

EXHIBIT A
CITY OF AUSTIN
INTEGRATED SOLID WASTE MANAGEMENT MASTER PLAN
SCOPE OF SERVICES

Project Goals

- Use the City of Austin's (COA) Zero Waste Plan, Climate Protection Plan (ACPP), current and planned services, programs and facilities and sustainability goals as the foundation for development of the Integrated Solid Waste Management Master Plan (ISWMMP).
- Establish a cohesive framework for promoting and implementing programs to minimize environmental impacts and enhance resource conservation opportunities in the Solid Waste Services (SWS) Department's waste management programs and throughout the COA.
- Serve as a business planning document to identify financial requirements, long-term financing options, regional watershed challenges, facility requirements, and program requirements necessary to provide solid waste services to the growing population in the COA region for the next 50 years.

Task List

The following list of tasks includes master planning and engineering services required to develop the COA ISWMMP.

1. Project Management (assumes 12 month project schedule):

- 1.1 **Project Management Planning** – Development of final project schedule and budget and monitoring through tracking of the scope, schedule and budget for 12 month schedule period;
- 1.2 **Project Management Administration** – Invoice and controller time to track hours, review and adjust personnel time (as appropriate), and prepare invoices;
- 1.3 **Project Coordination** – Coordination through e-mails and phone calls between COA staff and HDR Engineering, Inc. (HDR) "task managers"(HDR Project Manager, Deputy Project Manager, Zero Waste Lead, and Public Involvement Lead); assume approximately three (3) times per week; and
- 1.4 **Procedure for Project Deliverable** – For all written Project Deliverables, HDR will submit one (1) Draft Project Deliverable for COA staff review. We assume that COA staff will review and make comments to the draft; we further assume that COA staff will collect and combine all COA staff comments into one (1) document for submittal to HDR for our use in developing the Final Project Deliverable under consideration.

1.5 Deliverables:

1.5.1 Monthly Invoices and Progress Letters

1.5.2 Overall Project Schedule Update (updated as required)

2. Quality Assurance/ Quality Control (QA/QC) (assumes 12 month project schedule):

2.1 Quality Control Reviews – QC reviews will be conducted prior to each draft and final deliverable for writing accuracy, calculation review and review for consistency with engineering and procedural standards; and

2.2 Quality Assurance Reviews – QA reviews of schedules, budgets, and major task deliverables will be conducted by senior QA/QC staff.

2.3 Deliverables:

2.3.1 Quality Assurance/Quality Control – Conduct senior QA/QC reviews of all deliverables.

3. SWS Master Plan Development:

3.1 Review and evaluate SWS Department services, programs, facilities and general information:

3.1.1 Collect and Describe COA Background Information – Prepare an information request and obtain background information from COA staff on existing COA programs and COA infrastructure and COA statistics, including population information and area specific densities, waste generation, disposal and landfill diversion figures. Prepare phone survey form. Conduct phone survey of seven (7) City facilities. Compile completed survey form for each facility, as listed below:

- 1) COA AWU Hornsby Bend Waste Water Treatment Center
- 2) COA Fleet Service Center 11
- 3) COA Fleet Service Center 12
- 4) COA Fleet Service Center 8
- 5) COA SWS 812 Resource Recovery Center
- 6) COA SWS Kenneth Gardner South Service Center
- 7) COA SWS Materials Recovery Facility/Transfer Station

3.1.2 Describe Regional Public and Private Infrastructure based on Facility Surveys Conducted by COA Staff – Based on facility surveys conducted by COA staff, HDR will describe the existing regional infrastructure resources.

3.1.3 Collect and Review Growth/Annexation Information – Collect, review and analyze information pertaining to local and regional growth and annexation impacts to the COA service area and apply these growth impacts to the current SWS Department services, programs, and facilities taking into account the new COA initiatives discussed below.

Based on this information, HDR will project COA waste generation through 2050, preparing a summary table of waste projections;

- 3.1.4 Review and Evaluate Existing SWS and Relevant COA Initiatives** – Review currently existing SWS Department and COA initiatives, including policies, programs, and facilities as listed below. Complete a one-page form for each of the 30 initiatives as listed below. Based on these descriptions and the facility descriptions prepared pursuant to tasks 3.1.1 and 3.1.2 above, identify opportunities for program enhancements; facility expansion; and new policy initiatives. Compile completed form for each initiative documenting findings, existing initiatives and opportunities for expansion and enhancements. The policies, programs and facilities include:

Policies

- 1) Zero Waste Strategic Plan (Resolution) 20090115-050
- 2) Green Events (Resolution) 20081218-075
- 3) Energy Conservation Audit and Disclosure (Resolution) 20081106-048
- 4) Plastic Bag Reduction & Recycling (Resolution) 20080410-048
- 5) Integration of Sustainability Requirements in City Projects (Resolution) 20071129-046
- 6) Sustainability Best Practices for City Projects (ISWG) (Resolution) 20071129-045
- 7) Water Conservation Task Force Recommendations (Resolution) 20070503-029
- 8) Austin Climate Protection Plan (Resolution) 20070215-023
- 9) United National Urban Environmental Accords (Resolution) 20050519-044
- 10) Clean Air Action Plan (Early Action Compact) (Resolution) 040325-28
- 11) Vehicle Efficiency & Alternative Fuels (Resolution) 001005-36
- 12) Shared Responsibility for Waste Reduction (Resolution) 000803-68
- 13) Fly Ash Reuse in City Construction Projects (Resolution) 940818-45
- 14) Designation of Energy Manager & Establishment of Energy Efficiency Policy (Administrative Bulletin) 05-01
- 15) Fuel Conservation Policy (Administrative Bulletin) 09-01
- 16) Sustainable Food Policy Board Creation (Ordinance) 20081120-058
- 17) Building Energy Code Updates (Ordinance) 20071018-089
- 18) Reclaimed Water Regulations (Ordinance) 20001214-070
- 19) Green Purchasing Program
- 20) Ozone Action Day Plan
- 21) The SWS Departmental Climate Protection Plan

Programs

- 22) Recycling services including single-stream recycling collection
- 23) C&D debris recycling program
- 24) Household hazardous waste collection program
- 25) WasteSMART program and the Waste Reduction Assistance Program (WRAP) analysis

Facilities (*based on the facilities listed in tasks 3.1.1 and 3.1.2*)

- 26) Long-term composting facilities and services
- 27) C&D recycling facilities
- 28) Landfill and other disposal capacity requirements
- 29) Transfer station requirements

30) Household hazardous waste facility requirements

- 3.1.5 Review and Evaluate New SWS and Relevant COA Initiatives** – Review new SWS Department and COA initiatives as listed below. We understand that many of these initiatives were developed during formation of the COA's Zero Waste Strategic Plan. Using portions of this previous work, as applicable; HDR will complete a one-page form for each of the 23 initiatives (listed below). Identify diversion potential and planning level costs or cost ranges for each of the 23 initiatives. Identify additional initiatives (assumed up to 7 additional). Provide a list of advantages and disadvantages for each initiative. Compile completed form for each initiative documenting findings. The policies, programs and facilities include:

Policies

- 1) New proposed additions to the ACPP
- 2) New Recycling Ordinance
- 3) New proposed additions to the SWS Departmental Climate Protection Plan
- 4) New Green Events Ordinance
- 5) Changes to the rate structure, including Recycle Bank, Pay-as-you-throw (assume up to four (4) approaches are evaluated)
- 6) Identification of siting criteria (including Environmental Justice criteria) consistent with the Comprehensive Plan process

Programs

- 7) New proposed additional recycling and reuse services including programs for single-stream recycling collection
- 8) C&D debris recycling program
- 9) Household hazardous waste collection program
- 10) New proposed composting incentive program
- 11) COA provision of collection services to City facilities (149 City facilities)
- 12) Partnerships with other COA departments

Facilities

- 13) New eco-industrial parks that may include reuse and repair centers
- 14) New drop-off centers that may include reuse and repair centers
- 15) New COA fueling and service centers
- 16) Rail-haul options (to remote landfills or processing facilities)
- 17) New MRF
- 18) New proposed additional C&D recycling facilities
- 19) New proposed landfill and other disposal capacity requirements
- 20) New proposed transfer station requirements
- 21) New proposed household hazardous waste facility requirements
- 22) Employee and equipment service center requirements including consideration and assessment of current and future required parking, fueling, vehicle and equipment maintenance, supervisor offices and employee facilities, etc.
- 23) Other new proposed solid waste facilities and technologies including, but not limited to anaerobic digestion, landfill methane capture and landfill gas-to-energy

- 3.1.6 Prepare Needs Assessment** – Using the generation projections conducted for task 3.1.3, information developed regarding the existing and potential new initiatives, utilizing any applicable and previously developed information from the COA's Zero Waste Strategic Plan, HDR will prepare a needs assessment identifying the policies,

programs and facilities that will be needed over the planning period. The needs assessment will identify modifications to the current programs, policies and facilities incorporating the current activities of the COA as well as the new initiatives to meet the goals of the COA. The findings from the needs assessment will be used to develop an initial framework for the ISWMMP that includes the elements necessary for the COA to meet its goals and overall vision of diversion and sustainability for the 50-year planning period. HDR assumes that the early years of the plan will have more robust data than the later years of the plan. The schedule prepared as a component of the ISWMMP will identify periodic plan updates; and

- 3.1.7 Public Meeting to Discuss Needs Assessment** – HDR will hold the first public meeting (as included in task 3.5) to present the preliminary findings and receive input for the needs assessment. Input from the meeting will be discussed with COA staff and incorporated into the needs assessment as applicable (assume costs included in task 3.5).

3.1.8 Deliverables:

- 3.1.8.1 Prepare Draft and Final Needs Assessment Technical Memorandum** – HDR will develop a technical memorandum, attaching the completed forms developed for tasks 3.1.1 through 3.1.5 to describe the ISWMMP needs assessment, including recommended COA policies, programs or facilities to be modified or expanded; an initial draft needs assessment (assumed to be 15 to 20 pages in length plus attachments) will be prepared and submitted to COA staff for their review and comment; the revised draft needs assessment will be distributed prior to the stakeholder meeting and finalized after receiving and incorporating comments (as appropriate) from the stakeholders and COA staff; HDR will meet via conference call with COA staff after the stakeholder meeting to discuss all comments to allow finalization of the needs assessment (assume one draft and one final technical memorandum);
- 3.1.8.2 Prepare Recommendations** – HDR will prepare recommendations by service, program and facility type and identify recommended Capital Projects (assumed to be 5 to 10 pages in length); COA staff will review the draft recommendations, HDR will incorporate COA comments and finalize the recommendations (assume one draft and one final technical memorandum).

3.2 Review and evaluate private sector and other governmental entity's services, programs and facilities, including partnership and competition issues:

- 3.2.1 Review Non-SWS Services, Programs and Facilities** – In addition to the facility operators, identified for task 3.1.1 and 3.1.2, conduct a survey of local communities, private sector companies, and institutions/non-profits providing solid waste services within the COA watershed (assume up to 10 programs will be surveyed) to identify services, costs, and diversion rates. Review and evaluate currently existing and planned private sector and other governmental entity's solid waste related services, programs and facilities within the COA watershed in regards to: capacity, cost, and diversion rates. Prepare a one-page program description including a summary of each survey documenting findings;

3.2.2 Identify Unmet Needs/ Recommend Modifications – Using the results from the COA specific task 3.1.6, identify COA and community unmet needs that may be available through private sector and/or other governmental entities, and make recommendations for meeting those needs through private sector providers, public/private partnerships, partnerships with other governmental entities in the region, and/or direct COA service provision. Prepare a five to ten-page summary memorandum documenting findings;

3.2.3 Examine Tools to Foster Partnerships – Conduct research on model case studies that foster development of partnerships (public/public and public/private). Document tools and approaches that are used in other jurisdictions. Up to five case studies will be profiled and documented. Prepare a one-page summary for each case study documenting findings; and

3.2.4 Deliverables:

3.2.4.1 Prepare Draft and Final Technical Memorandum Addressing Private Sector Assessment, Partnerships, and Private/Other Government Entity Improvements – Based on the research conducted for tasks 3.2.1 through 3.2.3, HDR will prepare a technical memorandum including assessment of: private or other governmental entity services; new types of partnerships and/or improvements to existing partnerships; and governmental entity services, programs or facilities to improve the overall COA solid waste system. HDR will submit a draft technical memorandum to COA staff for review (assumed to be 15 to 20 pages in length plus attachments); HDR will discuss and incorporate, as applicable COA staff comments into finalizing the technical memorandum (assume one draft and one final technical memorandum).

3.3 Evaluate methods for improving local markets for recycled materials, regulating service providers, and establishing mechanisms for regional cooperation:

3.3.1 Evaluate and Promote Materials Markets – Conduct research on methods to encourage and promote markets for reclaimed and recycled materials, and the establishment and growth of local and small businesses (including minority- and women-owned businesses) that use reclaimed and recycled materials. Identify local manufacturers that can use and increase the use of reclaimed materials. Up to 10 local manufacturers will be profiled. Prepare a one-page summary for each profile documenting findings;

3.3.2 Evaluate and Recommend Promotion of Reclaimed/Recycled Materials – Evaluate and recommend methods to promote the use of reclaimed and recycled materials in construction. Identify reclaimed materials appropriate for use in construction. Survey COA Public Works staff and three local contractors (four surveys total) to identify the feasibility of using reclaimed and recycled materials in construction. Prepare one-page summary for each survey documenting findings;

3.3.3 Evaluate and Recommend Methods for Promotion of Producer “Take Back”

Programs – Identify materials types appropriate for take back (such as pharmaceuticals, paint, batteries, fluorescent lamps, and food industry packaging). Document voluntary take back programs in other jurisdictions (up to five). Survey 10 local retailers (including pharmacies, hardware stores, and supermarkets) on the feasibility of accepting materials for takeback. Prepare a one-page summary for each survey documenting findings;

3.3.4 Evaluate Mechanisms for Regulating Private Service Providers and Generators –

Conduct research to determine: (1) what regulatory authority the COA has to control waste via fees (license/franchise); (2) how much authority COA can assert over generators of waste; and (3) what options are available to impress upon waste generators to encourage them to assist in creating/contributing to market development. Prepare a one-page summary for each of these three (3) mechanisms documenting findings;

3.3.5 Evaluate Mechanisms for Regional Cooperation –

Identify specific functions that would be appropriate to delegate to a regional body, including regional landfill capacity, regional facility development, technical assistance, and education and outreach programs. Summarize approaches, including but not limited to the formation of a regional solid waste management district (through state legislation) or joint power authority (through local agreements); formalizing and expanding the Capital Area Council of Governments (CAPCOG) role in solid waste planning; and the development of inter-agency or inter-local agreements between neighboring communities. Up to three (3) additional mechanisms will be evaluated by HDR, to be identified based on initial research and approval by COA staff. Prepare a one-page summary for each of these mechanism documenting findings;

3.3.6 Cost/Benefit Analysis – Perform cost/benefit analysis of any recommendations made that require COA contributions or participation. Identify potential program costs, including staff costs, and potential diversion rates. Prepare summary table documenting costs and diversion; and

3.3.7 Public Meetings – HDR will hold a second public meeting (as included in task 3.5) to present the preliminary findings and receive input on COA and private sector programs and potential partnerships and gather input for recommended methods and solutions to promote the use of reclaimed and recycled materials (assume costs included in task 3.5).

3.3.8 Deliverables:

3.3.8.1 Prepare Draft and Final Market and Private Sector and Regional Cooperation and Cost/Benefit Analysis Recommendations – HDR will prepare and submit draft recommended methods to: 1) encourage and promote markets and 2) establish local businesses that use reclaimed and recycled materials; 3) regulate service providers and generators; and 4) establish regional cooperation. HDR will prepare a cost/benefit analysis and diversion estimate. HDR will discuss and incorporate, as applicable COA staff comments into finalizing the recommendations (assume one draft and one final technical memorandum).

3.4 **Economic analysis including impact on rates and life-cycle pro forma:**

3.4.1 **Collect Economic Information** – Prepare information request and review current and historical (prior 5 years) budgets provided by COA staff, financial data for the SWS Department including actual spent amounts related to solid waste services; also collect and review current residential, commercial and industrial monthly solid waste rates provided by COA staff; and

3.4.2 **Conduct Economic Analysis** – Conduct an economic analysis and 50-year life-cycle pro forma related to the ISWMMP existing and proposed services, programs and facilities, showing how and when estimated costs and revenues would be incorporated and how they would impact the COA budget and residential, commercial and industrial monthly solid waste rates. The analysis will include a presentation of the new potential rates that include the impact of these new facilities, services and programs. A life-cycle pro forma includes all recurring and one-time (non-recurring) costs over the full life span (50 years as requested for this ISWMMP) of service and structure for the system. It includes all planning level capital costs, operating costs, maintenance and upgrade costs program and service costs, any decommissioning or costs for reuse. The pro forma will include any potential revenues to the system including estimated material and energy sales and any salvage value of equipment and facilities remaining during the 50-year period.

3.4.3 **Deliverables:**

3.4.3.1 **Prepare Draft and Final Economic Analysis Life-Cycle Pro Forma Technical Memorandum** – HDR will prepare a technical memorandum that provides an economic analysis and 50-year life-cycle pro forma related to the ISWMMP of the existing and proposed services, programs and facilities; HDR will submit a five to ten-page draft technical memorandum and pro forma spreadsheet to COA staff for review; HDR will discuss and incorporate, as applicable COA staff comments into finalizing the technical memorandum (assume one draft and one final technical memorandum).

3.5 **Conduct public outreach:**

3.5.1 **Project Kick-Off Meeting and Project Progress Meetings** – Progress meetings between COA staff and HDR task managers including one “kick-off” meeting and 3 project progress meetings scheduled to coincide with the 3 public meetings.

3.5.2 **Conduct Public Outreach Meetings** – Up to 3 public meeting events (2 public meetings are listed above in previous tasks; 1 public meeting is listed below in this task), will be held to obtain input both early in the planning process, to assist in education efforts during and after a draft ISWMMP has been developed. The community may be engaged utilizing meetings with members of the following Boards and Commissions: Solid Waste Advisory Commission (SWAC), Resource Management Board, Sustainable Food Policy Board, and the Environmental Board.

3.5.3 **Deliverables:**

All public meetings will be structured as public workshops and will be made available for those that cannot attend through web accessed “live meetings” or webinars (assume webinars are hosted by COA). COA staff will update the appropriate boards and commissions on the public meetings and will invite representatives to the public meetings, as appropriate (assume COA staff will secure venues and provide audio visual equipment).

- 3.5.3.1 **Public Meetings Before Release of the Draft ISWMP** – HDR will hold 2 public meetings (as detailed in earlier tasks) early in the planning process to obtain stakeholder input regarding the need for new initiatives and facilities, and their willingness to pay for them; HDR will be available to schedule and hold separate key stakeholder meetings if scheduled within a day of the public meetings;
- 3.5.3.2 **Public Meetings After Release of the Draft ISWMP** – HDR will hold 1 public meeting after a draft ISWMP has been developed to obtain stakeholder input regarding the plan, and their willingness to pay for the planned new initiatives and facilities; HDR will be available to schedule and hold separate key stakeholder meetings if scheduled within a day of the public meeting;
- 3.5.3.3 **Draft and Final Outreach Materials** – HDR will assist COA staff with website content development or twitter updates, if appropriate, (assume one-page of content per meeting), public input meeting summaries, advertisement and educational materials development (assume one press release, meeting announcement, meeting agenda and PowerPoint presentation per meeting) and response to public comments throughout the public involvement process (assume compilation of a “Frequently Asked Questions” list and documentation of stakeholder input through meeting summaries) (assume one draft and one final of all outreach materials); and
- 3.5.3.4 **Maintain Stakeholder Database** – HDR will maintain a stakeholder database (in Microsoft Excel) and will update the database after each meeting based on the sign-up list distributed at each. HDR will e-mail meeting announcements to all stakeholders with e-mail addresses included in the database (assume two e-mail invitations prior to each meeting).

4. Final Deliverables

4.1 Prepare Draft and Final ISWMP:

- 4.1.1 **Prepare Draft and Final ISWMP** – HDR will prepare a draft ISWMP using the information collected, reviewed, evaluated, prepared and accepted/approved in the tasks above. The content of the draft ISWMP will be comprised of the assimilation of the content of the many deliverables provided under the prior tasks. The Draft will then be made available electronically to COA staff, for distribution to other agencies and stakeholders (as applicable) for their review. One (1) stakeholder meeting, as discussed above, including COA representatives and other agencies (as applicable) will be conducted to discuss their comments to the Draft ISWMP. HDR will discuss these comments with COA staff via conference call and these comments will be incorporated into the COA Final ISWMP as applicable and as agreed upon by COA staff and HDR. One hard copy (of the entire ISWMP) and one electronic copy of the

Final ISWMMP will be made available to COA staff with copy rights to reproduce, copy, disseminate and or print (assume one draft and one final ISWMMP). Any presentation material prepared during the ISWMMP development period will also be made available to the COA staff. Additional supporting documentation to the ISWMMP is as follows in the deliverables below.

- 4.1.2 Prepare Draft and Final Funding and Financing Section of the ISWMMP** – As part of the complete ISWMMP document, HDR will prepare a draft and final funding and financing section, incorporating all of the economic analysis and rate impacts identified in task 3.4 and including the identification of additional sources of funding for COA services, including producer-based fees, consumer-based fees, hauler-based fees, generator-based fees, and facility-based fees. A discussion of the feasibility and the revenue-generating potential of these fees will be included. Based on the economic pro-forma developed in task 3.4, this section will also include a description of the planning level projected SWS Department capital and operating costs and revenues over the planning period. We assume that the information will be more detailed for the first 5 years of the plan and generalized through the remainder of the 50-year planning period.

Based on the historical and future projected planning level operating and capital costs, identify the potential impacts on the COA collection rates of the new policies, programs and facilities. Currently, residential solid waste collection rates include a standard base rate plus a cart charge based on the size of the solid waste collection cart. Unlimited recycling and yard trimming collection are included in the base rate at no additional charge. The resulting rates offer a “pay as you throw” incentive. Current commercial rates offer a similar incentive and include a base rate, plus a cart charge based on the number of carts and the frequency of collection. Commercial recycling is provided at no additional charge. For this analysis, we will model the potential impact of the costs of the new policies, programs and facilities to the base rates for both residential and commercial customers. Based on input from stakeholders and COA staff, we will identify two additional rate making approaches designed to incentivize waste prevention and recycling and model these costs using the rate approaches. For example, commercial customers in the City of San Francisco pay a standard volume-based rate for all services (solid waste, recycling and organics) and then are provided a rate reduction based on the volume converted from solid waste to diverted recyclables or organics. This approach provides an incentive for both: 1) diversion from waste to recycling and organics and 2) reduction of total waste generation.

4.1.3 Deliverables:

- 4.1.3.1 Electronic Copy of Supplemental Information** – All of the information collected, reviewed, evaluated and prepared in the tasks above will be provided to the COA staff in electronic format through Microsoft Project, Word, Excel and Access or Adobe Acrobat Pro;
- 4.1.3.2 Final and Draft ISWMMP Document, including Schedule Timeline** – HDR will develop a draft ISWMMP document including the funding and financing section and schedule timeline to be included as part of the ISWMMP based on the recommendations and analysis developed that coordinates all recommended services, programs and facilities. HDR will develop a draft schedule timeline to be included as part of the ISWMMP, projecting when new services, programs and

facilities will be needed and will be developed as part of the ISWMMP. HDR will identify the milestones for achieving the 50 percent, 75 percent and 90 percent diversion and identify methods for measuring progress toward these milestones. HDR will submit a draft ISWMMP document including the schedule timeline to COA staff for review; HDR will discuss and incorporate, as applicable COA staff comments into finalizing plan (assume one draft and one final ISWMMP).

4.2 **Provide tools:**

- 4.2.1 **Provide Tools for ISWMMP Use** – The ISWMMP should be envisioned as a “dynamic” document that should be modified as appropriate to encompass new service, programs and facilities, adjust costs and diversion rates as planned services, programs and facilities are implemented. HDR will provide the tools developed by HDR in previous tasks to the COA/SWS staff to allow them to continue updating the ISWMMP. These tools will be developed using standard Microsoft software currently used by the COA staff, including Microsoft Project, Excel, Word and Access or Adobe Acrobat Pro.