EXHIBIT A – SCOPE OF SERVICES

The purpose of the Master Plan is to evaluate Metropolitan Government of Nashville and Davidson County's existing solid waste management system and provide options to improve and enhance the system and increase waste reduction and diversion with the ultimate goal of zero waste. The Master Plan will need to include recommendations on how Nashville & Davidson County can maintain an integrated solid waste management system and should include:

- Evaluation of the current solid waste management system
- Detailed plan on how the Metro region can meet and exceed the requirements of the State of Tennessee 2025 Material Management Plan
- Recommendations on how to increase waste reduction, reuse and recycling
- Detailed waste reduction and diversion plan with long-term projections on achieving the goal of zero waste.

Metro Nashville & Davidson County intends to use the Solid Waste Master Plan to set the vision for waste reduction, diversion and management for the next 30 years.

Metro Public Works has provided links and attachments to provide additional information and services to support the contractor' work which include statistics on Metro Public Works waste collection and recycling programs, current 10 Year Solid Waste Plan, Solid Waste Annual Progress Reports, Solid Waste Management Diversion Option Evaluation prepared December 2015.

Metro Public Works will provide a project manager to service as a single point of contact for the contractor that will provide general guidance, oversight and coordination. Contractor, however, will be responsible for completing all research, data collection, interviews, public engagement and reports required for this project.

Scope of Services

Developing a long-term solid waste management plan that proactively addresses all aspects of Nashville & Davidson County's waste management system including Urban Services District, General Services District, residential and commercial waste as well as collection and processing options will be important to achieving greater waste reduction and diversion and effectively managing Nashville's waste and recycling programs in the future. The ultimate goal of this long-term solid waste management plan will be detailing a plan with, at a minimum, benchmarks at 5, 10, 20 and 30 years to achieving zero waste.

- Task 1 (Research) - The Solid Waste Master Plan should include assessing and evaluating solid waste management options including, but not limited to:

  - Residential (single and multi-family), commercial (including the downtown core area), institutional and industrial recycling in the Urban and General Services District. See link to USD/GSD Map below.
  - Construction & demolition diversion and recycling
  - Organic recycling and processing including:
    - Analysis of Metro Water Services co-generator plan
    - Analysis of Resource Capture's proposed anaerobic digester plan

EXHIBIT A – SCOPE OF SERVICES

- Systems with high waste reduction and diversion rates including successful zero waste programs
- Waste management collection, processing and disposal systems/options:
    - Wet/dry systems
    - Waste to energy including conversion and emerging technologies
    - Waste reduction methods to effectively engage businesses and residents outside Metro Public Works collection program
    - Variable rate systems
    - Organic processing systems
    - Mixed waste processing
    - Landfilling
    - Franchise systems
- Waste and recycling infrastructure including recommendations for waste transfer stations or processing facilities
- Legislative or policy options including but not limited to mandatory diversion programs, product or material bans, recycling content procurement requirements, etc. and best management practices for enforcement
- Future funding options
- Material market development options
- Source reduction initiatives that could impact the waste stream
- Task 2 (Evaluation) - The following factors will be assessed and evaluated for all options:
    - The costs and benefits of each option in detail including per capita costs and benefits. Costs would include, but not limited to, infrastructure start-up, operation and maintenance, public education and outreach, and projected end-of-life closure costs, if any.
    - Where the facility(ies) would be located including permitting, zoning and any other requirements. Consideration should be given to regional partnerships and options where possible.
    - The projected types and amount of wastes that would be reduced or diverted from landfills of any and all classes. Gross diversion rates and per capita diversion rates would need to be reported. Waste projections and diversion rates should be for the next 30 years and clearly state the methodologies used to calculate them.
    - Byproducts of the system, if any, and how byproducts can be sold, managed or disposed.
    - Specific implementation plans and timelines for each option including any local or state legislation that would be required and a qualitative assessment of regulatory issues. The assessment of any regulatory issues should include a detailed plan on how to secure regulatory approval.
    - Compare the environmental benefits and drawbacks of each option's technology in qualitative terms as to the extent they are known or published, including greenhouse gas emissions (with the projected life cycle carbon footprint, including transportation, based on CO2 equivalents), air emissions, water consumption, energy usage, noise, odor, traffic, effluent and residue.
    - Examples, where possible, of each option operating in other municipalities at a scale either comparable to Davidson County or can be demonstrated that it could operate successfully at a Davidson County level.

  - Estimate the range of number of direct jobs created both inside Metro Government and in the private sector.
- Task 3 (Public Engagement)
  - Organize at least 4 public meetings and listening sessions for resident and business input
  - Interview members of Metro Council, at a minimum, interviews should be conducted of the Metro Council Public Works committee
  - Interviews of key environmental groups to include, but not limited to, the Tennessee Environmental Council, RAM and BURNT
  - Conduct an online survey of Nashville residents and businesses
  - Organize two meetings of TDEC staff and waste management staff in surrounding counties to determine regional needs and options. The first meeting should be conducted at the beginning of the contract period to help inform and guide the research and recommendations as it relates to possible regional needs. The second meeting should be conducted as a follow-up to get input on proposed recommendations.

- Task 4 (Recommendations and Goals)

  - Based on the research conducted and public input develop a list of recommendations and a target timeline towards zero waste. The timeline should include, at a minimum, key target benchmarks at 5, 10, 20 and 30 years.
    - The recommendations and goals from the Solid Waste Master Plan must be done in consultation with Mayor Barry's Livable Nashville Committee (including goals and recommendations of the Committee) and the Metro Public Works Department and consistent with NashvilleNext, the Tennessee Department of Environment & Conservation's 2025 Material Management Plan, the State of Tennessee requirements for 10 Year Solid Waste Plans, Mayor Dean's Green Ribbon Committee recommendations and any other related plans.
  - Provide a final report that includes details showing how the above mentioned plans and reports, including any other known plans and reports not mentioned, have been considered and integrated in to the final Solid Waste Master Plan.

- Task 5 (Cost Studies)

  - Conduct a triple bottom line (3BL) study on the top three recommendations and on the cost to landfill waste. The 3BL on landfilling should include the social, environmental and economic cost to landfill a typical ton of municipal solid waste in a landfill instead of recovering all reusable, recyclable and compostable materials. Research conducted by Recycling Advocates for Middle Tennessee and their contractors must be reviewed and included in the landfilling portion of the study.

- Task 6 (Waste Stream Characterization)

  - Conduct a comprehensive waste stream analysis of Nashville & Davidson County's waste to include all types of waste generators.

EXHIBIT A – SCOPE OF SERVICES

Project Deliverables

In addition to conducting all the required items listed in the scope, the following deliverables shall be required in the performance of this contract:

- Monthly progress meeting and reports to the Public Works project manager and Solid Waste Region Board representative. These reports should include the progress on each of Items 1-5 of the Scope of Services.
- Quarterly progress reports and presentations to the Davidson County Solid Waste Region Board
- Formal presentations of Solid Waste Master Plan draft to (Note that any formal presentations must be coordinated with Metro Public Works in advance):
    - Metro Public Works
    - Mayor Megan Barry
    - Metro Council Public Works Committee
- Electronic copy of all draft and final documents in PDF and Microsoft Word. All drafts and final documents must be submitted to the Public Works project manager prior to finalization.
- Electronic copies of all research, interview, raw data, reports, etc. will be supplied to Metro and will be the property of Metro Government.
- The Solid Waste Master Plan must be completed in a matter that meets the requirements of Tennessee Code and the Tennessee Department of Environment and Conservation of a Solid Waste Region Plan. It must also include a detailed plan on how the Metro region can meet or exceed the requirements of the State of Tennessee 2025 Material Management Plan.

Project Timeline

Unless otherwise requested by the contractor and approved by Metro, all items required in this contract should be completed and the final documents submitted to Metro Public Works 12 months after the contract is approved, signed and filed with the Metro Clerks Office.

Additional Services

Metro Government, upon completion of the Solid Waste Master Plan, reserves the right to engage the contractor further to develop implementation strategies.