

SECTION 01524 - CONSTRUCTION WASTE MANAGEMENT - CONSTRUCTION MANAGER EDITION

PART 1 - GENERAL

1.1 Summary:

- A. Reduce construction and demolition waste on job site and minimize waste sent to landfills through implementation of Construction Waste Management Plan as required by LEED[®] Green Building Rating System[™] for Schools (LEED-S) Materials and Resources (MR) Credit 2 and as outlined within this Section and in the Sections referenced herein.
- B. Divert a minimum of 75 percent from landfill by weight or volume of total non-hazardous project construction, demolition and site operations waste, excluding excavated soil and land-clearing waste.

1.2 Related sections:

- A. Division 2 Section "Earthwork" for site clearing requirements.
 - 1. Division 01 Section "Sustainable Design Requirements-LEED" for LEED-S compliance and documentation requirements and definitions.
 - 2. Division 02 Sections referring to demolition.

1.3 References:

- A. "Maryland Recycles" website: <http://www.mdrecycles.org/>.
- B. Maryland Commercial Recycling Specialist (410) 333-3066.

1.4 Submittals:

- A. Prior to any waste removal, submit for approval a detailed Construction Waste Management Plan as outlined in this Section, including but not limited to the following:
 - 1. Analysis of estimated job-site waste to be generated, including types and quantities of compostable, recyclable and salvageable materials.
 - 2. Description of means and methods to achieve the 75 percent diversion requirement for compostable, recyclable and salvageable materials.
 - 3. Identification of recycling contractors proposed for use in project, locations accepting construction waste materials or entities providing related services by referencing "Maryland Recycles" website or by contacting Maryland Commercial Recycling Specialist, as listed in this Section.
- B. Waste Management Progress Reports: Submit monthly, including the following information:
 - 1. Project title, name of party completing report, and dates of period covered by report.
 - 2. Amount (by weight) of Project waste material landfilled and identity of landfill(s).

3. For each material composted, recycled or salvaged from the Project, provide the following:
 - a. Amount (by weight)
 - b. Date(s) removed from job site
 - c. Receiving party
 - d. Disposal Cost: Bin rental and facility fees
 - e. Transportation Cost: Hauling
 - f. Money paid or received for recycled or salvaged material.
 - g. Brief description of what was done with material
- C. Final Waste Management Report: At completion of construction submit comprehensive tracking log. Include the following information in addition to details stated above.
 1. Overall Disposal Costs
 2. Overall Transportation Costs
 3. Total money paid or received for recycled or salvaged material.
 4. Include legible copies of on-site logs, manifests, weight tickets, and receipts.
- D. LEED-Online: Final LEED-Online Template and associated required documentation uploaded to LEED-Online for each of the following credits:
 1. MR Credit 2, Construction Waste Management.

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION

3.1 Waste Management Plan Implementation:

- A. Training and Coordination:
 1. Furnish copies of approved Waster Management Plan to all on-site supervisors, each subcontractor, Owner, and Architect.
 2. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all entities at the appropriate stages of the Project.
 3. Meetings: Include construction waste management on the agenda of all required regularly scheduled construction meetings.
- B. Facilities: Provide designated facilities for co-mingling or separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, per approved Construction Waste Management plan for use by all contractors and installers.
 1. Provide bi-lingual signage.
 2. Provide materials for barriers and enclosures that are non-hazardous, recyclable, or reusable to the maximum extent possible; reuse project construction waste materials if possible.

3. Provide adequate space, convenient to subcontractors, for pick-up and delivery.
 4. Keep recycling and trash/waste bin areas neat and clean to avoid contamination of materials.
- C. Records: Maintain onsite logs for each load of materials removed from site:
1. Landfill Log: Include type of material, load, (by weight or volume), recycling/hauling service, date accepted by landfill, and facility fee.
 2. Waste Diversion: Include type of material load (by weight or volume), recycling/hauling service, date accepted by recycling service, or non-profit receiver and facility fee.
 3. Where commingling occurs prior to collection, track the amount of construction waste diverted from landfill based on the weight or volume of the removed co-mingled debris and provide the documentation of percentages of recycled from the sorting facility.
- D. Methods of waste disposal that are not acceptable for LEED-credit achievement are:
1. Burning or incinerating on or off project site.
 2. Burying on project site, other than fill.
 3. Dumping or burying on other property, public or private, other than official landfill.
 4. Illegal dumping or burying.
- E. Allow Owner or his representative to select cut logs for reuse. Logs to be removed by entity hold FSC Chain of Custody Certification.
1. Wood Products harvested from Project site are excluded from MRc2, but are applicable to MRc5 "Regional Materials" and MRc7 "Certified Wood".
 2. Prior to or once trees are cut down allow the Owner to select wood to be used.
 - a. All limbs shall be trimmed and removed from as near the trunk as possible.
 - b. Minimum length of logs is 9 feet. Other acceptable lengths are 11, 13, 15 and 17 feet.
 - c. Logs must be cut flush (no crotches or splits).
 - d. Minimum diameter for inside bark is 11 inches.
 - e. Logs must not contain holes or rotted wood.
 - f. Known embedded metal shall be marked with paint.
 - g. For logs with large sweep, cut to a minimum 8'8" to reduce sweep.

- F. Recycling Procedures:
1. Co-mingle or separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
 2. Coordinate work of recycling, composting and salvaging waste haulers with other trades.
 3. Revenues, savings, rebates, tax credits, and other incentive received for recycling waste materials shall accrue to the Contractor.
- G. Reuse of materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
1. Materials qualifying as reused for MRc3 are not eligible to be applied to MRc2 and shall not be part of the waste diversion calculation. These materials are eligible to be applied to MRc5. See Division 1 Section "Sustainable Design Requirements-LEED" for MRc5 requirements.
 2. Concrete, masonry and asphalt crushed and reused onsite shall contribute to MRc2 and shall not contribute to MRc3. These materials are eligible to be applied to MRc5. See Division 1 Section "Sustainable Design Requirements-LEED" for MRc5 requirements.
 3. Projects incorporating existing building components but that do not meet the requirements of MRc1 may apply the reused portions of the existing building toward MRc2.
- H. Salvage of Materials: Set aside, sort, and protect products to be salvaged for reuse offsite.
- I. Hazardous Waste Handling: Separate, store and dispose of hazardous wastes separately and in accordance with local regulations. Do not handle, separate, store, salvage, or recycle hazardous materials with other materials.

END OF SECTION