 7.05, the Company shall be obligated for the payment of damages calculated pursuant to Section 7.ll(b)(vi).

(b) If, any time, the Facility performs at less than the Full Acceptance Standard, the Company may, at its sole cost and expense and subject to the provisions of Section 2.08, alter the Facility to bring its performance up to the Full Acceptance Standard; provided, however, that no expenditure by the Company in connection with such alteration shall in itself cause an increase in the Service Fee.

7.10 County Non-Performance.

(a) If, during any Billing Year, the Facility is temporarily shut down, either partially or totally, or is otherwise unable to receive and Process Processable Waste in accordance with the Company's obligations under this Agreement due to County Fault and not as a result of Company Fault or Uncontrollable Circumstance, the Company shall receive and shall" Process such lesser amounts of Processable Waste to the full extent of the remaining Processing capability of the Facility , the County shall pay the Service Fee and the County shall pay the Company damages, if any, pursuant to Section 7.ll(a).

(b) During any such period during the Billing Year, the Company shall use all reasonable efforts to reduce its costs of operation and maintenance of the Facility and any such reduction in cost shall correspondingly reduce the Operation and Maintenance Charge.

7.11 Annual Settlement Procedure. Within sixty (60) Days after the last Day of each Billing Year, the Company shall prepare and deliver to the County an annual settlement statement, payable by the Company or the County, as the case may be, within thirty (30) Days of such statement date, reflecting the following items: [to be determined].

Article VIII
Further Agreements

[To be developed]

Article IX
Events of Default and remedies; Specific Performance

[To be developed]

Article X
Indemnification Consequential Damage; Property Rights; Representations

[To be developed]

Article XI
Miscellaneous

[To be developed]

TABLE OF SCHEDULES

Attachment 5: Service Fee Formula Model

Monthly Service Fee (MSF) shall be:

MSF = OM + ER + DS + PT + EW - HF– RRR – BW - MD

Where:

OM is the Operations and Maintenance Charge

ER is the monthly Equipment Replacement and Improvement charge,

DS is the monthly Debt Service expense for Company provided debt,

PT is the Pass-Through costs,

EW is the Excess Waste charge,

HF is Host Fees for non-County Processable Waste

RRR is the Recovered Resources Revenue Share for the sale of products from the Facility to the County,

BW is the monthly expense of the disposal cost any Bypass Waste, if any, and

MD is the monthly damages for Company nonperformance, if any.

The Operations and Maintenance Charge shall be a fixed monthly payment made to the Company which provides the sole compensation to the Company for:

- All wages, health and welfare benefits, retirement benefits, sick leave, vacation leave, payroll taxes, workers compensation and similar employee payroll expenses necessary to operate and maintain the Facility,
- All Facility management and supervisory wages, health and welfare benefits, retirement benefits, payroll benefits, payroll taxes sick leave, vacation leave workers compensation and similar payroll expenses necessary to operate and maintain the Facility,
- All Facility consumable materials, parts, repairs, chemicals, fuel, utilities, and similar expenses necessary to operate and maintain the facility,
- All employee training and safety related expenses,
- All temporary labor expenses,
- All outside contractor expenses related to maintaining or operating the Facility,
- All corporate overhead and allocated expenses,
- All equipment replacement and refurbishment of Company owned proprietary equipment,
- All Facility site office expenses including but not limited to, office supplies, furniture, software, communication and internet services, office supplies and equipment, personnel recruiting, marketing, legal, accounting, landscape and janitorial services and similar expenses., and
- Company profit.

The Equipment Replacement and Improvement charge shall be a fixed monthly payment to be deposited into the Equipment Replacement and Improvement Reserve Fund to cover future expenses for:

- The replacement of Facility mobile equipment,
- The replacement or refurbishment of DPW- owned processing equipment listed in Schedule ___,
- The replacement of Facility site and building systems such as site roadways, building HVAC, fire protection, elevators, roofing, siding, lighting, above and underground utilities and similar property, and
- Desirable and mutually agreeable post-Acceptance improvements of the County owned buildings, equipment and systems due to changes in waste material composition or characteristics, technological advancements, changes in commodity or product markets, or similar events and occurrences.

Debt Service Charge shall be a monthly payment for Company debt used to construct the Facility as provided in Schedule _____.

Pass Through Costs are those expenses necessary to construct and operate the Facility as provided in this Agreement including:

- Change-in-Law expenses,
- Unforeseen Circumstances expenses,
- DPW required insurance,
- Property taxes, and
- Any other identified Pass through expenses.

Excess Waste Charge shall be a unit charge for the delivery, acceptance and processing of DPW Processable in a Billing Year in excess of the Guaranteed Tons.

Host Fees are payments made to the DPW by the Company for accepting Processable Waste at the Facility from sources other than through the Service Agreement.

Recovered Resources Revenue shall be a credit attributable to the County for the sale of recovered products from the Facility as provided in Schedule _____.

By-Pass cost shall be the DPW's cost of Bypass Waste, if any, due to fault of the Company.

Monthly Damages shall be the liquidated damages to the DPW due to a Company Fault, if any, such as:

- The failure to meet a Commodity material recovery rate guarantee,
- The failure to meet a Company Product production rate guarantee,
- The failure to meet a Pass-Through expense performance guarantee, and
- Other liquidated performance guarantees as the Service Agreement may specify.

Attachment 6: Summary of State of Michigan Incentive Programs

MICHIGAN INCENTIVE PROGRAMS

BROWNFIELD REDEVELOPMENT AUTHORITY (PA 381)

Brownfield Redevelopment Authority (BRA) can be used to develop and implement Brownfield projects. A BRA is a resource that may use Tax Increment Financing (TIF) as a tool for property redevelopment.

COMMUNITY DEVELOPMENT BLOCK GRANT

The Community Development Block Grant (CDBG) program is a federal grant program utilizing funds received from the US Department of Housing and Urban Development (HUD). Each year, Michigan receives approximately $30 million in federal CDBG funds, out of which various projects are funding through the state.

INDUSTRIAL PROPERTY TAX ABATEMENT (PA 198)

Industrial property tax abatements provide incentives for eligible businesses to make new investments in Michigan. These abatements encourage Michigan manufacturers to build new plants, expand existing plants or renovate aging plants. High technology operations are also eligible for the abatement.

MICHIGAN BUSINESS DEVELOPMENT PROGRAM

The Michigan Business Development Program is an incentive program available from the Michigan Strategic Fund (MSF), in cooperation with the Michigan Economic Development Corporation (MEDC). The program is designed to provide grants, loans or other economic assistance to businesses for highly competitive projects in Michigan that create jobs and/or provide investment.

MICHIGAN BUSINESS GROWTH FUND LOAN PARTICIPATION PROGRAM

The Michigan Loan Participation Program participates with lenders to finance diversification projects when faced with eligible borrower companies whose projected cash flows are considered speculative by the lender.

MICHIGAN COLLATERAL SUPPORT PROGRAM

The Michigan Collateral Support Program supplies cash collateral accounts to lending institutions to enhance the collateral coverage of borrowers. To qualify, a business must be engaged with a private lender for the purpose of acquiring a commercial extension of commercial credit and must exhibit a collateral shortfall according to the lender's analysis.

COMMUNITY REVITALIZATION FUND

The Michigan Community Revitalization Program (CRProgram) is designed to promote community revitalization that will accelerate private investment in areas of historical declining values, contribute to Michigan's reinvention as a vital, job generating state, foster redevelopment of functionally obsolete or

historic properties, reduce blight, and protect natural resources of this state. The program is designed to provide grants, loans, or other economic assistance for eligible investment projects in Michigan.

PERSONAL PROPERTY TAX RELIEF IN DISTRESSED COMMUNITIES (PA 328)

Personal Property Tax Relief in Distressed Communities allows distressed communities, county seats, and certain border county communities to abate personal property taxes on new investments made by eligible businesses.

PURE MICHIGAN BUSINESS CONNECT - PROGRAM OVERVIEW

Pure Michigan Business Connect (PMBC) is a public-private initiative that introduces Michigan companies to opportunities that help them grow and expand. By participating in the program, companies receive: business assistance at little to no cost; access to a new business-to-business (B2B) network; and find new customers while also leveraging procurement resources to increase their supply chain.

SKILLED TRADES TRAINING FUND (STTF)

The STTF provides competitive awards for employer responsive-training that enhances talent, productivity, and employment retention, while increasing the quality and competitiveness of Michigan's businesses. The STTF ensures Michigan's employers have access to the talent they need to compete and grow, and individuals have the skills they need for in-demand jobs.

SESA EXEMPTION PROGRAM

Under the State Essential Services Assessment (SESA) Exemption Program, companies may qualify for a SESA exemption or alternative SESA when investing more than $25 million in personal property. SESA exemptions are equal to 100% of the SESA amount for a period of years. Alternative SESAs are equal to a 50% exemption for a period of years. Terms will be determined by a formal review, including: level of investment, amount of jobs created, level of wages, and connection to Michigan suppliers.

Contact us to learn more!

MICHIGAN FINANCING PROGRAMS

CREDIT UNION SMALL BUSINESS FINANCING ALLIANCE

The Michigan League of Credit Unions, in partnership with the Michigan Small Business Development Centers (MI-SBDC), has launched the Credit Union Small Business Financing Alliance. With an initial pledge of $43 million, credit unions around the state are engaged in Michigan's economic transformation, providing new and small businesses with commercial loans.

For information on how to enter the Credit Union Small Business Financing Alliance (CUSBFA), contact one of the 12 MI-SBDC's directly or visit the CUSBFA website.

SMALL BUSINESS CAPITAL ACCESS PROGRAM

The Small Business Capital Access Program (SBCAP) gives banks a flexible tool to make business loans to small firms, encouraging traditional lending to the small companies that are so vital to Michigan's economic health. The Michigan Economic Development Corporation contributes a small amount of "gap financing" to provide Michigan businesses access to capital that otherwise might not be available.

More than 50 participating financial institutions offer SBCAP loans directly to Michigan based companies. Similar to a loan loss reserve fund, the bank, borrower, and Michigan Economic Development Corporation pay small premiums into a reserve that makes it possible for the company to receive fixed asset and working capital financing. Download the MEDC's fact sheet for more information.

SBA CERTIFIED DEVELOPMENT LOANS

The U.S. Small Business Administration's (SBA) program provides small- and medium-sized businesses with long-term fixed rate financing for the acquisition or construction of fixed assets. Businesses must have a tangible net worth of less than $7.5 million and an average net profit of less than $2.5 million for the past two years.

MICHIGAN EMERGING TECHNOLOGIES FUND

Federal research and development funds support a critical stage for many technology companies as they move from the laboratory to the marketplace. The Emerging Technologies Fund, administered by the Michigan Small Business Development Center (MI-SBDC) for the Michigan Economic Development Corporation, is dedicated to match federal Small Business Innovation Research and Small Business Technology Transfer Research SBIR/STTR funding opportunities for exceptional research and technical innovation generated in Michigan. For more information, visit the Michigan Emerging Technologies Fund website.

MICHIGAN SUPPLIER DIVERSIFICATION FUND

Keeping auto suppliers working to diversify into new emerging sectors, the Michigan Supplier Diversification Fund was created in 2009 through the 21st Century Jobs Fund. The Michigan Economic Development Corporation partnered with private lenders to provide companies with the necessary liquidity to help purchase fixed assets and expand working capital as they translate manufacturing capacity into new 21st Century markets.

Companies engaged with a private lender for the purpose of acquiring a commercial loan for a diversification project experiencing a cashflow or collateral shortfall according to the lender's analysis may qualify under one of the Fund's programs: The Michigan Collateral Support Program and the Michigan Loan Participation Program.

PRIVATE ACTIVITY BONDS

Private activity bonds are an attractive source of financial assistance to economic development projects in Michigan. They provide profitable firms with capital cost savings stemming from the difference between taxable and tax-exempt interest rates. Download our factsheet for more information.

MICHIGAN ECONOMIC DEVELOPMENT CORPORATION | PURE MICHIGAN®

PRIVATE ACTIVITY BOND PROGRAM

WHAT IS PRIVATE ACTIVITY BOND FINANCING?

Private activity bonds are an attractive source of financial assistance to economic development projects in Michigan. They provide profitable firms with capital cost savings stemming from the difference between taxable and tax-exempt interest rates.

Public facilities, which generate a revenue stream, (parking structures, for instance) have traditionally been financed by municipalities through tax-exempt 'revenue bonds.' Private activity bonds apply this same tax-exempt finance mechanism to the 'public purpose' of economic development. The governmental unit borrows money from private capital markets, secured only by the project's revenues rather than the government's full faith and credit. Interest income earned on bonds issued by a governmental entity to finance a project for a private company which has demonstrated a good public purpose is exempt from federal, state, and local income taxes, thereby reducing the cost of capital (including the cost of letters of credit, remarketing fees, etc.).

WHO IS ELIGIBLE?

The Michigan Strategic Fund (MSF) issues private activity bonds on behalf of the borrower and lends the bond proceeds to the borrower. These loans can be made for manufacturing projects, not-for-profit corporation projects and solid or hazardous waste disposal facilities. (Please note: Per MSF Board Resolution 2005-234, no volume cap shall be allotted for solid or hazardous waste disposal facilities which serve the general populous. Also, MSF Board Resolution 2005-300 defines standards for financing Concentrated Animal Feeding Operations [CAFOs].)

For manufacturing projects, 95% of the bond proceeds must be used to acquire land, building and equipment directly related to the manufacturing process. Warehouse space and other 'non-core' items are ineligible unless they are directly
related to the manufacturing process, and then are limited to 25% of the project. At least 70% of bond proceeds must be spent on 'core manufacturing' costs. If you acquire existing facilities, a minimum of 15% of the bond proceeds must be used to renovate the facility. Used equipment is generally ineligible. Loans for such purposes as working capital or inventory are not permitted.

The maximum size of bonds is limited to:

1. $1 million free of any restrictions on capital expenditures; or,
2. $10 million subject to the condition that the company's total capital expenditures in the locality over the period of three years before and three years after the date of issuance do not exceed $20 million.

Regardless of owner's equity, bonds, conventional debt, all capital expenditures in a municipality where project is located, including the bond, cannot exceed $20 million for a period of three years prior and three years after issuance of bond. This includes any principal user (e.g. lessees) of the bond-financed facility and any related parties thereto which are made in the jurisdiction in which the bond proceeds are spent. Borrowers may not have more than $40 million bond indebtedness outstanding nationwide.

There is no limit on the size of bonds issued to finance solid or hazardous waste disposal facilities or not-for-profit corporation projects.

WHAT IS THE APPLICATION PROCESS?

The following steps summarize the actions necessary to obtain tax-exempt bond financing through the Michigan Strategic Fund:

1. Applicant prepares an application for the loan and submits it to MSF staff by the first day of the month to be on the agenda for that month's MSF meeting. (Please note: MSF Board meetings are generally held the fourth Tuesday of the month in Lansing. The applicant or a representative of the applicant may be asked to make a brief presentation to the MSF Board describing the project.)
2. MSF considers an inducement resolution at its public meeting recognizing the public purpose of the project.
3. Applicant structures the financing and bond counsel begins to prepare documents.
4. MSF staff publishes a public hearing notice at least 14 days prior to the date of hearing (Please note: applicant pays for publication costs); holds public hearing in Lansing and obtains required government approvals.
5. Financing documents are prepared by counsel and reviewed and accepted by all parties to the transaction.
6. MSF adopts bond resolution authorizing the issuance of the bonds.
7. MSF, borrower, purchaser and counsel close on the project financing.

MSF FEE SCHEDULE

The application fee is non-refundable and is required when the evaluation request is filed. The fee structure is: $500 for $1 million or less; $1,000 for over $1 million.

The issuance fee is required on or before the closing of the project financing. The fee structure is: 1/4 of 1% for $10 million or less; $25,000 + 1/8 of 1% for the amount over $10 million. The maximum issuance fee chargeable to not-for-profit corporations is $40,000. Issuance fee for refunding issues is 1/8 of 1% of the bond issue with a minimum of $2,000 and a maximum of $40,000.

For more information, contact the Michigan Economic Development Corporation℠ (MEDC) Customer Contact Center at 517.373.9808.

michiganbusiness.org

Attachment 7: Cost Information Form

Option Proposed: ☐ **P3 Option**

☐ **Private Option**

Cost Information Form	
1. Facility Fixed Price and Schedule of Values: (P3 Projects)	
a. Site clearing, grading and related improvements	
b. Buildings and similar real property improvements	
c. Waste processing equipment and associated materials supply and installation	
d. Utility systems and equipment	
e. Mobile equipment	
f. Maintenance shop and warehouse equipment and fixtures	
g. Initial spare parts and consumable supplies inventory	
h. Facility start-up, commissioning and testing	
i. Facility design and engineering	
j. Project management, contingency and Company profit	
Total Facility Fixed Price:	**$**

2 Fixed Price Drawdown Schedule (Monthly percentage of the Facility Fixed Price): (P3 Projects)

Month	Milestone – Activity	**Percent of Facility Fixed Price**
1	Notice to Proceed	XX.X%
2	…	
Etc.	…	
…	…	
Final Month	Final Acceptance	
	Total	100%

3. Operations and Maintenance Charge ($/Yr.)	$
4. Company estimated Debt Service Charge ($/Yr.)	$
Company debt Principal	
Assumed Company debt term	20 Years
Assumed Company debt interest rate	4.0%

5. Equipment Replacement and Improvement Charge (for P3 Projects DPW owned buildings, equipment and systems only, $/Yr.)	$
6. Itemized Company estimated Pass Through Costs ($/Yr.)	
a.	$
b.	$
c.	$
7. Excess Waste Charge (dollar per ton charge for accepting and processing DPW waste in excess of the Guaranteed Tons)	$
8. Host Fees for Accepting Processable Waste for sources other than the DPW ($ per Ton)	$

9. Company Revenue Sharing

a. Traditional Recyclables

Recovered commodities	Recovery rate (guaranteed)	Assumed unit price ($/ton, not guaranteed)	Percent of revenue shared with the DPW	Estimated DPW revenue ($/Yr.)
Old Corrugated Containers (OCC)	ZZ%	$41.57	YY%	$
Mixed residential paper	ZZ%	$20.09	YY%	$
Other fiber(s)	ZZ%	($0.09)	YY%	$
Aluminum UBC	ZZ%	$1,037.13	YY%	$
Ferrous Metal Containers	ZZ%	$129.88	YY%	$
Other mixed metals*	ZZ%	$90.91	YY%	$
#1 plastic containers	ZZ%	$225.39	YY%	$
#2 plastic containers**	ZZ%	$226.03	YY%	$
Mixed rigid plastics	ZZ%	$84.26	YY%	$
	ZZ%		YY%	$
	ZZ%		YY%	$
	ZZ%		YY%	$

Notes:

1. Commodity prices were determined using RecyclingMarkets.net, an online resource for current recycling market data, reported confidentially online weekly, by a qualified group of purchasing officials representing major recycling collection centers and consumers.

2. Commodity prices from the Midwest/Chicago region were calculated by averaging the past year's

pricing data from May 2019 to May 2020.

* GBB determined a reasonable estimation for the pricing for the other metals category to be 70% of the value of the metal containers category due to the lack of availability of Recycling Markets data.

**The market value from HDPE (#2) colored containers is lower than the market value of HDPE (#2) natural containers. GBB assumed the list value from HDPE-colored data as mixed bales tend to be priced as colored (or close). If the vendor intends to also separate HDPE-natural, please add a line to the table and use $784.44 for the price per ton of the HDPE-N and fill out the rest accordingly.

b. Company Proprietary Products

Proprietary Product(s) produced	Product(s) production (guaranteed)	Assumed unit price (not guaranteed)	Percent of revenue shared with the DPW	Estimated DPW revenue ($/Yr.)
			YY%	$
			YY%	$
			YY%	$
			YY%	$