

SECTION 01505 - CONSTRUCTION WASTE MANAGEMENT**PART 1 – GENERAL**

1.01 SUMMARY

- A. Section includes: Administrative and procedural requirements for construction waste management activities.
- B. Related section, 02050-Demolition and Salvage

1.02 DEFINITIONS

- A. Construction, Demolition, and Landclearing (CDL) Waste: Includes all non-hazardous solid wastes resulting from construction, remodeling, alterations, repair, demolition and landclearing. Includes material that is recycled, reused, salvaged or disposed as garbage.
- B. Salvage: Recovery of materials for on-site reuse, or offsite sale or donation to a third party.
- C. Reuse: Making use of a material without altering its form. Materials can be reused on-site or reused on other projects off-site. Examples include, but are not limited to the following: Grinding of concrete for use as subbase material. Chipping of landclearing debris for use as mulch.
- D. Recycling: The process of sorting, cleaning, treating, and reconstituting materials for the purpose of using the material in the manufacture of a new product.
- E. Source-Separated CDL Recycling: The process of separating recyclable materials in separate containers as they are generated on the job-site. The separated materials are hauled directly to a recycling facility or transfer station.
- F. Co-mingled CDL Recycling: The process of collecting mixed recyclable materials in one container on-site. The container is taken to a material recovery facility where materials are separated for recycling.
- G. Approved Recycling Facility: Any of the following:
 - 1. A facility that can legally accept CDL waste materials for the purpose of processing the materials into an altered form for the manufacture of a new product.
 - 2. Material Recovery Facility: A general term used to describe a waste-sorting facility. Mechanical, hand-separation, or a combination of both procedures, are used to recover recyclable materials. Co-mingled containers are to be taken to a material recovery facility with at least a 50% co-mingled recycling rate.

1.03 SUBMITTALS

- A. Waste Management Plan: Submit plan within seven days of date established for the Notice to Proceed.
- B. Waste Management Report: Submit report concurrent with the final Application for Payment.

1.04 PERFORMANCE REQUIREMENTS

- A. General: Material from demolition projects shall be recycled or reused whenever practicable (State of Washington RCW 39.04.135). Divert a minimum of 50% CDL waste, by weight, from the landfill by one, or a combination of the following activities:
 - 1. Salvage
 - 2. Reuse
 - 3. Source-Separated CDL Recycling
 - 4. Co-mingled CDL Recycling
- B. CDL waste materials that can be salvaged, reused or recycled include, but are not limited to, the following:
 - 1. Asphalt
 - 2. Asphalt shingles
 - 3. Concrete
 - 4. Metals
 - 5. Window glass
 - 6. Wood
 - 7. Field office waste, including office paper, aluminum cans, glass, plastic, and office cardboard.

See section 02050 for salvage detail.

1.05 QUALITY ASSURANCE

- A. Regulatory Requirements: Conduct construction waste management activities in accordance with State of Washington RCW 70.95.240, Seattle Municipal Code Chapter 21.36 and all other applicable laws and ordinances.
- B. Preconstruction Conference: Review methods and procedures related to waste management including, but not limited to, the following:
 - a. Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
 - b. Review requirements for documenting quantities of each type of materials that will be salvaged, recycled or disposed of as waste.

- c. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
- d. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
- e. Review waste management requirements for each trade.
- f. Review and distribution of the following publications and programs (request copies by calling the King County Solid Waste Division at (206)296-4466:
 - 1) Construction Recycling Directory for Seattle/King County.
 - 2) Contractors Guide: Save money and resources through job-site recycling and waste prevention
 - 3) King County Solid Waste Division Report of Comingled Recycling Facilities (available at <http://www.metrokc.gov/dnrp/swd/construction-recycling/comingled.asp>).

1.06 WASTE MANAGEMENT PLAN

- A. General: Develop plan consisting of waste types, quantity by weight, methods of disposal, handling and transportation procedures. Include separate sections in plan for demolition and construction waste.
- B. Organize the waste management plan in accordance with the sample plan included at end of Part 3, including the following information:
 - 1. Types and estimated quantities, by weight, of CDL waste expected to be generated during demolition and construction.
 - 2. Proposed methods for CDL waste salvage, reuse, recycling and disposal during demolition including, but not limited to, one or more of the following:
 - a. Contracting with a deconstruction specialist to salvage materials generated,
 - b. Selective salvage as part of demolition contractor's work,
 - c. Reuse of materials on-site or off-site sale or donation to a third party.
 - 2. Proposed methods for salvage, reuse, recycling and disposal during construction including, but not limited to, one or more of the following:
 - a. Requiring subcontractors to take their CDL waste to a recycling facility,
 - b. Contracting with a recycling hauler to haul recyclable CDL waste to an approved recycling or material recovery facility,
 - c. Processing and reusing materials on-site
 - d. Self-hauling to a recycling or material recovery facility.
 - 4. Name of recycling or material recovery facility receiving each of the CDL wastes.

5. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.

1.07 WASTE MANAGEMENT REPORT

- A. Waste Management Report: Submit a cumulative waste management report on the form included at end of Part 3 with the final Application for Payment with the following attachments:
 1. A record of the type and quantity, by weight, of each material salvaged, reused, recycled or disposed.
 2. Total quantity of waste recycled as a percentage of total waste.
 3. Disposal Receipts: Copy of receipts issued by a disposal facility for CDL waste that is disposed in a landfill.
 4. Recycling Receipts: Copy of receipts issued by approved recycling facilities for co-mingled materials. Include weight tickets from the recycling hauler or material recovery facility and verification of the recycling rate for co-mingled loads at the facility.
 5. Salvaged Materials Documentation: Types and quantities, by weight, for materials salvaged for reuse on site, sold or donated to a third party.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 CONSTRUCTION WASTE MANAGEMENT, GENERAL

- A. Provide containers for CDL waste that is to be recycled clearly labeled as such with a list of acceptable and unacceptable materials. The list of acceptable materials must be the same as the materials recycled at the receiving material recovery facility or recycling processor.
- B. The collection containers for recyclable CDL waste must contain no more than 10% non-recyclable material, by volume.
- C. Provide containers for CDL waste that is disposed in a landfill clearly labeled as such.
- D. Use detailed material estimates to reduce risk of unplanned and potentially wasteful cuts.
- E. To the greatest extent possible, include in material purchasing agreements a waste reduction provision requesting that materials and equipment be delivered in packaging made of recyclable material, that they reduce the amount of packaging, that packaging be taken back for reuse or recycling, and to take back all unused product. Insure that

subcontractors require the same provisions in their purchase agreements.

- F. Conduct regular visual inspections of dumpsters and recycling bins to remove contaminants.

3.02 SOURCE SEPARATION

- A. General: Separate recyclable materials from CDL waste to the maximum extent possible. Separate recyclable materials by type.
 1. Provide containers, clearly labeled, by type of separated materials or provide other storage method for managing recyclable materials until they are removed from Project site.
 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 3. Stockpile materials away from demolition area. Do not store within drip line of remaining trees.
 3. Store components off the ground and protect from weather.

3.03 CO-MINGLED RECYCLING

- A. General: Do not put CDL waste that will be disposed in a landfill into a co-mingled CDL waste recycling container.

3.04 REMOVAL OF CONSTRUCTION WASTE MATERIALS

- A. Remove CDL waste materials from project site on a regular basis. Do not allow CDL waste to accumulate on-site.
- B. Transport CDL waste materials off Owner's property and legally dispose of them.
- C. Burning of CDL waste is not permitted.

END OF SECTION

SECTION 01505
CONSTRUCTION WASTE MANAGEMENT
SAMPLE WASTE MANAGEMENT PLAN

Company: Northwest Best Construction
Project: Northwest Bank Building, Kent, WA

Designated Recycling Coordinator: John Doe

Waste Management Goals:

This project will recycle or salvage for reuse xx% [e.g. 75%] by weight of the waste generated on-site.

Communication Plan:

- Waste prevention and recycling activities will be discussed at the beginning of each safety meeting.
- As each new subcontractor comes on-site, the recycling coordinator will present him/her with a copy of the Waste Management Plan and provide a tour of the recycling areas.
- The subcontractor will be expected to make sure all their crews comply with the Waste Management Plan.
- All recycling containers will be clearly labeled.
- Lists of acceptable/unacceptable materials will be posted throughout the site.

Expected Project Waste, Disposal, and Handling:

The following charts identify waste materials expected on this project, their disposal method, and handling procedures.

Demolition Phase

Material	Quantity	Disposal Method	Handling Procedure
Asphalt from parking lot	100 tons	Ground on-site, reused as fill	
Wood Framing	6 tons	Recycled - Wood Recycling Northwest	Separate "clean wood" in clean wood bin
Decorative Wood Beams	300 bd. ft.	Salvaged - Timber Frame Salvaging	Remove by hand, store on-site, load on pallets for pickup
Remaining Materials	8 tons	Landfill - Sound Disposal	Dispose in "trash" dumpster

SECTION 01505
CONSTRUCTION WASTE MANAGEMENT
REPORT FORM

WASTE MANAGEMENT PROGRESS REPORT				
MATERIAL CATEGORY	DISPOSED IN MUNICIPAL SOLID WASTE LANDFILL	DIVERTED FROM LANDFILL BY RECYCLING, SALVAGE OR REUSE		
		Recycled	Salvaged	Reused
1. Asphalt (cu yds)				
2. Concrete (cu yds)				
3. Porcelain Plumbing Fixtures (lbs)				
4. Ferrous Metals (lbs)				
5. Non-Ferrous Metals (lbs)				
6. Wood (lbs)				
7. Glass (lbs)				
8. Clay Brick (lbs)				
9. Bond Paper (lbs)				
10. Newsprint (lbs)				
11. Cardboard (lbs)				
12. Plastic (lbs)				
13. Gypsum (lbs)				
14. Paint (gal)				
15. Insulation (lbs)				
16. Other (insert description)				
17. Other (insert description)				
Total (In Weight)		(TOTAL OF ALL ABOVE VALUES – IN WEIGHT)		
		Percentage of Waste Diverted	(TOTAL WASTE DIVIDED BY TOTAL DIVERTED)	