

SECTION 01 81 14

HIGH PERFORMANCE BUILDING REQUIREMENTS (HPBr)

*****Spec writer note: any text formatted in this manner is a general note for the spec writer and should be deleted prior to finalizing / printing the specification*

****Spec writer note: Bracketed text highlighted in green indicates multiple options to choose from. Prior to finalizing / printing this specification, remove brackets from the selected option and delete other options.*

****Spec writer note: Edit red specification section numbers to be project-specific*

PART 1 – GENERAL

1.01 DESCRIPTION

- A. The State of Tennessee High Performance Building Requirements (HPBr) is an Office of the State Architect (OSA) program acknowledged by the State Building Commission (SBC) whose goal is to provide a minimum standard of high performance building attributes for Designers and Contractors. It is to be used as a mandatory design, construction, and operations tool for all SBC projects including new construction, additions, and renovation / maintenance.
- B. The Designer and Owner have selected materials and utilized integrated design processes that achieve the State of Tennessee's objectives for high performance buildings. The Contractor is responsible for maintaining and supporting these objectives in developing means and methods for performing work and in proposing product substitutions or changes to specified processes.

*****Spec writer note: ensure that the project specific HPBr Checklist/Tracking Form worksheet is provided as attachment to this section*

- C. A copy of the HPBr Checklist/Tracking Form worksheet is found as an attachment to this section which summarizes the HPBr credits intended to be achieved.
- D. The Contractor shall review the project-specific HPBr Checklist/Tracking Form worksheet for those credits for which the Contractor has a responsibility in achieving. The Contractor shall respond to the Designer and the Owner regarding credits that are the responsibility of the Contractor, that depend on product selection or product qualities, or that depend on Contractor's procedures. Contractor shall document responses as informational submittals. Contractor shall inform Designer and/or Owner where credit applicability is questionable or where pursued credits may not be achieved. The Contractor shall also inform the Designer and Owner of credits which are achievable but are not shown as being pursued in the checklist.

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1.02 RELATED WORK

****Spec writer note: if you have global, project-specific submittal procedures included as a Division 1 spec, include it here. Otherwise, if project-specific submittal procedures are included in each respective spec section, remove this item.

A. Section 01 60 00 Submittal Procedures

****Spec writer note: this section is provided for reference only to the Designer, as it cross-references several HPBr credits and relevant specification sections. Review the ~~HPBr Checklist~~/[Tracking Form worksheet](#) for project-specific credits being pursued and make changes to the referenced spec sections to ensure that HPBr credit requirements are properly conveyed to the Contractor. Note that this is not an exhaustive list of spec sections that may contain HPBr credit requirements, and the Designer is ultimately responsible for conveying all applicable project requirements to the Contractor.

B. LM1.3 – Site Selection: Brownfield Redevelopment

1. Specify remediation documentation for contamination
 - a. Section 01 33 43 Abatement Submittals (HazMat)

C. LM5.2 – Heat Island Reduction

1. White membrane (high SRI) roofing
 - a. Section 07 53 00 Elastomeric Membrane Roofing
 - b. Section 07 54 00 Thermoplastic Sheet Roofing

D. MR2.1 – Construction Waste Management

1. Identify the target diversion rate within the Construction Waste Management Plan in Section 01 74 19 (50%, 75%, 95%).
2. Require the Contractor to track the overall waste diversion rate throughout construction and provide a submittal for the final achieved diversion rate.

E. MR3.1 or MR3.2 – Sustainable Materials: Recycled content

1. Give preference to materials that are high in Recycled Content, such that at least 10 percent or 20 percent (based on cost) of building materials is recycled (excludes MEP equipment cost).
2. Research local availability of fly-ash concrete and synthetic gypsum board for use in construction when appropriate
3. Consider specifying recycled content replacing Portland cement
 - a. Section 03 30 00 Cast-in-Place Concrete
 - b. Section 03 41 00 Precast Structural Concrete

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F. MR3.3 – Sustainable Materials: Tennessee-produced materials (non-wood)

1. Give preference to materials that are harvested, manufactured, or both manufactured and harvested, such that at least 10% (based on cost, excluding MEP equipment) is from the State of Tennessee.
2. Materials which satisfy the MR3.3 requirements can automatically be included in HPBr credit MR3.5 Regional Materials.
3. Specify regional quarries and/or manufacturers
 - a. Section 03 30 00 Cast-in-Place Concrete
 - b. Section 03 41 00 Precast Structural Concrete

G. MR3.4 – Sustainable Materials – Tennessee-produced materials (wood):

1. Give preference to wood-based materials that are harvested, manufactured, or both manufactured and harvested, such that at least 50% (based on cost, excluding MEP equipment) is from the State of Tennessee.
2. Materials which satisfy the HPBr credit MR3.4 requirements can automatically be included in HPBr credit MR3.5 Regional Materials.

H. MR3.5 – Sustainable Materials: Regional materials

1. Give preference to building materials that are regional to the project site, regardless of which state they are produced in, such that at least 20% (based on cost, excluding MEP equipment) of the project is comprised of materials harvested, manufactured, or harvested AND manufactured within 500 miles of the project.
2. Any materials that qualify for either HPBr credit MR3.3 or MR3.4 can also be counted for this credit
3. Additional credit is available under HPBr credit ID1.5 for achieving at least 30% Regional Materials.
4. Specify regional quarries and/or manufacturers
 - a. Section 03 30 00 Cast-in-Place Concrete
 - b. Section 03 41 00 Precast Structural Concrete

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- I. MR3.6 – Sustainable Materials – Salvaged Materials:
 - 1. Give preference to locally available resources for Salvaged Materials that meet the project’s functional and aesthetic needs. For example: if a school building is utilizing old markerboards from a previous renovation project, the Contractor shall provide the price of a new markerboard to account for value of Salvaged material (in lieu of avoided cost, actual market value of salvaged material may be provided).
- J. MR3.7 – Sustainable Materials: Rapidly renewable materials
 - 1. Where practical, utilize Permanently Installed natural materials of Rapidly Renewable origin (the list below outlines preferred Rapidly Renewable Materials; list other materials where appropriate):
 - a. Linoleum
 - b. Cotton batt insulation
 - c. Wool carpet
 - d. Cork flooring
 - e. Bamboo flooring
 - 2. Flooring made of rapidly renewable materials
 - a. Section 09 62 23 Bamboo Flooring
 - b. Section 09 62 29 Cork Flooring
- K. EQ6 – Material VOC Limits
 - 1. The Volatile Organic Compounds (VOC) content of Adhesives, sealants, and paints / coatings used must not exceed the limits established within Part 2 for interior products (those inside the weather barrier).
 - 2. Contractor to meet or exceed (VOC limits lower than the amounts outlined in Part 2) the VOC content limits of Adhesives, sealants, paints / coatings, flooring systems, composite wood and agrifiber products.
 - 3. EQ6.1 – Material VOC Limits: Sealants
 - a. VOC-compliant sealants
 - i. Section 07 84 00 Firestopping
 - ii. Section 07 92 00 Joint Sealants
 - 4. EQ6.2 – Material VOC Limits: Paints
 - a. VOC-compliant interior paints and coatings
 - i. Section 09 91 23 Interior Painting

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5. EQ6.4 – Material VOC Limits: Flooring systems
 - a. Give preference to carpet systems that meet or exceed the requirements of the Carpet and Rug Institute’s Green Label Plus *Indoor Air Quality Test* Program.
 - b. Give preference to carpet cushion installed in the building interior that meets the requirements of the Carpet and Rug Institute Green Label program.
 - c. Give preference to hard surface flooring that meets the testing and product requirements of FloorScore certification.
 - d. Tile, masonry, terrazzo, cut stone and solid wood flooring without coatings or sealant qualify for credit without testing.
 - e. Carpet complying with CRI Green Label Plus requirements and installation materials complying with CRI Green Label requirements and VOC-limits. Include a reference to FloorScore certification by Resilient Floor Covering Institute (RFCI) in conjunction with Scientific Certification Systems (SCS).
 - i. Section 09 68 00 Carpeting
 - ii. Section 09 68 13 Carpet Tile
6. EQ6.5 – Material VOC Limits: Composite Wood and Agrifiber products
 - a. Specify products that contain no added Urea-formaldehyde resins.
- L.** EQ7.2 – Pollutant Control: Hazardous material storage
 1. Door closers at rooms where hazardous gases or chemicals may be present, including copy/print rooms
 - a. Section 08 71 00 Door Hardware

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1.03 DEFINITIONS

- A.** Addition – an increase in floor area of a building outside of the existing building envelope.
- B.** Adhesive - A substance used to bond two surfaces together by attachment. Adhesives include all bonding and adhesive primers.
- C.** Brownfield – Property with the potential presence of hazardous substances, pollutants or contaminants which may complicate redevelopment efforts. See also www.epa.gov/brownfields.
- D.** Formaldehyde - Formaldehyde is a naturally occurring volatile organic compound which is carcinogenic and an irritant when present in relatively high concentrations. It has been known to cause headaches, dizziness, mental impairment, and other symptoms. When present in air at levels above 0.1 ppm (parts per million), it may cause watery eyes, burning sensations in the eyes, nose, and throat; nausea; coughing; chest tightness; wheezing; skin rashes; as well as asthmatic and allergic reactions.
- E.** Indoor Air Quality - The quality of air inside a space or building. Indoor air quality affects the health and well-being of building occupants.
- F.** Light Pollution - Waste light from building sites and lighting installations produces glare, when directed upward or off site.
- G.** Outdoor Air - The ambient air that enters a building through a ventilation system, through intentional openings for natural ventilation, or by infiltration.
- H.** Permanently Installed Building Product - products and materials that create the building or are permanently attached to it. Examples include structure and enclosure elements, installed finishes, framing, interior walls, cabinets and casework, doors, and roofs. Most of these materials and products fall within CSI 2012 MasterFormat Divisions 3-10, 31, and 32.
- I.** Recycled Content - Recycled Content of materials is defined according to Federal Trade Commission Guides for the Use of Environmental Marketing Claims (16 CFR Part 260). Recycled Content value of a material assembly is determined by weight. Recycled fraction of assembly is multiplied by cost of assembly to determine Recycled Content value.

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1. “Post-Consumer” material is defined as waste material generated by households or by commercial, industrial, and institutional facilities in their role as end users of the product, which can no longer be used for its intended purpose.
 2. “Pre-Consumer” material is defined as material diverted from waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind, or scrap generated in a process and capable of being reclaimed within the same process that generated it.
- J.** Regional Materials - Materials that have been extracted, harvested, or recovered, as well as manufactured, within 500 miles (800 km) of project site. If only a fraction of a product or material is extracted or harvested or recovered and manufactured locally, then only that percentage (by weight) must contribute to regional value.
- K.** Rapidly Renewable Material - Building materials and products which are made from plants that are typically harvested within a 10—year or shorter cycle.
- L.** Salvaged or Reused Materials - Construction materials recovered from existing buildings or construction sites and reused. Common Salvaged Materials include structural beams and post, flooring, doors, cabinetry, brick, and decorative items.
- M.** Sealant - Any adhesive with properties that have been specifically formulated to fill, seal, or waterproof gaps or joints between two surfaces. These may include primers and caulks.
- N.** Solar Reflectance Index (SRI) - SRI is the measure of a material’s ability to reject solar heat. It is defined so that a standard black surface (reflectance 0.05, emittance 0.90) is 0 and a standard white surface (reflectance 0.80, emittance 0.90) is 100. Once the maximum and minimum temperature rises of a given material have been computed, the SRI can be found by interpolating between the values for white and black. Materials with the highest SRI values are the coolest choices. Due to the way SRI is defined a relative scale, particularly hot materials may have slightly negative values, and particularly cool materials can sometimes exceed 100. (Lawrence Berkeley National Laboratory Cool Roofing Materials Database)
- O.** Urea Formaldehyde - A combination of urea and formaldehyde that is used in some adhesives and will sometimes emit formaldehyde at room temperature.
- P.** Volatile Organic Compounds (VOC) - Chemicals that are emitted as gases from certain solids or liquids. VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects.

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1.04 REFERENCES

- A.** Tennessee High Performance Building Requirements (HPBr) can be found within the Office of the State Architect's page on the following website (includes the Manual, ~~Checklist~~ HPBr Workbook, Owner's Project Requirements, FAQ Guide, and Quick Start Guide): <https://www.tn.gov/content/tn/osa/capital---real-estate/capital-projects/high-performance-building-requirements--hpbr-.html>

****Spec writer note: remove the following reference if HPBr credit LM2.1 – Site Disturbance is not pursued.

- B.** Tennessee Erosion and Sediment Control Handbook by the Tennessee Department of Conservation (TDEC).

****Spec writer note: remove the following reference if HPBr credit EQ5.1 is not pursued.

- C.** SMACNA – IAQ Guidelines for Occupied Buildings Under Construction, 2nd Edition (2007)

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1.05 SUBMITTALS

- A.** Product submittals to be provided with manufacturer documentation in accordance with [Section 01 60 00] [each respective spec section]:

*****Spec writer note: remove any paragraphs where specific HPBr credits are not being pursued.*

1. LM5.2 - Heat Island Reduction. Roof SRI data
2. [MR3.1], [MR3.2], [MR3.3], [MR3.4], [MR3.5], [MR3.6], [MR3.7] – Sustainable Materials.
 - a. Manufacturer’s product data with percentages of sustainable materials, by cost, used to calculate compliance with Materials & Resource credits. Note that credits MR3.6 Salvaged Material and MR3.7 Rapidly Renewable Materials are based on dollar amounts rather than percentage costs.
3. EQ5.1 – Air Quality Management: During Construction.
 - a. If permanently installed air handling units are used during construction, provide manufacturer’s cut sheets and product data highlighting the Minimum Efficiency Reporting Value (MERV) for filtration media installed at return air grilles.
 - b. If ANSI/SMACNA 008-2008, Chapter 3 approaches are employed, take a minimum of 18 construction photographs including six photographs taken on three different occasions during construction along with a brief description of each approach, documenting implementation of IAQ management measures, such as protection of ducts and on-site stored or installed absorptive materials
4. [EQ6.1], [EQ6.2], [EQ6.3], [EQ6.4], [EQ6.5] – Material VOC Limits.

Manufacturer’s product data including VOC content for all adhesives, sealants, paints / coatings, flooring systems, and urea-formaldehyde content of composite wood / agrifiber materials within the weather barrier.

- B.** As requirement for Final Payment, Contractor shall provide additional closeout submittals as follows:

*****Spec writer note: remove any paragraphs where specific HPBr credits are not being pursued.*

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1. LM1.3 – Site Selection: Brownfield redevelopment. Brownfield / contamination remediation certificate or similar documentation
2. LM2.1 – Site Disturbance: Sediment and Erosion control. Inspection reports confirming compliance with the Erosion and Sedimentation Control Plan
3. MR2.1 – Construction Waste Management. Waste hauler provided construction waste [receipts] [tickets] [reports] verifying level of diverted waste or salvaged material for the project.
4. [MR3.1], [MR3.2], [MR3.3], [MR3.4], [MR3.5], [MR3.6], [MR3.7] – Sustainable Materials. Materials and Resources Calculator, (found within the Checklist Workbook) verifying calculated Recycled Content (pre-consumer and post-consumer), regional content, resource reuse / material reuse, Rapidly Renewable Materials, and Tennessee-based material content (excluding MEP equipment).
5. EQ5.1 – Air Quality Management: During construction. Filter change log showing filters are replaced prior to occupancy

*****Spec writer note: If EQ5.2 is being pursued, select the option being used and delete all text pertaining to the other option.*

6. EQc5.2 – Air Quality Management: Before occupancy. Additional submittals to confirm implementation of the Construction Indoor Air Quality Management Plan [Option 1] [Option 2]
 - a. [Option 1 – Flush-out documentation which includes:
 - i. Product data for filtration media used during flush-out
 - ii. Product data for filtration media installed immediately prior to occupancy (if using phased flush-out)
 - iii. Project schedule detailing dates when flush-out begun and completed as well as a statement that filtration media was replaced after flush-out]
 - b. [Option 2 – Submit report from testing and inspecting agency indicating results of indoor-air-quality testing and documentation showing compliance with indoor-air-quality testing procedures and requirements]

*****Spec writer note: If 5 or less credits are applicable, select One-Time Completion Form ~~credit verification form.~~ Otherwise, select Credit Verification form.*

7. Signed [Credit Verification] [One-Time Completion] Form found within the HPBr ~~Checklist~~ Workbook

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2.01 PERFORMANCE CRITERIA

****Spec writer note: Review the HPBr Checklist and remove paragraphs for credits not being pursued.*

- A.** LM5.2 – Heat Island Reduction: Roof. Finished roof surface shall have an SRI of 78 or greater for at least 75% or more of the roof surface.
 - 1. Contractor shall include SRI value in submittal documentation.
- B.** MR2.1 - Construction Waste Management. No less than [50] [75] [95] percent or more waste material (excluding soil, by [weight] [volume]) from construction has been diverted from the landfill to be salvaged or recycled.
 - 1. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
 - 2. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- C.** MR3.1 [and MR3.2] – Sustainable Materials: Recycled content. Not less than [10] [20] percent of building materials (by cost, excluding MEP equipment) must contain Recycled Content. For the purposes of documenting credit compliance, pre-consumer recycled content is only worth half of the value of post-consumer recycled content.
- D.** MR3.3 Regional Materials. Not less than 10 percent of non-wood building materials (by cost, excluding MEP equipment) must be based in and/or manufactured from the state of Tennessee.
- E.** MR3.4 Regional Materials; not less than 50 percent of wood-based building materials (by cost, excluding MEP equipment) must be based in and/or manufactured from the state of Tennessee.

*****Spec writer note: if targeting HPBr credit ID 1.5 for 30% Regional Materials, indicate below by selecting appropriate text.*

- F.** MR3.5 [and ID1.5] Regional Materials; not less than [20] [30] percent of building materials (by cost) must be regional material.

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2.02 VOC Limit Table

EQ Table – Material VOC Limits	
Architectural Adhesives (g/L less water):	
a. Indoor Carpet:	50
b. Carpet Pad:	50
c. Wood Flooring	100
d. Rubber Floor:	60
e. Subfloor:	50
f. Ceramic Tile:	65
g. VCT & Asphalt:	50
h. Drywall & Panel:	50
i. Cove Base:	50
j. Multipurpose:	70
k. Structural Glazing:	100
Specialty Adhesives (g/L less water):	
a. PVC Welding:	510
b. CPVC Welding:	490
c. ABS Welding:	325
d. Plastic Cement:	250
e. Primer for Plastic:	550
f. Contact:	80
g. Special Purpose Contact:	250
h. Structural Wood Member:	140
i. Sheet Applied Rubber:	850
j. Top & Trim:	250
Substrate Specific (g/L less water):	
a. Metal to Metal:	30
b. Plastic Foams:	50
c. Porous Material (except wood):	50
d. Wood:	30
e. Fiberglass:	80
Sealants (g/L less water):	
a. Architectural:	250

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b. Architectural Porous:	775
c. Non-membrane Roof:	300
d. Roadway:	250
e. Single-Ply Roof Membrane:	450
f. Other:	750
g. <i>Aerosol</i> General Purpose mist spray: 65% VOCs by weight	
h. <i>Aerosol</i> General Purpose web spray: 55% VOCs by weight	
i. <i>Aerosol</i> Special Purpose:	70% VOCs by weight
Paints (g/L less water):	
a. Flats:	50
b. Non-Flats	50
Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates:	
a. VOC limit is (g/L less water):	250
Coatings (g/L less water)	
a. Clear wood finish, varnish:	350
b. Clear wood finish, lacquer:	550
c. Floor coatings:	100
d. Sealers and undercoaters:	200
e. Shellac, clear:	730
f. Shellac, pigmented:	550
g. Stain:	250

PART 3 – EXECUTION

3.01 SPECIAL REQUIREMENTS

****Spec writer note: Review the project-specific ~~HPB~~-Checklist/Tracking Form worksheet and remove respective specification paragraphs below for credits not being pursued*

- A.** EQ5.2 Construction Indoor Air Quality Management additional requirements, the Contractor shall develop and implement an Indoor Air Quality Management plan for the pre-occupancy phase as follows:

*****Spec writer note: Select either Option 1 or Option 2, delete all text associated with the option not chosen*

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1. Option 1 – Flush-out: After construction ends, prior to occupancy and with all interior finishes installed, perform a building flush-out by supplying a total air volume of 14,000 cu.ft. of Outdoor Air per sq.ft. of floor area while maintaining an internal temperature of between 80 and 60 degrees F and *relative humidity* no higher than 60%.
 - a. If occupancy is desired prior to completion of the flush-out, the space may be occupied following delivery of a minimum of 3,500 cu.ft. of Outdoor Air per sq.ft. of floor area to the space. Once a space is occupied, it shall be ventilated per the design minimum outside air rate determined from ASHRAE 62.1-2007 or the 2012 IMC.
 - b. During each day of the flush-out period, *ventilation* shall begin a minimum of three hours prior to occupancy and continue during occupancy. These conditions must be maintained until a total of 14,000 cu.ft./sq.ft. of outside air has been delivered to the space.
2. Option 2 - Perform air quality testing
 - a. Conduct baseline indoor-air-quality testing, after construction ends and furniture has been moved in as well as prior to occupancy, using testing protocols consistent with the EPA’s “Compendium of Methods for the Determination of Air Pollutants in Indoor Air,” and as additionally detailed in the HPBr Manual.
 - b. Demonstrate that contaminant maximum concentrations listed below are not exceeded:
 - i. Formaldehyde: 27 ppb.
 - ii. Particulates (PM10): 50 micrograms/cu. m.
 - iii. Total Volatile Organic Compounds (TVOC): 500 micrograms/cu. m.
 - iv. 4-Phenylcyclohexene (4-PH): 6.5 micrograms/cu. m.
 - v. Carbon Monoxide: 9 ppm and no greater than 2 ppm above outdoor levels.
 - c. For each sampling point where maximum concentration limits are exceeded, conduct additional flush-out with outside air and retest the specific parameter(s) exceeded to indicate the requirements are achieved. Repeat procedure until requirements have been met. When retesting non-complying building areas, take samples from same locations as in the first test.
 - d. Air-sample testing must be conducted as follows:

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- i. Measurements must be conducted prior to occupancy but during normal occupied hours, and with building ventilation system starting at the normal daily start time and operated at minimum outside air flow rate for occupied mode throughout duration of air testing.
- ii. Building must have interior finishes installed including millwork, doors, paint, carpet, and acoustic tiles. Non-fixed furnishings such as workstations and partitions are encouraged, but not required, to be in place for testing.
- iii. Number of sampling locations varies depending on size of building and number of ventilation systems. For each portion of building served by a separate ventilation system, number of sampling points must not be less than one per 25,000 sq. ft. (2300 sq. m) or for each contiguous floor area, whichever is larger, and must include areas with the least ventilation and greatest presumed source strength.
- iv. Air samples must be collected between 3 and 6 feet (0.9 and 1.8 m) from the floor to represent the breathing zone of occupants, and over a minimum four-hour period.

B. ID1.1 Watershed Restoration:

1. Follow TDEC guidelines for all restoration activities implemented on site in compliance with credit.

C. ID1.4 Construction Site Energy Efficiency

1. Contractor shall implement a minimum of two of the following requirements during construction:
 - a. Utilize alternative fuels such as bio-diesel in construction equipment
 - b. During construction, meet the site lighting criteria of LM7.2 and LM7.3
 - i. LM7.2 Use fixture types designed as “cutoff” and “full-cutoff” styles to reduce light pollution, specifically minimizing fixture lumens emitted at 90 degrees or higher from straight down.
 - ii. LM7.3 Design the placement and fixture styles of site and all exterior lighting to minimize light trespass at the site boundary. Document the foot-candle levels at the site boundary with a site illumination model.
 - c. During construction, coordinate evening site lighting with local curfew hours

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3.02 ATTACHMENTS

*****Spec writer note: attach the ~~completed Checklist workbook tabs~~ applicable HPBr Workbook worksheets. Additionally For projects pursuing MR credits 3.1 through 3.7, a blank electronic version of the Materials and Resources Calculator should be sent to the Contractor for his/her completion and submission during the project as outlined in this specification.*

~~A.~~ Tennessee HPBr Checklist

~~B.A.~~ ~~[Tennessee HPBr One-Time Completion/Tracking~~ Form

~~C.B.~~ ~~]~~ [Tennessee HPBr Credit Verification Form]

~~D.C.~~ Tennessee HPBr Materials and Resources Calculator

~~D.~~ ~~Tennessee HPBr One-Time Completion Form~~

END OF SECTION 01 81 14