PART 1 GENERAL

1.01 PROJECT GOALS
   A. Many of the sustainable design credits can be achieved only through intelligent design of the project and are beyond the control of the Contractor. However, certain credits relate to the products and procedures used for construction. Therefore, the full cooperation of the Contractor and subcontractors is essential to achieving final certification.
   B. Contractor shall familiarize himself with the relevant requirements and provide the necessary information and instruction to all subcontractors and installers.
   C. Since Contractor and subcontractors may not be familiar with sustainable design requirements, this section includes a summary of the products and procedures intended to achieve sustainable design credits.
      1. Some credits are dependent on proper performance by Contractor and subcontractors.
      2. Other credits involve quantifying percentages by weight or volume and cost; these require careful recordkeeping and reporting by the Contractor.

1.02 RELATED REQUIREMENTS
   A. Section 01.30.00 - Administrative Requirements: Additional submittal requirements.
   B. Section 01.61.16 - Volatile Organic Compound (VOC) Content Restrictions.
   C. Section 01.78.56 - Sustainable Design Verification Form.

1.03 DEFINITIONS
   A. Product Reporting Scope: All products in the following product categories, whether specified or not:
      1. Exterior and interior paints and coatings.
      2. Interior adhesives and sealants, including flooring adhesives.
      3. Flooring.
      4. Products making up wall and ceiling assemblies.
      5. Thermal and acoustical insulation.

1.04 REFERENCE STANDARDS
   A. State of Tennessee Sustainable Design Guidelines.

1.05 SUBMITTALS
   A. See Section 01.30.00 - Administrative Requirements, for additional submittal procedures.
   B. See Section 01.78.56 - Sustainable Design Verification Form for additional documentation requirements.
   C. Sustainable Design Documentation: The scope of required documentation is specified in some individual specification sections; other scope is specified in this section and its related forms only.
   D. New Product Documentation: For each new product in the Product Reporting Scope, submit the Material Content Form, with evidence of compliance attached.
   E. Product Cost Statement: Submit the total cost of all products defined as in the Product Reporting Scope, above, including purchase price, taxes, and delivery to site, but not labor, tools, or equipment for installation; submit prior to or along with initial application for payment; update and re-submit whenever the total cost changes due to contract modifications.
1.06 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

A. Sustainable design documentation is to be in electronic (PDF) format and transmitted via email.
   1. The types of submittals for which email must be used include those for credits that relate to materials, and any others designated by Architect.
   2. For credits for which achievement requires substantiation of material type, quantity, and cost, submit receipts showing purchase of materials for this project.
   3. Contractor and Architect are required to transmit via email.
   4. It is Contractor's responsibility to submit documents in PDF format.
   5. Subcontractors, suppliers, and Architect's consultants are required to use email transmission as well.
   6. Users need an email address, Internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, www.adobe.com, or Bluebeam PDF Revu, www.bluebeam.com).
   7. Paper document transmittals will not be reviewed.
   8. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 PROCEDURES

A. All sustainable design documentation is to be submitted by Contractor, using the procedures defined for Submittals for Information in Section 01.30.00.
B. Use of electronic submission is required.
C. Submit sustainable design documentation to Architect, unless otherwise indicated.
D. Where an item of sustainable design documentation is specified, fill out and submit the appropriate form.
   1. Fill out one form for each different brand name product and each different manufacturer of a lot of commodity products.
   2. Where required attachments are specified, attach the documentation to the back of the form.
   3. Mark each blank with the appropriate information; use "ATT" for items attached; if any item is not relevant use the code "NR"; if any item is not available use the code "NA".
E. Each form must be signed by the entity capable of certifying the information.
   1. Certification signatures must be made by an officer of the company.
   2. For products, certification must be made by the manufacturer not the supplier.
   3. For custom fabricated products, certification by the fabricator is acceptable.
F. Submit the completed forms in accordance with the requirements of Section 01.30.00, as information submittals.
   1. Give each form a unique submittal number.
   2. Do not combine sustainable design documentation with product data or shop drawing submittals.

3.02 DIVISION 1 - GENERAL REQUIREMENTS

A. Sections that include requirements intended to achieve sustainable design goals are, but are not limited to, the following:
B. Section 01.10.00 - Summary:
   1. List of materials and equipment to be salvaged from existing building for re-use or relocation on project.
C. Section 01.33.29.04 - Material Content Form: Form with checklist for documenting product content, emissions, health effects, sources, and costs.

D. Section 01.57.13 - Temporary Erosion and Sediment Control: Preventive measures and remediation.

E. Section 01.57.21 - Indoor Air Quality Controls:
   1. Basic construction procedures.
   2. Contractor's IAQ management plan and construction procedures.
   3. Building flush out is required, but at Contractor's option, may be performed before occupancy or partially after occupancy.
   4. Air contaminant testing may be substituted for building flush out, at Contractor's option.

F. Section 01.60.00 - Product Requirements:
   1. Definitions of:
      a. Reused Products.
      b. Recycled Content.
      c. Bio-Based content.
      d. Sustainably Harvested Wood, which is defined as certified by FSC only.
      e. Source Location.
      f. Environmental Product Declarations.
      g. Health Product Declarations.
      h. Cradle-to-Cradle.
      i. GreenScreen Chemical Hazard Analysis.
      j. Manufacturer's Inventory of Product Content.

G. Section 01.61.16 - Volatile Organic Compound (VOC) Content Restrictions: List of indoor-emissions-restricted products and VOC-content-restricted products, requirements, evidence required, and reporting.

H. Section 01.74.19 - Construction Waste Management and Disposal: Summary accounting of demolished materials and disposal of same; summary accounting of construction waste materials and disposal/landfill diversion of same.

I. Section 01.77.70 - Closeout Procedures:
   1. Dust control and basic surface drainage.

J. Section 01.78.21 - Closeout Submittals: Maintenance and operations manuals for commissioned systems.

K. Section 01.79.21 - Demonstration and Training:
   1. Demonstration of commissioned systems and equipment.
   2. Training of Owner's personnel.

L. Section 01.79.25 - Demonstration and Training Verification: Requirements related to documentation of Owner training.

M. Section 01.91.13 - Commissioning.

3.03 DIVISION 2 - EXISTING CONDITIONS

A. Section 02.41.00 - Demolition:
   1. Demolition of existing pavements and other impervious surfacing.

3.04 DIVISION 3 - CONCRETE

A. Section 03.30.00 - Cast-in-Place Concrete: Replacement of Portland cement, to some extent, with recycled content.

B. Section 03.45.00 - Precast Architectural Concrete: Replacement of Portland cement, to some extent, with recycled content.
3.05 DIVISION 7 - THERMAL AND MOISTURE PROTECTION
   A. Section 07.54.00 - Thermoplastic Membrane Roofing: Unballasted white or light colored roofing with minimum SRI specified.
   B. Section 07.84.00 - Firestopping: Emissions-compliant firestopping sealants.
   C. Section 07.92.00 - Joint Sealants: Emissions-compliant sealants.

3.06 DIVISION 9 - FINISHES
   A. Section 09.68.13 - Tile Carpeting: Carpet tile complying with CRI Green Label Plus requirements.
   B. Section 09.91.23 - Interior Painting: Emissions-compliant interior opaque paints and coatings.

3.07 DIVISION 11 - EQUIPMENT
   A. Section 11.31.00 - RESIDENTIAL APPLIANCES: Energy Star rated appliances.
   B. Section 11.40.00 - Foodservice Equipment: Energy Star rated appliances.
   C. Section ____ - Solid Waste Bins: Recycling storage containers.

3.08 DIVISION 12 - FURNISHINGS
   A. Section 12.24.00 - Window Shades: Motorized window shades.
   B. Section 12.93.00 - Site Furnishings: Benches for places of respite; metal, precast concrete, and wood.

3.09 DIVISION 22 - PLUMBING
   A. Section 22.10.05 - Plumbing Piping: Potable and non-potable water distribution.
      1. Documentation of products meeting regulatory lead-content restrictions.
      2. Certification of proper soldering of copper piping joints.
   B. Section 22.30.00 - Plumbing Equipment: Plumbing pumps for non-potable water distribution.
   C. Section 22.40.00 - Plumbing Fixtures:
      1. WaterSense-labeled water closets, urinals, lavatory faucets, and showerheads.
      2. High efficiency and dry toilet fixtures; occupant sensors.

3.10 DIVISION 23 - HVAC
   A. Section 23.08.00 - Commissioning of HVAC.
   B. Section 23.09.23 - Direct-Digital Control System for HVAC:
   C. Section 23.09.93 - Sequence of Operations for HVAC Controls.
   D. Section 23.21.13 - Hydronic Piping: Connection to non-potable water distribution.
   E. Section 23.31.00 - HVAC Ducts and Casings: For mechanical ventilation.
   F. Section 23.31.00 - HVAC Ducts and Casings: Emissions-compliant duct sealers.
   G. Section 23.74.13 - Packaged Outdoor Central-Station Air-Handling Units: Refrigerant options are limited those with ODP of zero and GWP of less than 50.

3.11 DIVISION 26 - ELECTRICAL
   A. Section 26.05.19 - Low-Voltage Electrical Power Conductors and Cables: Conductors and cables meeting lead-content restrictions.
   B. Section 26.22.00 - Low-Voltage Transformers: Replacement transformers.
D. Section 26.51.00 - Interior Lighting:
E. Section 26.56.00 - Exterior Lighting:

3.12 DIVISION 31 - EARTHWORK
A. Note: Temporary erosion and sediment control is located in Division 1.
B. Section 31.10.00 - Site Clearing: Fences to protect vegetation not being removed; vegetation removal limits are shown on the drawings; site clearing waste management.
C. Section 31.22.00 - Grading.

3.13 DIVISION 32 - EXTERIOR IMPROVEMENTS
A. Section 32.13.13 - Concrete Paving.
B. Section 32.92.19 - Seeding.
C. Section 32.93.00 - Plants: See drawings for specific plant materials.

3.14 DIVISION 33 - UTILITIES
A. Section 33.05.13 - Manholes and Structures.
B. Section 33.41.11 - Site Storm Utility Drainage Piping.

END OF SECTION