

## 01 74 19 – Construction Waste Management and Disposal

To meet the University's waste management goals a Waste Management Plan should be developed. Components of an acceptable plan should contain, but are not limited to the following:

### 1. Waste assessment

An analysis of the proposed jobsite wastes to be generated, including types and estimated quantities. This assessment includes salvageable materials as well as recyclables and trash.

A. Materials for reuse in project: (Designer should modify list as appropriate.)

1. Slate roof
2. Wood flooring
3. Brick pavers
4. Stone walls
5. Architectural details
6. Building equipment
7. Program equipment

B. Materials for reuse on campus: Contractor delivers to Owner. (Designer lists materials here)

C. Materials which must be recycled by law:

1. Beverage containers
2. Cardboard
3. Clean dimensional wood and pallets
4. Scrap metal, including but not limited to metals from banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze
5. White goods

D. Materials to be Recycled (project specific):

1. Suggested Salvageable Materials - items to be considered include but are not limited to:
  - a. Slate roof
  - b. Wood flooring
  - c. Brick pavers
  - d. Stone walls
  - e. Architectural details
  - f. Building equipment

- g. Program equipment
2. Other Recyclable Materials - items to be considered include but are not limited to:
  - a. Asphalt
  - b. Bricks
  - c. Ceiling tile
  - d. Concrete
  - e. Concrete Masonry Units (CMU)
  - f. Drywall
  - g. Paint
  - h. Plastic buckets

## 2. Landfill Options

The name of the landfill(s) where trash will be disposed of, the applicable landfill tipping fee(s), and the estimated cost of disposing of all Project waste in the landfill(s). This estimate will be used as a baseline for recycling/salvage cost comparison.

## 3. Waste Diversion Economic Analysis

A list of each material proposed to be salvaged, reused, or recycled during the course of the Project, the proposed local market for each material, and the estimated net cost savings or additional costs resulting from separating and recycling (versus landfilling) each material. "Net" means that the following have been subtracted from the cost of separating and recycling:

- Revenue from the sale of recycled or salvaged materials
- Landfill tipping fees saved due to diversion of materials from the landfill
- Replacement value of materials reused in the project

The Sanitation and Recycling Office suggests once the Owner has determined which of the recycling options addressed in the Draft Waste Management Plan are acceptable, the Contractor should provide a Final Waste Management Plan.

It is suggested that the Final Waste Management Plan should contain the following:

- A. **Contact information:** The name and contact information of who will be responsible for implementing the Solid Waste Management Plan.
- B. **Meetings/instruction:** A description of the regular meetings to be held to address waste management.
- C. **Waste assessment:** An analysis of the proposed jobsite wastes to be generated, including types and estimated quantities.

- D. **Alternatives to landfilling:** A list of each material proposed to be salvaged, reused, or recycled during the course of the Project.
  - E. **Landfilling information:** The name of the landfill(s) where trash will be disposed of, the applicable landfill tipping fee(s), and the estimated quantity of waste to be landfilled.
  - F. **Materials Handling Procedures:** A description of the means by which any waste materials will be protected from contamination, and a description of the means to be employed in handling the materials consistent with requirements for acceptance by designated facilities.
  - G. **Transportation:** A description of the means of transportation of recyclable materials and waste (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site) and destination of materials.
  - H. **Cost estimate summary:** The estimated cost of implementing the final solid waste management plan, broken down by material.
4. Suggested Implementation and Documentation of Waste Management Plan
- A. **Manager:** The Contractor shall designate an on-site party (or parties) responsible for instructing workers and overseeing and documenting results of the Waste Management Plan for the Project.
  - B. **Distribution:** The Contractor shall distribute copies of the Waste Management Plan to the Job Site Foremen, Subcontractors, the Owner, the Architect, and the Sanitation and Recycling Office.
  - C. **Instruction:** The Contractor shall provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the Project.
  - D. **Separation facilities:** The Contractor shall designate and label a specific area to facilitate separation of materials for potential recycling, salvage, reuse, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid contamination of materials.
  - E. **Hazardous wastes:** Hazardous wastes shall be separated, stored, and disposed of according to local regulations.
  - F. **Documentation:** The Contractor shall submit a **Summary of Waste Generated** by the Project each time a progress report is made.
    - 1. Disposal information:

- a. Amount (in tons or cubic yards) of material landfilled from the Project
  - b. Identity of the landfill
  - c. Total amount of tipping fees paid at the landfill
  - d. Total disposal cost (including transportation and container rental)
  - e. Weight tickets, manifests, receipts, and invoices (attach copies)
2. Recycling information:
- a. Amount (in tons or cubic yards)
  - b. Date removed from the jobsite
  - c. Receiving party
  - d. Transportation cost
  - e. Amount of any money paid or received for the recycled or salvaged material
  - f. Net total cost or savings of salvage or recycling each material
  - g. Manifests, weight tickets, receipts, and invoices (attach copies)
3. Reuse and salvage information:
- a. List of items salvaged for reuse on project or campus
  - b. Amount (in tons or cubic yards)
  - c. Receiving party or storage location
  - d. Net savings (avoided tip fee and cost difference of item purchased new)
- G. **Revenues:** Revenues or other savings obtained from recycled, reused, or salvaged materials shall accrue to contractor unless otherwise noted in the contract documents.