

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes the construction waste management requirements necessary to achieve Certification under the Living Building Challenge version 3.1.

1.2 RELATED SECTIONS

- A. The following sections are related:
 - 1. 01 33 00 Submittal Procedures
 - 2. 01 81 13 Sustainable Design Requirements
- B. Additional Living Building Challenge requirements are included in individual sections.

1.3 REFERENCES

- A. Additional information on the Living Building Challenge and Certification requirements can be found:
 - 1. The International Living Future Institute webpage at www.living-future.org/lbc
 - 2. The Living Building Challenge version 3.1 standard
 - 3. The Living Building Challenge Dialogue
 - 4. The Living Building Challenge Petal Handbooks: Place, Water, Energy, Health and Happiness, Materials, Equity, and Beauty

1.4 CONTRACTOR COORDINATION REQUIREMENTS

- A. Coordinate submittal and construction efforts.
- B. Designate a Living Building Challenge representative responsible for:
 - 1. Attending Living Building Challenge project meetings,
 - 2. Coordinating submittals and contractor related Living Building Challenge documentation,
 - 3. Site inspections to ensure construction related Living Building Challenge measures are implemented and documented.
- C. Subcontractor training and coordination, specifically for the Living Building Challenge.

1.5 SUBMITTALS

- A. All submittals are to be submitted in accordance with section 01 33 00 Submittal Procedures.
- B. A draft Material Conservation Management Plan addressing the construction phase of the project is to be submitted within twenty-one (21) days of the notice to proceed and prior to the collection or removal of any construction or demolition debris. The final Material Conservation



Management Plan for the construction phase is to be submitted prior to any waste sorting or removal onsite. The plan will include, at minimum:

1. Waste thresholds outlined in the Net Positive Waste Imperative and approach for meeting each material category diversion threshold.
 2. Ordering and installation methods that will be implemented to reduce excess building materials onsite and minimize the damage and need for reinstallation of materials.
 3. Estimates of material types and quantities.
 4. Identified waste haulers, recycling facilities, salvage locations, and manufacturer take back programs. At a minimum, must include a final processing facility beyond a transfer station for each of the following material types:
 - a. Metals
 - b. Paper & Cardboard
 - c. Soil & Biomass
 - d. Rigid Foam, Carpet & Insulation
 - e. All Other Materials
 5. Identification of any known hazardous waste materials and narrative explanation of remediation and disposal activities.
 6. Narrative description of sub-contractor construction waste management training practices.
 7. Narrative explanation of materials sorting, storage and collection practices.
 8. Narrative and/or graphic highlighting material sorting and storage locations on site.
- C. A monthly report highlighting all project construction waste (including demolition waste) is to be submitted to the Sustainability Consultant or Owner's Representative for review. The report is to include all material salvaged, recycled, or landfilled, and any products returned to the manufacturer as part of a take back program. The report must include, at minimum, the following information:
1. Material type
 2. Date of haul/removal or sale
 3. Waste management or diversion method



4. Total amount of material removed from the site
 - a. All materials must be tracked using consistent unit type, either tracked by weight (i.e. tons) or by volume (i.e. cubic yards)
5. Material destination or hauler name
6. Receipt or ticket, when applicable

1.6 QUALITY ASSURANCE

- A. The contractor is responsible for compliance with all regulatory requirements pertaining to the legal disposal of construction and demolition waste material.

1.7 DEFINITIONS

- A. Authority Having Jurisdiction (AHJ): a federal, state, local or other regional authority having statutory authority over the project.
- B. End of Product Life: The point at which a product or material is no longer useful and repair or rework is not a viable option.
- C. Hazardous Materials: Materials or ingredients that could cause injury or death, pollute natural resources, or are highly corrosive or reactive.
- D. LBC: Living Building Challenge
- E. Landfill Waste: Refuse that is disposed of through burying or incineration and is not recycled or reworked.
- F. Manufacturer Take Back Program: Voluntary manufacturer program which makes the manufacturer responsible for the end of life of the product through take back and recycling, rework, or disposal.
- G. Recyclable Materials: Materials that, after the end of their useful life, have undergone major refurbishment or processing prior to reaching their current form.
- H. Salvageable Materials: Materials that have been previously used, but can be implemented within a project with little to no refurbishment or alteration.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 NET POSITIVE WASTE DIVERSION THRESHOLDS

- A. End of project diversion rates are to meet the following minimum material specific thresholds:
 1. Metals 99%
 2. Paper & Cardboard 99%
 3. Soil & Biomass 100%
 4. Rigid foam, Carpet & Insulation 95%
 5. All others- combined weighted average 90%



- B. Material sent to an incinerator, a waste-to-energy facility, or used as alternate daily cover is not to be reported as diverted or recycled.

3.2 CONSERVATION MANAGEMENT PLAN EXECUTION

- A. The General Contractor is responsible for all implementation, training, and reporting measures outlined in the final, approved Conservation Management Plan.

3.3 PROGRESS REPORTING AND COMMUNICATION

- A. The general contractor is responsible for all construction waste tracking, reporting, and, as required by the Sustainability Consultant or Owner's Represented, corrections.
- B. The general contractor is responsible for reporting construction waste management progress at scheduled Living Building Challenge coordination meetings.

3.4 INSTALLATION

- A. Staged materials are to be stored in an area that is weather tight and away from high traffic areas to prevent potential damage.
- B. All materials are to be installed per the manufacturer's published guidelines to minimize damage and eliminate the need for replacement materials.
- C. Protect installed materials in high traffic areas to prevent damage throughout the construction process.

3.5 CONSTRUCTION AND DEMOLITION DEBRIS HANDLING

- A. The general contractor is responsible for designating an area for the sorting and storage of construction and demolition debris. Area(s) should be clearly communicated to all onsite personnel.
- B. Construction waste and debris is to be hauled in an appropriate container and secured and covered to prevent contamination or loss of material.

3.6 REPORTING EXCEPTIONS

- A. Hazardous materials in demolition waste are exempt from percentage calculations. Documentation of proper disposal must be provided.
- B. Surplus materials may be diverted to concurrent or future projects without a receipt. Documentation must be provided demonstrating the plan for the use of all surplus diverted materials, including photos, quantity and use of each material.

END OF SECTION