SECTION 01 74 19

CONSTRUCTION WASTE MANAGEMENT

BASED ON DFD MASTER SPECIFICATION DATED 02/29/2024

*Edit according to instructions in red text boxes. Additional edits shall be made as directed by the DFD PM and appropriate to the project.*

**SCOPE**

This Section addresses and specifies salvaging, reusing, recycling and disposing of all project Construction Waste.

**Part 1 - General**

Related Work

Definitions

Diversion Goal

Submittals

Construction Waste Management Plan

**Part 2 – Products** Not Applicable

**Part 3 - Execution**

Construction Waste Management Implementation

**PART 1 - GENERAL**

**RELATED WORK**

Other Applicable provisions of Division 01 shall govern all work under this Section.

 General Requirements Article 5: *Hazardous Substances*

 General Requirements Article 32: *Cleaning and Waste Disposal*

***List other sections included in project manual specifically relevant to Construction Waste Management, such as the following:***  *Section 01 83 13 Sustainable Building Requirements
 Section 02 41 13 Demolition
 Section 02 82 13 Asbestos Abatement
 Section 26 05 02 Electrical Demolition For Remodeling*

**DEFINITIONS**

Clean: Untreated and unpainted; not contaminated with oils, solvents, sealant (caulk), or the like.

Construction Waste: An umbrella term for construction, demolition and remodeling solid waste, typically including extra building materials, rubble & material that has reached the end of its useful life for its intended use, packaging, trash & debris incidental to the project construction. Construction Waste includes salvageable, returnable, recyclable, and reusable material.

Diversion Goal: Percentage of Construction Waste material (by weight or by volume) which is intended to be reused, recycled, returned or otherwise salvaged and thus diverted from landfill.

Hazardous Waste: Waste that is ignitable, corrosive, toxic and/or reactive and poses substantial or potential threats to public health or the environment. Hazardous Waste is not recyclable and not included when calculating Diversion Goal or percentage and shall be disposed of according to the General Requirements.

Landfill Tipping Fees: Monies paid for burying non-recyclable Waste in the landfills.

Recycle: To sort, clean, treat & reconstitue or remanufacture Construction Waste materials for reuse in the same form or some altered form. Recycling does not include burning, incinerating, or thermally destroying waste.

Return: To give back reusable items or unused products to vendors for credit.

Reuse: To reuse a Construction Waste material on the project site.

Scrap Revenue: Monies received by the hauler for recyclable materials.

Trash: Non-hazardous products or materials unable to be reused, returned, recycled, or salvaged.

Data Logging Program: Online reporting tool for construction waste management, accessed through the eBuilder project website or directly at the program’s website. WasteCap Resource Solutions manages the DFD’s program on ReTRAC Connect. Contractors bear no cost for using ReTRAC. Information about the DFD’s program on ReTRAC can be found by contacting WasteCap Resource Solutions.

**DIVERSION GOAL**

 ***Insert Diversion Goal below as appropriate to the project and accepted by the DFD PM. The minimum target diversion rate is 75%.***

*Typical construction projects are able to divert 65% Construction Waste from landfill, with higher rates possible on larger projects. Demolition-intensive projects can often achieve 90% and higher diversion rates.*

Divert **[XX]** % by weight or volume of total waste generated through Substantial Completion.

**SUBMITTALS**

The General Prime Contractor shall develop and compile the following Construction Waste Management (CWM) project information in cooperation with all Contractors and subcontractors:

**• CWM Plan:** Required prior to commencing demolition, construction or waste removal activities and no later than 15 days after Notice to Proceed.

*Edit progress reporting requirements for projects with total budgets of less than $3 million as appropriate to the project and directed by the DFD PM.*

**• CWM Progress Reports:** Required monthly or with each Request for Payment. Progress Report shall include the quantity of each material recycled, reused, or salvaged, the receiving party, and the applicable diversion rates. Contractor shall maintain a record of related weight tickets, manifests, receipts, and invoices for review by DFD upon request.

• **CWM Final Report:** At Substantial Completion, the General Prime Contractor shall submit a Final Report summarizing total waste and trash quantities and rates for all Contractors over the course of the project.

***Choose one of bracketed texts below as appropriate. Edit reporting and information requirements as appropriate to project if directed by the DFD PM.***

*Projects with total budgets of at least $3 million and all demolition projects are required to generate documentation using the Wisconsin Division of Facilities Development program on ReTRAC Connect, and submit to the DFD PM Projects with total budgets of less than $3 million are required to provide information upon request only.*

**[CWM Plan and all CWM Reports shall be generated using the Wisconsin Department of Facility Development’s program on ReTRAC Connect..]**

*or*

**[CWM Plan and Report information above shall be available from the General Prime Contractor upon request.]**

**CONSTRUCTION WASTE MANAGEMENT (CWM) PLAN**

The CWM Plan shall include, but is not limited, to the following:

**• Schedule -** Include milestones and key reporting dates of construction waste management.

**• Trash Materials List** - Include estimated quantities and types of materials expected to be discarded as trash.

**• Diverted Materials List** - Include estimated quantities and types of Construction Waste materials anticipated to be salvaged, reused, returned or recycled. Identify applicable markets for reuse and/or recycling. At a minimum, include scrap metal and all other materials required by statute or regulation to be recycled (e.g., cardboard, cans, bottles, office paper, fluorescent tubes, refrigerants, mercury, etc.). Other recyclable materials may include, but are not limited to:

***Edit the following to limit list to only those materials anticipated to be encountered on this project:***

Aluminum Cans, Straps, and Sheet: Recycle as metal.

Asphalt: Break up and transport to asphalt-to-asphalt recycling facility, or recycle on site.

Brick: Can be reused whole, or crushed for use as landscape cover, sub‑base material or fill.

Building Components and Fixtures: Windows, doors, cabinets, hardware, plumbing and electrical fixtures may be salvaged. Porcelain plumbing fixtures may be crushed for fill.

Carpet and Carpet Pad: Carpet may be able to be reused or recycled if sufficient quantities are generated. Store clean, dry carpet and pad in a closed container or trailer.

Ceiling Panels: Ceiling panels may be able to be recycled if sufficient quantities are generated. Sort by size, palletize, and shrink-wrap for shipment to and recycling by a ceiling tile manufacturer.

Concrete, Precast Concrete: Can/may be able to crushed and graded for use as riprap, aggregate, sub‑base material, or fill. Remove steel reinforcement and other metals and recylce with other metals. Neutralize alkalinity of concrete fill if planting above.

Concrete Block: Can be reused whole, or crushed for use as sub‑base material or fill, used as concrete aggregate.

Corrugated Cardboard and Paper: Separate for recycling into new paper products. Painted, waxed or muddy cardboard or paper is unsuitable for recycling and should be discarded.

Dimensional Lumber, Oriented Strand Board, Plywood, Crates, and Pallets: Large pieces can be reused. Wood unsuitable for reuse may be used to manufacture particleboard and other composite wood products, chipped or shredded for use as animal bedding, landscape use, groundcover, mulch, compost, pulp, or process fuel. Painted or treated wood may not be recycled. Some recyclers have equipment to remove nails.

Doors and Hardware: May be reused. Brace open end of door frames and leave door hardware attached to doors, except for removing door closers,.

Glass Containers: Recycle as glass.

Gypsum Board: Clean Standard, Type X, and Plaster Base (standard blue board) drywall, free of tape, joint compound, paint, nails, screws, or other contaminants may be processed and spread as a soil amendment. (Gypsum wallboard WR (green), Sheathing (brown/black), Mold Resistant Panels or Specialty Type X cannot be used due to additives unsuitable in soil amendments.)

Land Clearing Brush and Logs: Can be chipped or shredded for use as ground cover, mulch, compost, pulp, or process fuel. Larger branches or logs may be used as raw material for various products or other purposes.

Lighting Fixtures: Separate lamps by type and protect from breakage.

Metals, Ferrous and Nonferrous: Separate for recycling: banding, castings, ceiling grid, copper and other metal pipe, conduit and accessories, ductwork, extruded metals, rebar and metal stud cut-offs, roofing and sheet metals, miscellaneous steel shapes, miscellaneous metal parts, structural steel.

Piping: If separated for reuse, reduce piping to straight lengths and store with joints, accessories and other components by type and size.

Vinyl: Siding, window extrusions, floor tiles, and sheet flooring may be able to be separated for recycling into new vinyl products.

***Edit the following services and procedures requirements on projects with total budgets of less than $3 million as appropriate to the scope of the project and as directed by the DFD PM:***

**• Separation and Materials Handling Services and Equipment:** Description of how Construction Waste materials will be separated, cleaned (if necessary), protected from contamination and diverted, and the entity who will perform those services.

**• Documentation Procedures: Description of the method of collecting data and document materials reused on site, leaving the project site as trash, or diverted for recycling. All diversion and waste by all contractors and subcontractors on the project must be incorporated into the CWM Progress Reports.**

**• Educational and Motivational Procedures:** Means and methods the General Prime Contractor will employ to ensure full participation of all project construction personnel in CWM Plan activities. These might include periodic meetings, demonstrations, incentive/reward programs, etc.

**• Construction Waste Auditing Procedures:** Methods of monitoring and enforcing adherence to CWM Plan.

**PART 2 – PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION**

**CONSTRUCTION WASTE MANAGEMENT IMPLEMENTATION**

The General Prime Contractor is responsible for implementing the Construction Waste management requirements specified herein and shall designate a Waste Manager to coordinate and monitor the waste management activities of all Contractors and subcontractors, including coordination of separation, handling, recycling, salvage, reuse, and return methods used by all project construction personnel.

Contractors and subcontractors who do their own recycling shall report all applicable Construction Waste recycling and Trash amounts to the General Prime Contractor as needed to support the development of the CWM Plan and Progress and Final Reports.

The General Prime Contractor shall also provide:

***Edit the following requirements for projects with total budgets of less than $3 million as appropriate to project scope and as directed by the DFD PM***

* **Education and Instruction:** General Prime Contractor shall provide on‑site instruction as described in the CWM Plan to engage all construction personnel in separation, handling, recycling, salvage, reuse, and return methods throughout the project.

***Edit the following paragraph, if any special equipment or accommodations are required for sorting or separation. Designate an area on drawings for locating separation bins.***

**• Separation Facilities:** General Prime Contractor shall lay out and identify a specific area on the site and shall provide sorting bins for separating materials for recycling, salvage, reuse, and returns. The General Prime Contractor shall clearly identify the recycling area and sorting bins with durable signs and shall keep it neat and clean to avoid contamination of materials.

Acceptable sorting methods are:

**—**Sorting recyclable materials at the Project site and transporting them to recycling markets directly from the Project site.

**—**Employing haulers who make use of a materials-recovery facility or a transfer station where recyclable materials are sorted from the waste and recycled before disposing of the remainder. If using a hauler or recycling facility to sort out recyclables, verify that the hauler sorts out all construction waste loads and is not limited to those that are not acceptable at the landfill. Verify that the hauler or recycling facility recycles at least three types of materials.

**END OF SECTION**