CONSTRUCTION SPECIFICATIONS INSTITUTE TECHNICAL MEETING

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"Waste Reduction Specifications"

Jim Goddard
Recycling Program Manager
Metro
600 NE Grand Ave
Portland, OR 97232-2736

Printed on recycled paper, please recycle!

REUSE AND SALVAGE

Goals

Reuse

Retain and utilize all or parts of the existing structures and components in the new structure.

Salvaging

Remove those items which cannot be reused on the project but have a reuse value and are marketable.

Issues

- ✓ Contamination
- ✓ End-use of materials
- ✓ Quantity and value of materials
- ✓ Ownership of materials
- ✓ Describing how work is to be performed

Typical Specification Language

Salvageable Improvements: Carefully remove items indicated to be salvaged, and store on Owner's premises where indicated or directed.

Salvaged Materials: Items of salvageable value to Contractor may be removed from structure as work progresses. Transport salvaged items from site as they are removed.

Proposed Specification Language

(Attached)

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Dismantling of designated items and materials.

B. Sorting and inventorying of salvaged items and materials.

C. Preparation and reconditioning of designated items and materials.

D. Storage of salvaged items and materials.

E. Distribution and Removal of salvaged items and materials.

1.02 RELATED SECTIONS

A. Section 01010 - Summary of Work

B. Section 01039 - Coordination and Meetings

C. Section 01500 - Construction Facilities and Temporary Controls

D. Section 01600 - Material and Equipment

E. Section 01700 - Contract Closeout: Project Record Documents.

F. Section 02060 - Building Demolition

G. Section 02222 - Earthwork: 2.01 Fill materials.

1.03 UNIT PRICE - MEASUREMENT AND PAYMENT

A. Salvaged Material:

1. Wood:
   a. Basis of Measurement: Board Feet
   b. Basis of Valuation: Includes dismantling, trimming [grading], and transporting to [a designated location].

2. Wood Truss Assemblies
   a. Basis of Measurement: By object
   b. Basis of Valuation: Includes removal, loading, and transporting to [a designated location].

3. Waste Wood:
   a. Basis of Measurement: By weight and volume
   b. Basis of Valuation: Includes demolition, loading, removal from site, and disposal at [a designated location].

4. Toxic Waste [Contaminated Wood, Lead Paint, Solvents, Roofing Materials, Asbestos, Etc.]:
   a. Basis of Measurement: By weight and volume
   b. Basis of Valuation: Includes demolition, loading, removal from site, and disposal at [a designated location].

5. Recyclable Metals:
   a. Basis of Measurement: By weight and volume
   b. Basis of Valuation: Includes dismantling, loading, removal from site, and disposal at [a designated location].

6. Concrete and Asphalt:
   a. Basis of Measurement: By weight and volume
   b. Basis of Valuation: Includes demolition, loading, removal from site, and disposal at [(a) designated location(s)].

7. Relics, Antiques, and Similar Objects:
   a. Basis of Measurement: By object
   b. Basis of Valuation: Includes removal, loading, and transporting to [a designated location].

8. Windows, Doors, Other Fixtures:
   a. Basis of Measurement: By object
   b. Basis of Valuation: Includes removal, loading, and transporting to [a designated location].

9. Fire Protection System:
   a. Basis of Measurement: All components.
   b. Basis of Valuation: Includes removal, loading, and transporting to [a designated location] of sprinkler heads, piping, and misc. equipment.

10. Salvageable for Re-use Treated Wood:
    a. Basis of Measurement: Lengths by dimension
    b. Basis of Valuation: Includes removal, loading, and transporting to [a designated location].

11. Unsalvageable Treated Wood:
    a. Basis of Measurement: By volume
    b. Basis of Valuation: Includes removal, loading, and transporting to [a designated location].

12. Electrical System:
    a. Basis of Measurement: All re-marketable components.
    b. Basis of Valuation: Includes removal, loading, and transporting to [a designated location] of misc. equipment.

1.04 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Shop Drawings: Indicate location and construction of barricades, fences, temporary work equipment storage area, job shack location, etc.

C. Pre-dismantling Inventory: Contractor to provide Owner with an inventory of quantities of materials to be salvaged, disposed of or recycled. Materials shall be quantified using industry standard units of measurement for each item, as noted in Section 1.03, Unit Price. This inventory shall be used as the basis for determining disposal cost and salvage values.

1.05 PROJECT RECORD DOCUMENTS

A. Submit under provisions of Section 01700.

B. Accurately record actual locations of capped utilities, subsurface obstructions, and elevations of river bottom; and grade at 10 foot increments in area of work.

1.06 QUALIFICATIONS

A. Salvage or Demolition Firm: Company(ies) specializing in performing the Work of this Section with a minimum of five (5) years documented experience.

1.07 REGULATORY REQUIREMENTS

A. Conform to applicable codes for demolition and salvage of structures, safety of adjacent structures, dust control, and disposal of common and hazardous waste.

B. Obtain required permits from authorities.

C. Notify the Owner and affected utility companies before starting Work, and comply with their requirements.

D. Do not close or obstruct adjacent docks, sidewalks, hydrants, parking, or storage areas without prior approval of Owner.

E. Conform to applicable regulatory procedures when discovering hazardous or contaminated materials not documented prior to this Contract.

PART 2 PRODUCTS

2.01 FILL MATERIALS

A. *(This section will have to be coordinated with the civil and structural engineer for the requirements of the new facility. We can include a segment here about reusing the salvaged concrete as backfill.)*

PART 3 EXECUTION

3.01 PREPARATION

A. Provide, erect, and maintain temporary barriers and security devices, as required by the Owner.

B. Protect existing structures, equipment, and machinery which are not to be dismantled or salvaged.

C. Prevent movement or settlement of adjacent structures or earth. Provide bracing and shoring, as required.

D. Mark location of all utilities.

E. Clearly mark location of all salvaged materials' storage areas and provide and erect barriers and security devices, as required.

3.02 DISMANTLING AND SALVAGE REQUIREMENTS

A. Conduct dismantling and salvage to minimize interference with adjacent structures.

B. Cease operations immediately if adjacent structures appear to be in danger. Notify Owner. Do not resume operations until directed by Owner.

C. Conduct operations with minimum interference to public or private accesses. Maintain protected egress and access at all times.

D. Obtain written permission from Owner when demolition equipment will traverse, infringe upon, or limit access to other areas of the facility.

E. Sprinkle Work with water to minimize dust. Provide hoses and water connections for this purpose.

F. If cutting or welding torches are used, obtain permission from Owner prior to commencement of Work. Provide a fire watch at all times at each location of Work.

G. Provide fire protection equipment at all times at the site.

3.03 DISMANTLING

A. Identify, disconnect, and cap designated utilities within the areas to be dismantled.

B. Remove roofing and dispose of as detailed in Section 1.07, Paragraphs F and G .

C. Dismantle roof deck, wood siding, structural members, piping, etc.; store in designated areas for evaluation and dispersement.

D. Remove asphalt topping from deck areas and store in designated areas for evaluation and dispersement.

E. Remove all concrete walls, supports, slabs, etc. and store in designated areas for evaluation and dispersement.

F. Remove all pilings in their entirety and store in designated areas for evaluation and dispersement.

G. Empty buried tanks located within dismantling area. Remove buried tanks, components, and piping, and store for evaluation and dispersement.

H. Remove and store materials to be retained by Owner in a manner to prevent damage. Store and protect in accordance with requirements of Section 01600.

I. Backfill areas excavated, holes, and pits caused as a result of dismantling, in accordance with Section 02220.

J. Remove materials not scheduled for recycling or salvage and dispose of in accordance with applicable codes.

K. Do not burn or bury materials on site unless approved by Owner. Leave site in a clean condition.

L. Remove all temporary Work at completion of Contract.

3.04 SORTING AND INVENTORYING OF SALVAGED ITEMS AND MATERIALS

A. All materials produced during the dismantling of these structures will be separated and stored in distinct areas to be designated by the Port of Portland. The following materials will be separated from each other:

1. Roofing: Roofing materials down to the wood decking will be separated into two (2) groups - asbestos containing and non-asbestos containing.

2. Wood Members (excluding trusses): Wood members will be dismantled, prepared, and stored in stacks of like members (e.g. 2x6 T&G sorted and stored by length). All treated members - pressure treated, asphalt or creosote coated, etc. - will be separated from untreated items.

3. Windows and Doors: Windows and doors will be removed, sorted and stored.

4. Metal: All metal items such as fasteners, piping, braces, etc. will be sorted, either by item and/or by metal type, for recycling.

5. Trusses: Trusses will be removed and stored as units. They will not be dismantled. Store in a manner so as to prevent warping, bending, etc.

6. Toxic Waste: Toxic waste such as solvents, paint, oils, etc. will be clearly marked and placed in leak proof containers for evaluation and dispersement. Do not mix unlike or unknown items. Items in containers are to be left in these containers for evaluation and dispersement.

7. Asphalt: Ashpalt paving will be stored at designated areas for evaluation & dispersement.

8. Concrete: Concerte paving, piers, etc. will be stored at designated areas for evaluation & dispersement.

3.05 PREPARATION AND RECONDITIONING OF DESIGNATED ITEMS AND MATERIALS.

A. Wood: All wood members shall have nails, spikes, fasteners, etc. removed in their entirety.

B. Treated Wood: Treated wood members will be trimmed at the site to remove portions that are contaminated with creosote, asphalt, oil, or other chemicals.Creosote treated wood members will be iventoried and stored in a containment area designated by the Port of Portland. All trimming and residue from the trimming process will be collected and disposed of in an appropriate manner as designated by Metro including soils contaminated in the process.

C. Painted Wood: All painted wood members shall have nails, spikes, fasteners, etc. removed in their entirety. All demolition shall be performed manually so as to minimize the creation of airborne dust. Wood that has been determined to have lead paint will be trimmed on-site to remove the paint. These wood members will be inventoried and stored separately from the area of re-milling and will be collected and stored in a containment area designated by the Port of Portland. Workers performing the trimming and handling of lead residue will be required to meet OSHA requirements for this hazardous work. All debris and dust shall be kept within the Work area and cleaned up immediately. All waste material shall be dealt with and disposed of as required by OSHA and/or Metro, including soils contaminated by the process.

3.06 STORAGE OF SALVAGED ITEMS AND MATERIALS

A. The Port of Portland will designated an area or area for the temporary storage of dismantled materials. The contractor will separate all items into the size and category as noted in Section 3.04.

3.07 DISTRIBUTION AND REMOVAL OF SALVAGED ITEMS AND MATERIALS

A. Contractor provide verification of destination, quantitites, and values/costs on a material-by-material basis quantified as per section 01720-1.03.

- If material is contractor-owned, contractor has a period of time to remove material and an obligation to provide documentation of final destination. Funds/expenses resulting from distribution are accounted for and incentives/penalties assessed as agreed.

- If material is to be distributed by the Port or by an agent of the Port, then the Port assumes responsibility for selling and dispersement..

- If material is owned by the Port but distributed by the contractor, contractor has a period of time to remove material and an obligation to provide documentation of final destination. Funds/expenses resulting from distribution are accounted for and incentives/penalties assessed as agreed.

3.08 SCHEDULES

A. *(Provide list of items to be retained by Owner here.)*

END OF SECTION

RECYCLING

Goals

Recycling Construction and Demolition Waste

Recycle the waste materials from the projects for which there are local processors.

Issues

- ✓ Determination of materials which can be recycled
- ✓ Planning waste management before project begins
- ✓ Responsibility for waste disposal and recycling
- ✓ Cost/Savings for recycling
- ✓ Project management support

Typical Specification Language

DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Removal from Owner's Property: Remove waste materials, including unacceptable excavated material, trash, and debris, and dispose of it off Owner's Property.

Proposed Specification Language

(Attached)

Appendix 5

Recycling Specification

Construction Facilities and Temporary Controls

Part 1 - General

1.01 Requirements Included

A. Waste management goals
B. Waste management plan
C. Recycling
D. Reuse
E. Sorting on site
F. List of recycling facilities processors and haulers

1.02 Related Requirements

A. Section 01010 - Summary of Work
B. Section 01500 - Construction Facility and Temporary Controls: Cleaning during construction
C. Section 02050 - Building Demolition

1.03 Waste Management Goals

A. The Owner requires that as many waste materials as possible produced as a result of this project be salvaged, reused or recycled in order to minimize the impact of construction waste on landfills and to minimize the expenditure of energy and cost in fabricating new materials. In many cases the costs of recycling are less than traditional waste disposal methods.

   To this end, the Contractor shall develop with the assistance of the Owner and the Architect/Engineers a Waste Management Plan for work performed on this project. Outlined in Article 1.05 A. herein are examples of materials which can be recycled or reused as well as recommendations for waste sorting methods.

1.04 Waste Management Plan

A. Contractors are to attach to the bid packet a completed Waste Management Plan that outlines how any waste will be removed from the site. A copy of a Sample WMP is attached to this bid packet. The WMP shall include:

   1. Information on:
      a. Types of waste materials produced as a result of work performed on site.
      b. Estimated quantities of waste produced.
      c. Indentification of materials with the potential to be recycled (based on the sample WMP).

d. Cost savings accrued by recycling rather than disposing of waste in landfills
e. On-site storage and separation requirements
f. Transportation methods
g. Destinations

1.05 Recycling

A. The following materials can be recycled in the Portland Metro area are:

Wood, Drywall, Glass, Land-clearing Debris, Corrugated Cardboard, Metal, Rubble, and Carpet,

1.06 Reuse

A. Contractors and subcontractors are encouraged to reuse as many waste materials as possible. Salvage should be investigated for materials not reusable on site.

1.07 On-site materials sorting and storage

A. The general contractor will provide separate containers for the following materials: (list dependent upon project and site conditions)

B. The general contractor will provide on-site locations for subcontractors supplied recycling containers to help facilitate recycling.

1.08 List of recycling facilities

WASTE MANAGEMENT PLAN FOR CONTRACTORS

Circle the materials that will be produced, estimate the quantity, list how the materials will be transported and circle where the materials will be taken.

MATERIAL	ESTIMATED QUANTITY	DISPOSAL METHOD	RECYCLING COMPANY OR DISPOSAL SITE (If self-haul)	
Salvage and used building materials	_____yds³ _____tons	self-haul or Hauler Name:_____	Architectural Salvage Hippo Hardware Pumilite Bldg. Products Reclamation Services	Rejuvenation Inc. Storie Steel & Wood Prod. The Wherehouse Project Other:_____
Wood	_____yds³ _____tons	self-haul or Hauler Name:_____	Architectural Salvage Bredl Saw Service Durham Wood & Dirt East County Recycling Grimm's Fuel Co. H&H Wood Recycling Hillsboro Landfill Lakeside Reclamation	McFarlane's Bark Smurfit Newsprint Storie Steel & Wood Prod. Taylormade Products Inc. Wastech Wood Exchange Other:_____
Drywall	_____yds³ _____tons	self-haul or Hauler Name:_____	Gypsum Wallboard Knez Bldg. Materials	United Pacific Recycling Other:_____
Glass	_____yds³ _____tons	self-haul or Hauler Name:_____	Potters Industries	Other:_____
Insulation	_____tons _____tons	self-haul or Hauler Name:_____	Western Insulation	Other:_____
Land-clearing debris	_____yds³ _____tons	self-haul or Hauler Name:_____	American Compost & Recycling Best Buy Durham Wood & Dirt East County Recycling Grimm's Fuel Co. H&H Wood Recycling	Hillsboro Landfill Hyponex Lakeside Reclamation McFarlane's Bark Wastech Other:_____
Corrugated cardboard	_____yds³ _____tons	self-haul or Hauler Name:_____	East County Recycling EZ Recycling Farwest Fibers Hillsboro Landfill KB Recycling	Oregon Paper.Fiber Sunflower Recycling Wastech Other:_____
Metals	_____yds³ _____tons	self-haul or Hauler Name:_____	Acme Trading and Supply Calbag Metals Co. East County Recycling Hillsboro Landfill KB Recycling Metro Metals	Mt. Hood Metals Oregon Pacific Steel Schnitzer Steel Products Storie Steel & Wood Prod. Sunflower Recycling Other:_____
Rubble	_____yds³ _____tons	self-haul or Hauler Name:_____	99W Fill Durham Wood & Dirt East County Recycling Hillsboro Landfill Karbon Rock Lakeside Reclamation	Porter Yett Portland Road & Driveway Portland Sand & Gravel The Wall Other:_____
Carpet padding	_____yds³ _____tons	self-haul or Hauler Name:_____	Hickory Springs Magic Carpet	Other:_____
Mixed Loads (i.e., trash, plastic, packaging, etc.)	_____yds³ _____tons	self-haul or Hauler Name:_____	Metro Central Station Metro South Station East County Recycling	Hillsboro Landfill Lakeside Reclamation Other:_____

JG:ay
CONGUIDE/CONTRACT.TBL

RECYCLED CONTENT BUILDING MATERIALS

Goals

Utilize Recycled Content Building Materials

Incorporate locally produced or locally available recycled content building materials in the project design and procurement.

Issues

- ✓ Reluctance to specify new/untried materials
- ✓ Additional research to identify materials and include in bids
- ✓ Cost/Savings evaluation
- ✓ Special installation techniques
- ✓ Standard materials with recycled content

Typical Specification Language

Not applicable.

Proposed Specification Language

(Attached)

1.00 GENERAL

1.01 DESCRIPTION

A. This Section summarizes the Alternate Bids to be submitted to Owner. Alternate Bids shall state the net amount to be added to or deducted from the Base Bid.

B. It is intended that reference in the Bid Forms to Alternate Bids shall refer directly to this Section. Information included is provided for use of bidders in completing their Bid Proposals, and will not be repeated on the Bid Forms.

1.02 SUBMISSION REQUIREMENTS

A. Costs: Include under each Alternate Bid net amount of all changes in cost, whether additive or deductive, resulting to the work of all Sections affected by Alternate Bids.

B. Extent of Alternate Bids: Bidders shall determine the full extent of Work affected by preparation of Bids.
1. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.03 SELECTION AND AWARD OF ALTERNATES

A. Acceptance or Rejection: Alternates quoted on Bid Forms will be reviewed and accepted or rejected at the Owner's option. None, any, or all Alternates may be accepted or rejected by the Owner.

B. Accepted Alternates will be identified in the Owner-Contractor Agreement.

1.04 SCHEDULE OF ALTERNATES

A. For each product proposed under Alternate Bids, submit manufacturer's product data, test reports, and material safety data sheets (MSDS).

B. Alternates describe environmental requirements. Requirements for workmanship and materials not modified under the Alternate Bids shall conform to Drawings and Specifications, except as exceeded by Code.

1. Alternate Bid Number 1: State the amount to be added to or deducted from the Base Bid if crushed miscellaneous base and processed miscellaneous base containing 100 percent post-consumer asphalt and concrete are provided for base as specified in Section 02500, Paving and Surfacing.

Add:_____dollars, or Deduct:_____dollars.

SPECIFIER'S NOTE: Recycled Base Materials (818-767-3088); Blue Diamond (800-300-6120); Crush Masters (800-894-7778). Blue Diamond also produces "glassphalt" which contains post-consumer recycled glass.

2. Alternate Bid Number 2: State the amount to be added to or deducted from the Base Bid if rubber modified asphalt paving containing recycled tires is provided for asphalt paving as specified in Section 02500, Paving and Surfacing.

Add:_____dollars, or Deduct:_____dollars.

SPECIFIER'S NOTE: Plusride II by Envirotire, Inc. (206-587-6018). Recycles 6,000 tires per lane mile of 2" pavement.

3. Alternate Bid Number 3: State the amount to be added to or deducted from the Base Bid if pipes and fittings containing minimum 20 percent post-consumer recycled plastic are provided for pipes and fittings as specified in Section 02700, Sewerage and Drainage.

   Add:_____dollars, or Deduct:_____dollars.

SPECIFIER'S NOTE: Plastic Tubing, Inc. (919-525-5121) manufactures piping from recycled plastic bottles - verify percentage recycled content. Blue Diamond Materials (310-634-6698) manufactures piping with 50 percent post-consumer PVC plastic.

4. Alternate Bid Number 4: State the amount to be added to or deducted from the Base Bid if plastic car stops containing 100 percent post-consumer recycled plastic are provided in lieu of concrete car stops as specified in Section 02800, Site Improvements.

   Add:_____dollars, or Deduct:_____dollars.

SPECIFIER'S NOTE: California Recycling Co. (213-780-7999); Superwood of Alabama, Inc. (205-874-3781).

5. Alternate Bid Number 5: State the amount to be added to or deducted from the Base Bid if fiberglass reinforced plastic grating containing minimum 20 percent recycled content is provided in lieu of metal grating as specified in Section 05500, Metal Fabrications.

   Add:_____dollars, or Deduct:_____dollars.

SPECIFIER'S NOTE: International Grating, Inc. (713-633-3210) - verify recycled content.

6. Alternate Bid Number 6: State the amount to be added to or deducted from the Base Bid if 100 percent "remelt" steel nails are provided for steel nails as specified in Section 06100. Rough Carpentry.

   Add:_____dollars, or Deduct:_____dollars.

SPECIFIER'S NOTE: Maze Nails (815-223-8290) - verify structural integrity.

7. Alternate Bid Number 7: State the amount to be added to or deducted from the Base Bid if panels containing 100 percent post-consumer recycled paper fiber are provided in lieu of plywood sheathing as specified in Section 06100. Rough Carpentry.

   Add:_____dollars, or Deduct:_____dollars.

SPECIFIER'S NOTE: Homosote Co. (609-883-3300). ICBO #1016 and Los Angeles Research Report #23074 and #23610.

440 Homosote and N.C.F.R. Homosote (fire-rated): For wall sheathing board, siding, soffits.

Sound-A-Sote: Structural board for wall, floor, and ceiling noise control.

Easy-Ply Roof Deckings: For structural load-bearing decking.

Firestall TUPS Stress Skin Panels: For structural load-bearing roof system.

B. Provide cross sections of all fire rated assemblies on drawings and annotate with testing agency/laboratory, i.e., UL, GA or ETL along with applicable assembly Code or number.

Section 09280 Carpeting

Part 1. Standards

1.1 Description

A. Glue down only unless dictated by program requirements - must meet State of Texas Carpet Specifications Class A (0-25) Flame Spread Ratio, 100 or less Smoke Development - Anti-static.

B. Submit manufacturer's maintenance instructions and include information about cleaning materials which could damage carpet.

C. Recycled or recyclable content where appropriate.

D. Installation: Use adhesive and application methods that reduce outgassing and other health hazards during installation.

Section 09510 Acoustical Ceilings

Part 1. Standards

1.1 Description

A. Ceiling grid shall be either 2 x 4 or 2 x 2; exposed two-way grid system.

B. No fiberglass tile except in areas subject to high humidity.

C. Special ceiling treatment is allowed only in selected areas, i.e., lobbies, conference rooms, etc., or as approved by the Project Manager.

D. Specify material with recycled content from State contract.

Section 09660 Resilient Tile Flooring

Part 1. Standards

1.1 Description

A. Generally tile shall be 12" x 12" x 1/8" non-slip smooth finish type.

B. Floor tile must be of uniform composition throughout.

C. VCT is preferred.

D. 100% recycled material.

Part 2. Recommendations/Suggestions

1.1 Description

A. For ease of repair/replacement, use standard colors and/or patterns.

B. Special reinforcement and/or rigid (unbreakable) base should be used in corridors, public areas and other traffic or buffer equipment maintained areas.

DESIGN FOR RECYCLING

Goals

Design for Recycling by Occupants

Design the project to make recycling of waste materials at least as convenient as disposal of non-recyclable items for the occupants.

Issues

- ✓ Site space required for disposal and recycling
- ✓ Building space required for disposal and recycling
- ✓ Targeted materials
- ✓ Administrative policy versus facilities
- ✓ Interface with local collection methods

Typical Specification Language

Ground Level: Provided for all functions requiring public access (main lobbies, parking ramps, U.S. Marshals' sallyport, loading dock, garbage disposal, retail). Food service is also provided on the ground floor for the convenience of building users.

Proposed Specification Language

(Attached)

Specific Requirements:

1. Multi-unit residential buildings containing 5-10 units shall provide a minimum storage area of 50 square feet. Buildings containing more than 10 residential units shall provide an additional 5 square feet per unit for each unit above 10.
2. Non-residential buildings shall provide a minimum storage area of 10 square feet, plus:

   Office: 4 square feet/1,000 square feet gross floor area (GFA)
   Retail: 10 square feet/1,000 square feet GFA
   Wholesale/Warehouse/Manufacturing: 6 square feet/1,000 square feet GFA
   Educational and Institutional: 4 square feet/1,000 square feet GFA
   Other: 4 square feet/1,000 square feet GFA

B. Waste Assessment Method

Description of Method: The waste assessment method tailors the storage area size to a waste assessment and management program for the specific user of a new building.

Typical Application of Method: This method is most appropriate when the specific use of a building is known and the type and volume of mixed solid waste to be generated can be estimated.

Application Requirements and Review Procedure: A pre-application conference with the solid waste coordinator/plan check staff is required if the waste assessment method is proposed. The applicant shall obtain a waste assessment form from the local jurisdiction.

(Note: A sample form is provided as an attachment to this ordinance)

The form shall be used to estimate the volumes of source separated recyclables/ mixed solid waste generated. From this information, the applicant can design a specific management, storage and collection system. Techniques such as a compactor or cardboard baler may be implemented to minimize the square footage of the site which must be set aside for a storage area.

The waste assessment form shall be completed and submitted with site plans required by the local jurisdiction. The plans must identify the size and location of interior or exterior storage area(s), specialized equipment, collection schedule, etc. required to accommodate the volumes projected in the waste assessment. The solid waste coordinator for the local jurisdiction shall review and approve the waste assessment as part of the site plan or development review process.

Specific Requirement: The application shall demonstrate that the mixed solid waste and recyclables volumes expected to be generated can be stored in less space than is required by the minimum standards method.

C. Comprehensive Recycling Plan Method

The Comprehensive Recycling Plan method of compliance was developed because many large industrial, institutional or other uses have comprehensive recycling plans and programs in place which go far beyond the minimum standards of this model ordinance. These businesses are also frequently expanding and renovating their facilities. It is appropriate to recognize and use these existing plans to satisfy compliance with this model ordinance.

Description of Method: The comprehensive recycling plan method is most appropriate when an applicant has independently developed a comprehensive recycling plan that addresses materials collection and storage for the proposed use.

Typical Application of Method: This method can be used when a comprehensive recycling plan has been developed for a specific facility. It is most suited to large non-residential uses such as hospitals, schools and industrial facilities. The comprehensive recycling plan method can be used for new construction or expansion that is subject to full site plan review.

Application Requirements and Review Procedure: The comprehensive recycling plan shall be submitted to the local solid waste coordinator at the same time site plans are submitted for site plan review. The applicant shall submit plans and text that show how mixed solid waste and recyclables generated by the

proposed development will be served under a comprehensive recycling plan. The location, design and access standards set forth in Section VI are applicable to new storage areas only.

D. Franchised Hauler Review Method

The Franchised Hauler Review method is only available in jurisdictions which franchise collection service areas because there is certainty as to what hauler will actually provide service to the proposed development, once it is constructed.

Description of Method: This method provides for coordinated review of the proposed site plan by the franchised hauler serving the subject property.

Typical Application of Method: This method is to be used when there are unique conditions associated with the site, use or waste stream that make compliance with any of the other three methods infeasible. The objective of this method is to match a specific hauler program (types of equipment, frequency of collection, etc.) to the unique characteristic(s) of the site or development.

The following constitute unique conditions:

1. Use of either of the three other methods of compliance would interfere with the use of the proposed development by reducing the productive space of the proposed development, or make it impossible to comply with the minimum off-street parking requirements of the underlying zone.

2. The site is of and irregular shape or possesses steep slopes that do not allow for access by collection vehicles typically used by the franchised hauler to serve uses similar in size and scope to the proposed use.

3. The proposed use will generate unique wastes that can be stacked, folded, or easily consolidated without the need for specialized equipment, such as a compactor, and can therefore be stored in less space than is required by the Section V (A) of this Ordinance.

Application Requirements and Review Procedure: The applicant shall work with the franchised hauler to develop a plan for storage and collection of source separated recyclables and mixed solid waste expected to be generated from the new building. A narrative describing how the proposed site meets one or more of the unique site conditions described above plus site and building plans showing the size and location of storage area(s) required to accommodate anticipated volumes shall be submitted for site plan review. Additionally, a letter from the franchised hauler shall be submitted at the same time that describes the level of service to be provided by the hauler, including any special equipment and collection frequency, which will keep the storage area from exceeding its capacity.

VI. LOCATION, DESIGN AND ACCESS STANDARDS FOR STORAGE AREAS

The following location, design and access standards for storage areas are applicable to all four methods of compliance: 1) minimum standards; 2) waste assessment; 3) comprehensive recycling plan; and 4) franchised hauler review.

A. Location Standards

1. To encourage its use, the storage area for source separated recyclables shall be co-located with the storage area for residual mixed solid waste.

2. Indoor and outdoor storage areas shall comply with Uniform Building and Fire Code requirements.

3. Storage area space requirements can be satisfied with a single location or multiple locations, and can combine both interior and exterior locations.

4. Exterior storage areas can be located within interior side yard or rear yard areas. Exterior storage areas shall not be located within a required front yard setback or in a yard adjacent to a public or private street.

5. Exterior storage areas shall be located in central and visible locations on a site to enhance security for users.

6. Exterior storage areas can be located in a parking area, if the proposed use provides at least the minimum number of parking spaces required for the use after deducting the area used for storage. Storage areas shall be appropriately screened according to the provisions in Section B, Design Standards.

7. The storage area shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on the site or on public streets adjacent to the site.

B. Design Standards

1. The dimensions of the storage area shall accommodate containers consistent with current methods of local collection.

2. Storage containers shall meet Uniform Fire Code standards and be made and covered with waterproof materials or situated in a covered area.

3. Exterior storage areas shall be enclosed by a sight obscuring fence, wall, or hedge at least six feet in height. Gate openings which allow access to users and haulers shall be provided. Gate openings for haulers shall be a minimum of 10 feet wide and shall be capable of being secured in a closed and open position.

4. Storage area(s) and containers shall be clearly labeled to indicate the type of materials accepted.

C. Access Standards

1. Access to storage areas can be limited for security reasons. However, the storage area shall be accessible to users at convenient times of the day, and to collection service personnel on the day and approximate time they are scheduled to provide collection service.

2. Storage areas shall be designed to be easily accessible to collection trucks and equipment, considering paving, grade and vehicle access. A minimum of 10 feet horizontal clearance and 8 feet of vertical clearance is required if the storage area is covered.

3. Storage areas shall be accessible to collection vehicles without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius shall be provided to allow collection vehicles to safely exit the site in a forward motion.

MB:jc
August 26, 1992
luse/mord1.ord

INSTRUCTIONS FOR BIDDERS

Goals

Describe the resource efficient aspects of the project and what is expected of the bidder to satisfy the requirements.

Issues

- ✓ Level of commitment by project management
- ✓ Method of bidding
- ✓ Amount of work/risk perceived by bidders
- ✓ Evaluation of non-responsive bids

Typical Specification Language

Not applicable.

Proposed Specification Language

(Attached)

1.03 Cost centers will be provided on bid forms for:

1. recycling;
2. waste disposal;
3. recycled products price differential.

1.04 Evaluation of Efficient Use of Resource in this Work will be based on the following specific project goals:

1.

2.

3.

* * * * * END OF SECTION * * * * *

Section 00120

Supplementary Instructions to Bidders
Resource Efficiency

Part 1 - General

1.01 Description

A. The General Services Commission requires the contractor to efficiently utilize resources used in the completion of this Work. Resource Efficient aspects to be considered in completing this Work include:

1. Planning to reuse and renovate existing structures in lieu of demolition;

2. Salvage of existing materials and items for reuse or resale;

3. Recycling of waste generated during the demolition and construction processes;

4. Procurement and installation of recycled content building materials; and

5. Design and installation of space to allow for recycling of materials by the occupants of the completed project.

B. The Contractor is encouraged to include additional resource efficcient methods in the Work.

1.02 Related Sections

A. The following sections specify the methods to be used to incorporate efficient use of resources into the work

1. Address reuse of existing buildings - refer to Section 00230 for description of existing conditions

2. Salvage of existing materials - refer to Section 00230 for description of existing conditions.

3. Recycling of the waste generated during demolition and construction process - refer to Section 01560, Temporary Controls.

4. Procurement and installation of recycled content materials - refer to Section 01030, Alternate/Alternatives for the procedure of substituting a recycled content material for a conventional material.