

DG 01 74 00

CONSTRUCTION WASTE MANAGEMENT

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01. GENERAL

- A. Lincoln Public Schools is committed to being a responsible steward to our natural resources by developing good construction and demolition waste management practices.
- B. By engaging in sound construction and demolition waste management practices, the Lincoln Public Schools desires to direct materials from the waste stream that at a minimum:
 - 1. Identify materials to be salvaged.
 - 2. Identify materials to be recycled.
 - 3. Identify manufacturers that reclaim their packaging for reuse or recycling.
 - 4. Maintain procedures for separating hazardous waste by products of construction for disposal in accordance with federal, state, and local regulations.
- C. Develop waste management plan that results in End-of-Project rates for salvage/recycling of seventy five percent (75%) minimum by weight of total waste generated by the Work.
- D. Salvaging nonhazardous demolition and construction waste.
- E. Recycling nonhazardous demolition and construction waste.
- F. Disposing of nonhazardous demolition and construction waste.

02. DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

03. EXECUTION

- A. LPS requires that this project generate the least amount of trash and waste possible.
 - 1. Practice efficient waste management in the use of materials in the course of the Work. Minimize the generation of waste due to error, poor planning, breakage, mishandling, contamination and other factors.
 - 2. Minimize waste and trash disposal to landfills and incinerators.
- B. A waste management plan concept should be discussed during the design and construction stages of the process.
- C. Revenue from sale of recycled materials shall be passed on to LPS.
 - 1. Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to LPS.
 - 2. Revenue from sale of recycled materials shall be transmitted by check directly to LPS, unless other procedures are approved by LPS.

- D. A waste management plan should be submitted by contractor to Lincoln Public Schools within forty-five (45) days from commencement of Work.
- E. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations.
 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations.
 4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept.
 5. Disposed Materials: Indicate how and where materials will be disposed of.
 6. 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.
- F. Required Recycling, Salvage and Reuse: The following shall not be disposed of in landfills or by incineration:
1. Masonry – brick, block.
 2. Steel/Metal – piping, hollow metal doors and frames, metal studs, ductwork, lockers, toilet partitions, supports/hangers, conduit, electrical panel boards, etc.
 3. Aluminum – storefronts, doors, windows.
 4. Copper – wiring, coils, piping.
 5. Cardboard.
 6. Wood –pallets, lumber.
 7. Plastics/PVC.

- G. Categories which may or may not have the ability for local recycling. The following shall not be disposed of in landfills or by incineration, unless there is no locally available means of recycling:
1. Acoustic ceiling tile.
 2. Carpet.
 3. Unpainted gypsum board scrap.
 4. Aluminum window frames and glass.
- H. The following means of waste and trash disposal are not acceptable:
1. Burning on the project site.
 2. Burial on the project site.
 3. Dumping or burying on the project, public or private.
 4. Other illegal dumping.
- I. Waste Management Reports: Concurrent with each Application for Payment, submit report.
1. Use the LPS Monthly and Summary Waste Management Reporting forms. See attachments.
- J. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling and disposal as a percentage of total waste generated by the Work.
- K. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- L. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- M. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts and invoices.
- N. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts and invoices.
- O. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- P. Waste Management Manager: Designate an on-site person or persons to be responsible for implementing, monitoring and reporting status of waste management work plan.

- Q. Instruction: Provide on-site instruction for workers, subcontractors and suppliers on proper waste management procedures, as appropriate for the Work.
1. Distribute waste management plan to everyone concerned within seven (7) days of submittal return.
 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling and disposal.
- R. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated and sold. Provide signs for each container(s).
 2. Provide separate storage for any hazardous materials and dispose in manner in accordance with local regulations.
- S. Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:
1. Clean salvaged items.
 2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity and location where removed.
 3. Store items in a secure area until installation.
 4. Protect items from damage during transport and storage.
 5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports and miscellaneous materials necessary to make items functional for use indicated.
- T. Salvaged Items for Sale and Donation: Permitted on Project site for collection and periodic removal to designated locations.
- U. Salvaged Items for LPS use: Salvage items for LPS use and handle as follows:
1. Clean salvaged items.
 2. Pack or crate items after cleaning. Identify contents of 3 containers with label indicating elements, date of removal, quantity and location where removed.
 3. Store items in a secure area until delivery to LPS.
 4. Transport items to LPS storage area on-site as designated by LPS.
 5. Protect items from damage during transport and storage.
- V. Doors and Hardware: Except for removing door closers, leave door hardware attached to doors.

W. General: Recycle paper and beverage containers used by on-site workers.

X. Recycling Demolition Waste

1. Asphalt Paving: Break up and transport paving to asphalt-recycling facility.
2. Concrete: Remove reinforcement and other metals easily separated from concrete and sort with other metals.
3. Masonry: Remove metal reinforcement, anchors and ties easily separated from masonry and sort with other metals.
 - a. Clean and stack undamaged, whole masonry units on wood pallets.
4. Wood Materials: Sort and stack members according to size, type and length. Separate lumber, engineered wood products, panel products and treated wood materials.
5. Metals: Separate metals by type.
 - a. Metals need only be separated when it is economically feasible to accomplish such that the cost of separation does not exceed the dollar value of the recycled material.
6. Acoustical Ceiling Panels and Tile (Optional): Stack large clean pieces on wood pallets and store in a dry location.
7. Metal Suspension System: Separate metal members including trim and other metals from acoustical panels and tile and sort with other metals.
8. Carpet (Optional): Roll large pieces tightly after removing debris, trash, adhesive, and tack strips.
 - a. Store clean, dry carpet in a closed container or trailer provided by Carpet Reclamation Agency or carpet recycler.
9. Carpet Tile (Optional): Remove debris, trash and adhesive.
 - a. Stack tile on pallet and store clean, dry carpet in a closed container or trailer provided by Carpet Reclamation Agency or carpet recycler.
10. Windows (Optional):
 - a. Separate aluminum framing members including trim from glass and sort with other metals.

Y. Recycling Construction Waste

1. Packaging:

- a. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
- b. Polystyrene Packaging: Separate and bag materials.
- c. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on site, do NOT break them down. Collect and stack pallets to be reused/recycled through LPS. Coordinate with LPS Waste Management Consultant for transportation.
- d. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.

04. ATTACHMENTS

- A. Sample copy of Owner’s Monthly Waste Management Report

Project Title: _____
LPS Construction Waste Progress Report
Monthly Totals for MM YYYY

Material Category	Total Weight of Waste	Quantity of Waste Landfilled	Quantity of Waste Salvaged	Quantity of Waste Recycled	Total Quantity of Waste Recovered	Total Quantity of Waste Recovered
	(Tons)					(%)
Wood						
Metals						
Concrete and Masonry						
Drywall						
Acoustical Ceiling						
Mixed Recyclables (Paper, Bottles, Cans, etc.)						
General Waste						
Other (List)						
Total (all types) to Date	0.00	0.00	0.00	0.00	0.00	%

Ticket	Date	Quantity of Waste (Tons)							
		Landfilled	Salvaged	Wood	Metals	Concrete/Masonry	Drywall	Acoustical Ceiling	Mixed
Total		0	0	0	0	0	0	0	0

B. Sample copy of Owner's Summary Waste Management Report

Project Title: _____

LPS Construction Waste Progress Report

Project totals through MM YYYY

Material Category	Total Weight of Waste	Quantity of Waste Landfilled	Quantity of Waste Salvaged	Quantity of Waste Recycled	Total Quantity of Waste Recovered	Total Quantity of Waste Recovered
	(Tons)					(%)
Wood						
Metals						
Concrete and Masonry						
Drywall						
Acoustical Ceiling						
Mixed Recyclables (Paper, Bottles, Cans, etc.)						
General Waste						
Other (List)						
Total (all types) to Date	0.00	0.00	0.00	0.00	0.00	%