PLANNING AND DEVELOPMENT SERVICES
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Green Construction Code Submittal Checklist

Case #: _____

Date: _____ **Project Name**: _____

Site Address: _____

Note

- This submittal checklist is in addition to other required submittal checklists for construction projects intending to meet the City of Boise Green Construction Code.

Application Submittal

Building permit applications and plans are submitted to the city through our Electronic Plan Review System. This checklist must be completed as part of the required documentation.

> **Our ePlanReview system** lets you submit documents and plans electronically for review. Go to www.cityofboise.org/pds for more information. All electronic flies must meet the requirements specified in the "Electronic Plan Review Submittal Standards" document. Electronic Files that do not meet these requirements will not pass pre-screen review. www.cityofboise.org/pds/ePlanReviewStandards

Application Acceptance

- Incomplete submittals will not be accepted. Applicants with incomplete submittals must upload additional documents and work with staff to provide the correct documentation.
- Plans must be accepted as complete, and all review fees must be paid before review can begin.

Instructions

- Checklist must be completed by the project's Idaho-licensed design professional of record (or applicant if design professional not required) and uploaded with the application, and the plans and documents (ePlanReview).
- The checklist is not complete unless all information is filled out, all appropriate boxes are checked and all plan page numbers are listed.

Green Construction Code Compliance **(Note project type/green construction method)**

Project Type: ☐ **New Building (including site)** ☐ **Addition** ☐ **Existing Building**

Green Construction Method

Yes N/A

☐ ☐ **U.S. GREEN BUILDING COUNCIL LEED DESIGN – Version_____**

Choose Certification Level: ☐ Platinum ☐ Gold ☐ Silver ☐ Certified (existing buildings only)

☐ **LEED Registration Documentation.** Submit for project.

☐ **LEED Credits/Points Checklist.** Submit for project.

☐ Submit a **Functional & Performance Testing (FPT) and Commissioning Providers form.** Include provider qualifications.

☐ **Building commissioning plan.** Submit for project (e.g. mechanical systems, lighting and electrical systems including controls, other applicable items required by LEED). Building commissioning requirements notes to also be provided on plans. [Page(s) _____]

☐ **Plans and documents.** Submit compatible with the design outlined in the LEED Credits/Points Checklist. Plans drawn to scale on minimum 18" x 24" size sheets. Architectural stamped and signed by an Idaho licensed architect; Civil, Plumbing, Mechanical and Electrical stamped and signed by Idaho licensed engineers. **Include a Green Code Summary Sheet in plan set**:
[Page(s) _____] **Note:** Remaining items in this submittal checklist are not required to be completed for this method.

☐ ☐ **GREEN BUILDING INITIATIVE – GREEN GLOBES**

Choose Certification Level: ☐ Four Green Globes ☐ Three Green Globes
☐ Two Green Globes ☐ One Green Globe (existing buildings only)

☐ **Green Globes Registration Documentation.** Submit for project.

☐ **Green Globes Credits/Points Checklist.** Submit for project.

☐ Submit a **Functional & Performance Testing (FPT) and Commissioning Providers form.** Include agency qualifications.

☐ **Building commissioning plan.** Submit for project (e.g. mechanical systems, lighting and electrical systems including controls, other applicable items required by Green Globes). Building commissioning requirements notes to also be provided on plans. [Page(s) _____]

☐ **Plans and documents.** Submit compatible with the design outlined in the Green Globes Credits/Points Checklist. Plans drawn to scale on minimum 18" x 24" size sheets. Architectural stamped and signed by an Idaho licensed architect; Civil, Plumbing, Mechanical and Electrical stamped and signed by Idaho licensed engineers. **Include a Green Code Summary Sheet in plan set:** [Page(s) _____] **Note:** Remaining items in this submittal checklist are not required to be completed for this method.

☐ ☐ **ICC-700 NATIONAL GREEN BUILDING STANDARD (An option for R-2 and R-4 residential buildings, R-3 residential buildings, and detached one-and two-family dwellings or townhouses not more than three stories in height.)**

Choose Rating Level: ☐ Emerald ☐ Gold ☐ Silver ☐ Bronze

☐ **Plans and documents.** Submit compatible with the design requirements of ICC-700. Plans drawn to scale on minimum 18" x 24" size sheets. Architectural stamped and signed by an Idaho licensed architect; Civil, Plumbing, Mechanical and Electrical stamped and signed by Idaho licensed engineers. **Include a Green Code Summary Sheet in plan set:**
[Page(s) _____]
Note: Remaining items in this submittal checklist are not required to be completed for this method.

Yes N/A

☐ ☐ **INTERNATIONAL GREEN CONSTRUCTION CODE (IgCC) – Include a Green Code Summary Sheet in plan set:** [Page(s) _____] **Note:** Remaining items noted in this submittal checklist below must be completed for this method. **Note:** See the Boise City Green Construction Code ordinance for amendments to the IgCC.

IGCC Documents Provided

Yes N/A

☐ ☐ **Planning & Zoning letter(s) of approval and/or Development Agreement** – i.e. If the building and site are agreed upon to be green construction in the Planning approval, if the site is located in a Flood Hazard Area, a Waterways Overlay District, or in a Hillside & Foothills Development area.

☐ **Plans** with IgCC green construction components and notes incorporated into the plans. Plans drawn to scale on minimum 18" x 24" size sheets. Architectural stamped and signed by an Idaho licensed architect; Civil, Plumbing, Mechanical and Electrical stamped and signed by Idaho licensed engineers.

☐ Reference **Table 101.4.1.1 Requirements Determined By The Jurisdiction** in the Boise City Green Construction Code ordinance for applicable provisions.

IGCC Chapter 5 – Site Sustainability

Yes N/A

☐ ☐ **Stormwater Pollution Prevention Plan and Predesign Site Inventory and Assessment.** Regardless of the size of the site, a Stormwater Pollution Prevention Plan (SWPPP) in accordance with IDEQ, IPDES Construction General Permit, and per Construction Site Erosion Control ordinance of Boise City Code.

Also include a Predesign Site Inventory and Assessment as appendices to the SWPPP indicating natural resources and baseline conditions of the building project site, any prohibited development areas (flood hazard areas, waterways overlay districts, near fish/wildlife habitat conservation areas or other conservation areas, near wetlands) on or adjacent to the building project site, identification of and removal plan of invasive plant species on the site, identification of native plant species on the site and percentage protected, and identification and management of site features designated for preservation (vegetation, trees, soil, waterways, unique features).

☐ Narrative/Plan ☐ Plan Sheets [Page(s) _____]

☐ ☐ **Landscape plan with native and adaptive plants** showing protected existing landscaping and/or new landscaping on the site with not less than 60% of vegetative area in biodiverse planting of native or adaptive plants or low water use vegetation or rainfall-ETc compatible plants, other than turfgrass.

Exception: Dedicated sports/athletic fields, recreational fields, parks, golf courses, driving ranges, areas dedicated for production of food for human consumption, burial grounds, vegetated pavers, minimum fire lanes required, and other similar uses at the discretion of the code official.

[Page(s) _____]

☐ ☐ **Stormwater management system details** complying with Title 10, Public Utilities, Chapter 6, Stormwater Management and Discharge Control, of City Code, (Public Works has oversight of)

[Page(s) _____]

Yes N/A

☐ ☐ **Mitigation of Heat Island Effect – Site hardscape.** At least 50% of the site hardscape that is not covered by solar energy systems shall be provided with one or any combination of the following options:

☐ Shading by trees per 501.3.5.1 a.

☐ Paving materials with a minimum initial solar reflectance index (SRI) of 29. A default SRI value of 35 for new concrete without added color pigment is allowed in lieu of measurements.

☐ Open-graded (uniform sized) aggregate, permeable pavement, permeable pavers, and porous pavers (open-grid pavers). Permeable pavement and permeable pavers shall have a percolation rate not less than 2 gallons per minute per square foot.

☐ Shading by structures per 501.3.5.1 d. ☐ Parking under a building per 501.3.5.1 e.

☐ Buildings or structures that provide shade to the site hardscape per 501.3.5.1 f.

Exception. The code official may approve a percentage less, on a case-by-case basis, for portions of industrial type sites with limitations and/or having expansive amounts of paving need for the intended use, (i.e., next to airport, aircraft affiliated, large truck or vehicle loading and/or maneuvering areas).

[Page(s) _____]

☐ ☐ **IgCC Worksheet – Mitigation of Heat Island Effect form.** Submit for project.

☐ ☐ **Reduction of Light Pollution (exterior lighting systems) – Backlight and Glare** and **Uplight** complying with applicable sections of ANSI/ASHRAE/IES Standard 90.1, and the applicable sections and Tables in Chapter 5 of the IgCC. [Page(s) _____]

☐ ☐ **Pedestrian Walkways and Bicycle Paths.** Each primary building entrance provided with a 5 ft. minimum width pedestrian walkway that extends to either a public way or a transit stop. A public use walkway provided along the length of the adjoining public way frontage of the building project site, connected to adjacent public use walkways. On-site bicycle paths designed to connect bicycle parking areas to existing and planned off-site bicycle paths adjacent to the building project.

[Page(s) _____]

☐ ☐ **Bicycle Parking** spaces provided for at least 5% of the occupant load of each building but not less than two parking spaces. Projects with dwelling units to be provided with at least .5 bicycle parking spaces per bedroom for each building but not less than two parking spaces. See IgCC section for any exceptions. See IgCC Section for location, type of parking racks, minimum dimensions, lockability, security and visibility.

[Page(s) _____]

☐ ☐ **Site Vehicle Provisions.** Where on-site vehicle parking is provided for a building that has a building occupant load greater than 100, at least one of the following shall be provided:

☐ **Provisions for preferred parking spaces.** Not less than 5% of the parking spaces provided shall be designated as preferred parking for vehicles that meet both the minimum greenhouse gas and air pollution scores as required for USEPA SmartWay designation. See IgCC section for further provisions.

☐ **Provisions for electric vehicle charging infrastructure.** The building project shall comply with one of the following:

☐ Two or more electric vehicle charging stations shall be available to the building occupants and shall be located not more than ¼ mile from the building project.

☐ Electrical raceways shall be installed and extend from one or more of the building's electrical distribution panels to not less than the number of parking spaces specified in IgCC Table 501.3.7.3 to facilitate the future installation of vehicle charging stations. Electrical power distribution panels serving such raceways shall be sized to supply the future charging stations based on a design load of not less than 40 amp per required parking space at a supply voltage of not less than 208/240 VAC.

[Page(s) _____]

Yes N/A

☐ ☐ **Building Site Waste Management Plan.** Not less than 75 percent of land clearing debris, rock, and excavated soils shall be diverted from disposal in landfill and incinerators. Land clearing debris includes trees, stumps, and vegetation. This plan can be a deferred submittal, however, the plan must be submitted for review and approval prior to the first inspection on the construction site.

The plan shall address all of the following:

a. Land clearing debris, rock, and soil to be diverted from disposal by composting, recycling, or reuse.
b. Waste materials that will be diverted on-site.
c. The locations to which waste materials will be diverted off-site.
d. Soils to be stockpiled for future use at any location.
e. Woody waste to be used as fuel.
f. The destruction and disposal of invasive plant materials.
g. The methods of removal and location of treatment and/or disposal of any contaminated soils.

h. The treatment of vegetation to comply with the rules of government designated quarantine zones for invasive insect species.

Where it can be shown that diverting 75% is not feasible to the satisfaction of the code official, divert from the landfill to the maximum extent possible. Land clearing debris calculations shall be based on either weight or volume but not both. Receipts or other documentation related to diversion shall be maintained through the course of construction, and when requested by the code official, evidence of diversion shall be provided.

[Page(s) _____] - ***or*** - ☐ Deferred Submittal

IGCC Chapter 6 – Water Use Efficiency

Yes N/A

☐ ☐ **Alternate On-Site Sources of Water** can include rainwater/stormwater harvesting, air conditioner condensate, grey water from interior applications and treated, swimming pool filter backwash water, foundation drain water, industrial process water, and on-site wastewater treatment plant effluent, and must be permitted and approved by the Idaho Department of Environmental Quality (IDEQ) prior to permit approval by the City. See Boise City Green Construction Code ordinance amendment for further provisions.

☐ **IDEQ approval documents** **System design details.** [Page(s) _____]

☐ ☐ **Reclaimed Water.** The design of any reclaimed water and/or reuse system must be permitted and approved by the Idaho Department of Environmental Quality (IDEQ) prior to permit approval by the City. See Boise City Green Construction Code ordinance amendment for further provisions.

☐ **IDEQ approval documents** **System design details.** [Page(s) _____]

☐ ☐ **Irrigation (Optional).** When chosen to be complied with, landscaped areas not greater than 80% may be irrigated with potable water. All other irrigation shall be provided from alternate on-site sources of water or municipally reclaimed water. See applicable IgCC section and amendment for further provisions, and/or exceptions and for irrigation system design and controls. [Page(s) _____]

☐ ☐ **Plumbing fixtures and fittings** shall comply with applicable IgCC sections and Table 601.3.2.1. Note maximum flush volume or flow rates of fixtures in fixture schedules on plans.

[Page(s) _____]

☐ ☐ **Energy Star Qualified Appliances.** Note requirement on plans for clothes washers and dishwashers in dwelling units and commercial dishwashers and ice machines in commercial food-service facilities per IgCC provisions of Chapter 6. [Page(s) _____]

Yes N/A

☐ ☐ **HVAC systems and equipment** (cooling towers, chillers, evaporative coolers) shall comply with IgCC provisions of Chapter 6. [Page(s) _____]

☐ ☐ **Commercial Food Service Operations** (restaurants, cafeterias, food preparation kitchens, caterers, etc.) shall have equipment or appliances (prerinse spray valves, dishwashers, food steamers, ovens, ice machines, hands-free faucet controllers) comply with IgCC provisions of Chapter 6.
[Page(s) _____]

☐ ☐ **Medical and Laboratory Facilities** (clinics, hospitals, medical centers, physician and dental offices, and medical and nonmedical laboratories, etc.) shall have equipment or appliances (steam sterilizers, vacuum sterilizers, film processor water-recycling units, digital imaging and radiography systems, dry-hood scrubber system, wet-hood scrubber system, dry vacuum pumps, water treatment systems) comply with IgCC provisions of Chapter 6.
[Page(s) _____]

☐ ☐ **Water Consumption Measurement.** Water consumption management, consumption data collection, and data storage and retrieval shall comply with IgCC provisions of Chapter 6 (measurement devices, monitoring systems, submetering). [Page(s) _____]

☐ ☐ **Water Softeners** (demand-initiated regeneration, water consumption, waste connections, efficiency and listing) shall comply with IgCC provisions of Chapter 6. [Page(s) _____]

☐ ☐ **Onsite Reclaimed Water Treatment Systems.** The design of any onsite reclaimed water treatment systems (grey water reuse treatment, wastewater treatment, for use in water closets and urinals and surface irrigation or similar) must be permitted and approved by the Idaho Department of Environmental Quality (IDEQ) prior to permit approval by the City.

☐ **IDEQ approval documents** **System design details.** [Page(s) _____]

IGCC Chapter 7 – Energy Efficiency

Building energy systems shall comply with the "Mandatory Provisions" of IgCC Chapter 7 and either the "*Prescriptive Option*" method or the "*Performance Option*" method or the "*LEED EA Credit Option*".

Yes N/A

☐ ☐ **The LEED EA Credit Option: Optimize Energy Performance method from Normative Appendix E, Table E101.1** may also be chosen. Please check "Yes" box if this method is chosen, and if so, fill out the Mandatory Provisions Sections and then can move on to IgCC Chapter 8 in the Submittal Checklist.

☐ ☐ **Mandatory Provisions.** Building projects shall be designed to comply with the mandatory provisions of Sections 5.4, 6.4, 7.4, 8.4, 9.4, and 10.4 of ANSI/ASHRAE/ES Standard 90.1.
[Page(s) _____]

☐ ☐ **On-Site Renewable Energy Systems.** Building project design shall show allocated space and pathways for future installation of on-site renewable energy systems and associated infrastructure that provide the annual energy production equivalent of not less than 6.0 kBtu/ft2 for single-story buildings and not less than 10.0 kBtu/ft2 multiplied by the gross roof area in feet squared for all other buildings. See IgCC Section for any Exceptions.
[Page(s) _____]

☐ ☐ **Energy Consumption Management.** Measurement devices with remote communication capability shall be provided to collect energy consumption data for each energy supply source to the building (including gas, electricity, and district energy) that exceeds the thresholds listed in IgCC Table 701.3.3.1A. The measurement devices shall have capability to automatically communicate the energy consumption data to a data acquisition system.

For all buildings that exceed the threshold in IgCC Table 701.3.3.1A, subsystem measurement devices with remote capability (including current sensors or flowmeters) shall be provided to measure energy consumption data of each subsystem for each use category that exceeds the thresholds listed in IgCC Table 701.3.3.1B. The energy consumption data from the subsystem measurement devices shall be automatically communicated to the data acquisition system. [Page(s) _____]

Yes N/A

☐ ☐ **Energy Consumption Data Collection and Display.** All building measurement devices shall be configured to automatically communicate the energy data to the data acquisition system. Measurement devices shall provide daily data and shall record hourly energy profiles. Such hourly energy profiles shall be capable of being used to assess the building performance at least monthly. The hourly energy profiles shall be displayed. [Page(s) _____]

☐ ☐ **Data Storage and Retrieval.** The data acquisition system shall be capable of electronically storing data from the measurement devices and other sensing devices for a minimum of 36 months and creating user reports showing hourly, daily, monthly, and annual energy consumption. Portions of buildings used as residential are exempted.
[Page(s) _____]

☐ ☐ **Automated Demand Response (Optional).** When chosen to be complied with, *building projects* may contain *automatic* control systems that have the capability to reduce building equipment loads to lower electric peak demand of the building.

The building controls may be designed with automated demand-response (DR) infrastructure capable of receiving DR requests from the utility, electrical system operator, or third-party DR program provider and automatically implementing load adjustments to the HVAC and lighting systems. Consult with local utility company for any possible eligibility requirements. See IgCC Section in Chapter 7 for further provisions. [Page(s) _____]

Prescriptive-Based Compliance Method Option (to comply with IgCC Section 701.4)

Yes N/A

☐ ☐ **Prescriptive Option.** Where a requirement is specifically listed in the IgCC, Chapter 7, under the Prescriptive Option, it supersedes the requirement in ANSI/ASHRAE/IES Standard 90.1. For all other criteria, the building project shall comply with the provisions of ANSI/ASHRAE/IES Standard 90.1. [Page(s) _____]

☐ ☐ **On-Site Renewable Energy Systems (Optional)(Prescriptive Option).** When chosen to be complied with, *building projects* shall comply with either the Standard Renewables Approach in IgCC Section 701.4.1.1.1 (7.4.1.1.1) or the Alternate Renewables Approach in IgCC Section 701.4.1.1.2 (7.4.1.1.2). When complied with, this can be considered as equivalency to a Renewable Energy EA Credit in Normative Appendix E, Table E101.1. [Page(s) _____]

☐ ☐ **Building Envelope Requirements (Prescriptive Option).** The building envelope shall comply with the requirements in ANSI/ASHRAE/IES Standard 90.1, Tables 5.5-0 through 5.5-8, with the following modifications to values in each table. For opaque elements, each U-factor, C-factor, and F-factor in Tables 5.5-4 through 5.5-8 shall be reduced by 5%. The "Insulation Min. R-Value" column in ANSI/ASHRAE/IES Standard 90.1, Tables 5.5-4 through 5.5-8, shall not apply. For vertical fenestration and skylights, each U-factor shall be reduced by 5%. For skylights and east and west oriented vertical fenestration, each solar heat gain coefficient (SHGC) in Tables 5.5-0 through 5.5-8 shall be reduced by 5%. See IgCC Section for any Exceptions. These must also apply if the Building Envelope Trade-Off Option is chosen.
[Page(s) _____]

☐ ☐ **Air Curtains (Prescriptive Option).** Where provided at building entrances or building entrance vestibules, show locations and details in compliance with applicable IgCC Sections of Chapter 7, ANSI/AMCA 220, and per manufacturer's specifications (minimum velocity, automatic controls, etc.).
[Page(s) _____]

☐ ☐ **Vertical Fenestration Area (Prescriptive Option).** Total vertical fenestration area shall be less than 40% of the gross wall area, which supersedes the provisions of ANSI/ASHRAE/IES Standard 90.1, Section 5.5.4.2.1. [Page(s) _____]

Yes N/A

☐ ☐ **SHGC of Vertical Fenestration (Prescriptive Option).** Solar Heat Gain Coefficient (SHGC) shall comply with ANSI/ASHRAE/IES Standard 90.1 with the modifications/additions specified in the IgCC Sections and Table of Chapter 7. [Page(s) _____]

☐ ☐ **Heating, Ventilating, and Air Conditioning (Prescriptive Option).** The heating, ventilating, and air conditioning shall comply with ANSI/ASHRAE/IES Standard 90.1 and with the modifications/additions specified in the IgCC Sections of Chapter 7. [Page(s) _____]

☐ ☐ **Ventilation Controls for Densely Occupied Spaces (Prescriptive Option).** Demand control ventilation shall comply with ANSI/ASHRAE/IES Standard 90.1 and with the modifications/additions specified in the IgCC Sections of Chapter 7. [Page(s) _____]

☐ ☐ **Economizers (Prescriptive Option).** Economizers shall comply with ANSI/ASHRAE/IES Standard 90.1 and with the modifications/additions specified in the IgCC Sections and Table of Chapter 7.
[Page(s) _____]

☐ ☐ **Fan System Power and Efficiency (Prescriptive Option).** Fan systems shall comply with ANSI/ASHRAE/IES Standard 90.1 and with the modifications/additions specified in the IgCC Sections of Chapter 7. [Page(s) _____]

☐ ☐ **Kitchen Exhaust Systems (Prescriptive Option).** Kitchen exhaust systems shall comply with ANSI/ASHRAE/IES Standard 90.1 and with the modifications/additions specified in the IgCC Sections and Table of Chapter 7. [Page(s) _____]

☐ ☐ **Duct Insulation (Prescriptive Option).** Duct insulation shall comply with the minimum provisions in Normative Appendix A, Tables A-2 and A-3, which supersedes provisions of ANSI/ASHRAE/IES Standard 90.1. [Page(s) _____]

☐ ☐ **Automatic Control of HVAC and Lights in Hotel/Motel Guest Rooms (Prescriptive Option).** Hotels and motels with over 50 guest rooms to have automatic controls for the lighting, switched outlets, television, and HVAC equipment serving each guest room in accordance with the IgCC Sections in Chapter 7. Captive keycard systems are optional. [Page(s) _____]

☐ ☐ **Service Water Heating (Prescriptive Option).** Service water heating shall comply with ANSI/ASHRAE/IES Standard 90.1 and with the modifications/additions specified in the IgCC Sections of Chapter 7. [Page(s) _____]

☐ ☐ **Lighting (Prescriptive Option).** The lighting (interior and exterior) shall comply with ANSI/ASHRAE/IES Standard 90.1 and with the modifications/additions specified in the IgCC Sections and Tables of Chapter 7. [Page(s) _____]

☐ ☐ **Lighting in Commercial/Industrial Stack Areas (Prescriptive Option).** Unless the Exception applies, the lighting shall be controlled by an occupant sensor with a multi-level switching or dimming system that reduces lighting a minimum of 50% within 20 minutes after occupants leave the stack area. [Page(s) _____]

☐ ☐ **Controls for Exterior Sign Lighting (Prescriptive Option).** Unless the Exceptions apply, exterior sign lighting shall be provided with controls that reduce input power in accordance with IgCC Section 701.4.6.4. [Page(s) _____]

☐ ☐ **Parking and Outdoor Sales Lighting (Prescriptive Option).** Lighting serving uncovered parking areas and open areas in outdoor sales lots shall have controls in accordance with a. and b. of IgCC Section 701.4.6.5. [Page(s) _____]

Yes N/A

☐ ☐ **Energy Star Equipment (Prescriptive Option).** All building projects shall have Energy Star equipment and/or appliances as outlined in IgCC Section 701.4.7.3.1. [Page(s) _____]

☐ ☐ **Refrigerated Display Cases (Prescriptive Option).** All vertical standing refrigerated display cases shall be covered by using field-installed strips, curtains, or doors. [Page(s) _____]

Performance-Based Compliance Method Option (to comply with IgCC Section 701.5)

Yes N/A

☐ ☐ **Annual Energy Cost.** The proposed building performance cost index (with or without consideration of renewables) shall be calculated in accordance with ANSI/ASHRAE/IES Standard 90.1, and the applicable IgCC Normative Appendices specified, and be equal to or less than the Performance Cost Index (PCI) Target as determined in IgCC Section 701.5.1. [Page(s) _____]

☐ ☐ **Annual Carbon Dioxide Equivalent (CO_2e).** The proposed design shall have an annual CO_2e calculated and complying with IgCC Section 701.5.2. [Page(s) _____]

IGCC Chapter 8 – Indoor Environmental Quality (IEQ)

Yes N/A

☐ ☐ **Mandatory Provisions – Indoor Air Quality.** Buildings shall comply with the design requirements of ANSI/ASHRAE Standard 62.1 Sections 4 through 6 including applicable normative appendices with modifications and/or additions indicated herein, Standard 170 for Health Care Facilities, or Standard 62.2 Sections 4 through 8 including applicable normative appendices with modifications and/or additions indicated herein, for Residential Dwelling Units. [Page(s) _____]

☐ ☐ **Minimum Ventilation Rates** - Provide ventilation rates, the calculated outdoor airflow rates must be documented consistently in design, acceptance testing, commissioning (Cx) (where appropriate), and operations plans to ensure that the intended airflow rates are confirmed at initial occupancy and maintained over time. [Page(s) _____]

☐ ☐ **Outdoor Air Delivery Monitoring** - Permanently installed measuring device(s) to measure the minimum outdoor air intake and airflow that meets the monitoring requirements of Section 801.3.1.2.2. [Page(s) _____]

☐ ☐ **Filtration and Air Cleaner Requirements.** Both outdoor air entering the building and recirculated air shall utilize the following methods:

1. Healthcare facility Yes or No? If "Yes" ASHRAE/ASHE 170 applies.
2. Provide the minimum efficiency reporting value (MERV) for particulate matter air filters or cleaners.
3. Air filters, filter tracks, filter supports, and filter access doors shall be sealed per IgCC.

[Page(s) _____]

☐ ☐ **Mechanical Exhaust.** Mechanical systems shall include controls capable of disabling exhaust fans and closing exhaust dampers whenever mechanical intake airflow is discontinued. [Page(s) _____]

☐ ☐ **Venting of Combustion Products** - Products of combustion from any appliance, equipment or system that is permanently installed indoors shall be vented to the outside (unless any exceptions apply). [Page(s) _____]

☐ ☐ **Direct Evaporative Cooling (DX)** - Direct evaporative cooling systems shall include devices and controls capable of limiting HVAC zone relative humidity to not exceed 65% rh for more than 48 consecutive hours. [Page(s) _____]

Yes N/A

☐ ☐ **Environmental Tobacco Smoke** – Smoking shall not be allowed inside of buildings. No smoking signage shall be posted within 10 ft. of each building entrance. Designated smoking areas shall be located a minimum of 25 ft. away from building entrances, outdoor air intakes, and operable windows. [Page(s) _____]

☐ ☐ **Building entrances** – Unless any Exceptions apply, all building entrances shall employ an entryway floor system comprising of a scraper surface, an absorption surface, and a finish surface, in the direction of travel entering the building. The width of all surfaces must be no less than the width of the entry door or opening served. The scraper surface and absorptive surface must each be at least 3 feet in length. The finishing surface must be at least 4 feet in length. The resulting minimum total length of the entryway floor system is 10 feet. [Page(s) _____]

☐ ☐ **Guest Room Preoccupancy outdoor air purge cycle and ventilation control** – For hotel and motel guest rooms, provide methods for the preoccupancy purge cycle and ventilation controls per IgCC. [Page(s) _____]

☐ ☐ **Thermal Environmental Conditions for Human Occupancy.** The building shall be designed in compliance with ANSI/ASHRAE Standard 55, Sections 6.1, "Design," and 602, "Documentation."
[Page(s) _____]

☐ ☐ **Acoustical Control.** Provide details and STC ratings for all interior spaces within the building or structure as required in section 801.3.3, 801.3.3.3, and Table 801.3.3.3. Other elements in this section such as building envelope and related mechanical equipment are provided as designer options.
[Page(s) _____]

☐ ☐ **Soil-Gas Control.** Unless Exceptions apply, in known areas, per the Idaho Department of Health and Welfare, where elevated soil-gas may be present, soil-gas entry into enclosed spaces that are immediately above crawlspaces, slabs-on-grade, and basement slabs shall be controlled in accordance with Sections 801.3.4.1 or 801.3.4.2. Provide details on the soil-gas control system.
[Page(s) _____]

☐ ☐ **Lighting Quality.** Provide details and specifications for required lighting and lighting controls in enclosed office spaces and multi-occupant spaces. All minimum control requirements, such as multilevel and bilevel controls, task lighting, settings, manual controls, labeling, etc.…, must be satisfied.
[Page(s) _____]

☐ ☐ **Moisture Control.** Either a dynamic heat and moisture analysis, in accordance with ANSI/ASHRAE Standard 160, or steady-state water vapor transmission analysis, in accordance with Sections 801.3.6.1 and 801.3.6.2, shall be performed on above-grade portions of the building envelope and on interior partitions as described in Section 801.3.6.2. Conditions conducive to condensate formation, as demonstrated by analysis, shall not occur at any location within the building envelope or partition components or on the interior side of surfaces not specifically designed and constructed to manage moisture. [Page(s) _____]

☐ ☐ **Glare Control –** Unless Exceptions apply, view fenestration, in specified spaces, shall have one or more operable glare control devices capable of reducing the specular visible transmittance of the fenestration assembly to 3% or less. Occupant Override up to 2 hours. [Page(s) _____]

Prescriptive-Based Compliance Method Option (to comply with IgCC Section 801.4)

Yes N/A

☐ ☐ **Daylighting.** Unless Exceptions apply, provide methods for daylighting for the following items in section 801.4.1. Enclosed spaces, both conditioned and unconditioned, space in a building 3 stories or fewer above grade, space area is greater than 2,500 sq. ft., the space is directly under a roof with average ceiling heights greater than 15', must meet all of the criteria listed below:

☐ Minimum Daylight Area. For buildings that meet the conditions listed in Section 801.4.1.1.1 requires no less than 50 percent of the floor area in each enclosed space be a daylight area.
[Page(s) _____]

☐ Visible Transmittance (VT) of Skylights and Roof Monitors. Where enclosed spaces have a skylight, the visible transmittance shall not be less than 0.40, unless skylight effective aperture is of not less than 1 percent.
[Page(s) _____]

☐ Minimum Sidelighting Effective Aperture. Unless Exceptions apply, the spaces listed in Table 801.4.1.2A shall comply with items (a), (b) and (c) of this provision.
[Page(s) _____]

☐ Shading for Offices. Unless Exceptions apply, and when 250 sq. ft. and larger, show requirements with a shading projection factor (PF) having a minimum value of 0.5 on all first story façades and 0.25 for above grade stories. Can be external or internal. In other words, it requires that buildings have permanent shading.
[Page(s) _____]

Yes N/A

☐ ☐ **Materials.** All materials that emit contaminants that might enter the indoor air are considered indoor contaminant sources. The requirements of section 801.4.2 apply to all products installed or applied inside the weatherproofing system. Provide compliance specifications for the materials listed in these sections.

[Page(s) _____]

☐ ☐ **Lighting for Presentations.** Where spaces include vertical surfaces for presentations, lighting located within 3 feet horizontally from the permanently installed presentation surface must have separate lighting controls capable to turn off. Presentation surfaces for these requirements can include whiteboards, blackboards, chalkboards, and projection screens. [Page(s) _____]

Performance-Based Compliance Method Option (to comply with Section IgCC 801.5)

Yes N/A

☐ ☐ **Daylight Simulation.** In lieu of meeting the prescriptive requirements of Section 801.4.1, projects and applicable spaces may comply with the performance requirements of Section 801.5.1, which requires compliance with both minimum daylight provisions, Section 801.5.1.1 and excessive sunlight provisions, Section 801.5.1.2. [Page(s) _____]

☐ ☐ **Materials.** In lieu of following the prescriptive requirements for materials under Section 801.4.2, project teams are allowed to comply by showing acceptable emission levels by complying with this performance option. In addition, the modeling for the building shall include, at a minimum, the criteria listed in Normative Appendix D of this code. [Page(s) _____]

☐ ☐ **Lighting for Presentations.** Lighting systems shall be provided and shall be controllable by the occupants so as to meet the illuminance and uniformity requirements specified in items (a) through (c) for each permanently installed presentation system. [Page(s) _____]

IGCC Chapter 9 – Materials and Resources

Yes N/A

☐ ☐ **Construction Waste Material Diversion.** A minimum of 35% of nonhazardous construction and demolition waste material generated prior to the issuance of the final certificate of occupancy shall be diverted from disposal in landfills and incinerators as waste, for reuse, recycling, repurposing, and/or composting. Excavated soil and land clearing debris shall not be included in this waste diversion calculation. Reports, receipts, or other documentation related to diversion shall be maintained through the course of construction, and when requested by the code official, evidence of such diversion shall be provided.

[Page(s) _____] - ***or*** - ☐ Deferred Submittal

Yes N/A

☐ ☐ **Construction material and waste management plan.** A Construction Material and Waste Management Plan shall be developed and implemented to reuse, recycle, or salvage construction materials and waste. This plan can be submitted upon application for a permit, or can be requested to be a deferred submittal, however, the plan must be submitted for review and approval prior to the first inspection on the construction site. The Construction Material and Waste Management Plan shall include the following:

1. Identify the construction and demolition waste materials expected to be diverted from disposal in landfill by reuse, recycling, manufacturer's reclamation, or salvage for future use, donation, or sale.
2. The percentage of materials to be diverted shall be specified and shall be calculated by weight or volume, but not both.
3. The location for collection, separation and storage of recyclable construction waste shall be indicated.
4. Determine whether construction and demolition waste materials are to be source-separated or comingled.
5. Identify service providers and designate destination facilities for construction and demolition waste materials generated at the job site.

6. Identify the average diversion rate for facilities that accept or process comingled construction and demolition materials. Separate average percentages shall be included for those materials collected by construction and demolition materials processing facilities that end up as alternative daily cover and incineration.

Demolition materials and waste shall include from existing buildings or portions of existing buildings. Construction materials and waste shall include all materials delivered to the site and intended for installation prior to the issuance of the certificate of occupancy, including related packaging and delivery materials. [Page(s) _____] - ***or*** - ☐ Deferred Submittal

☐ ☐ **Extracting, Harvesting, and/or Manufacturing.** Materials shall be harvested and/or extracted, and products and/or assemblies shall be manufactured, according to the laws and regulations of the country of origin. Wood products in the project, other than recovered or reused wood, shall not contain wood from endangered wood species unless the trade of such wood conforms with the requirements of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
[Page(s) _____]

☐ ☐ **Areas for Storage and Collection of Recyclables and Discarded Goods.** Provide areas for recyclables and discarded goods. These areas shall be coordinated with the anticipated collection services to maximize the effectiveness of the dedicated areas. Instructions regarding the identification and handling of recyclables and discarded goods in these areas shall be posted in or adjacent to each dedicated area. Recycling areas shall be designed and constructed in accordance with the City of Boise Solid Waste Ordinance.
[Page(s) _____]

☐ ☐ **Mercury Content Levels of Lamps.** Unless Exceptions apply, if electric lamps are used in the building project, they shall not contain mercury in an amount exceeding, per lamp, the maximum mercury content levels of Table 901.3.5 (9.3.5). Note the level of mercury in each lamp if applicable.

[Page(s) _____]

Prescriptive-Based Compliance Method Option (to comply with IgCC Section 901.4)

Yes N/A

☐ ☐ **Reduced Impact Materials.** The building project shall comply with (2) two of the following options listed below. NOTE: Calculations shall only include materials permanently installed in the project. A value of 45% of the total construction cost shall be permitted to be used in lieu of the actual total cost of materials. **(Select at least (2) two options below)**

☐ **Recycled Content.** The first option is met if the sum of the recycled content value divided by the total cost of materials is greater than or equal to 10 percent.

[Page(s) _____]

☐ **Regional Materials.** The second option requires that at least 15 percent of the project's products or materials, based on cost, be harvested/extracted/recovered or manufactured within a 500-mile radius of the project site. [Page(s) _____]

☐ **Biobased Products.** The third option requires that 5 percent of the building materials, based on cost, be biobased products. [Page(s) _____]

☐ **Multiple-Attribute Product Declaration or Certification with EPD's.** The fourth option to fulfill the prescriptive requirements requires that ten different products be installed in the building project complying with IgCC Section 901.4.1.4 and subsections. [Page(s) _____]

Yes N/A

☐ ☐ **IgCC Worksheet – Reduced Impact Materials form.** Submit for project.

Performance-Based Compliance Method Option (to comply with IgCC Section 901.5)

Yes N/A

☐ ☐ **Life-Cycle Assessment (LCA).** Provide documentation that a life-cycle assessment (LCA) was performed in accordance with ASTM E2921 and ISO Standard 14044, as modified by this section, for a minimum of two building alternatives, both of which meet the owner's project requirements in IgCC Section 901.5.
[Page(s) _____]

☐ ☐ **Reporting.** Provide a life-cycle analysis report which shall be submitted with the construction documents and that complies with the reporting requirements in ASTM E2921. The name and address of the design professional or other approved source verifying structural system material quantities shall be included. A critical review shall be performed by an external expert independent of those performing the LCA. The report shall be submitted and include documentation of critical peer review by a third party, results from the review, and the reviewer's name and contact information.

IGCC Chapter 10 – Construction and Plans for Operation

Yes N/A

☐ ☐ **Functional & Performance Testing (FPT) and Commissioning Providers form.** Submit for project, signed by owner.

☐ ☐ **Functional & Performance Testing (FPT) and Commissioning Providers qualifications.** Where not on file with the Building Official, submit documentation outlining company/personnel qualifications, experience, certifications and/or licenses of provider personnel conducting functional and performance testing or commissioning work to the Building Official for review and approval.

☐ ☐ **Functional & Performance Testing (FPT) plan.** Submit for project where applicable (e.g. mechanical HVAC and refrigeration systems, lighting systems including controls, domestic hot water systems and controls, water pumping and mixing systems, irrigation systems, and all applicable items as noted in the IgCC). Functional & Performance Testing requirements notes to also be provided on plans.
[Page(s) _____]

☐ ☐ **Building commissioning plan.** Submit for project where applicable (e.g. mechanical HVAC and refrigeration systems, air curtains, lighting systems including controls, domestic hot water systems and controls, water pumping and mixing systems, irrigation systems, renewable energy systems, energy storage systems, energy and building management systems, demand control systems, building envelope air tightness, indoor air quality and flush-out, soil gas control/radon testing per amendment, construction waste management, transportation management, and all applicable items as noted in the IgCC). Building commissioning requirements notes to also be provided on plans.
[Page(s) _____]

IGCC Normative Appendix E with Table E101.1 – Additional LEED Credit Points

Each project shall select from the LEED credit type options listed below, from Table E101.1, with applicable corresponding LEED sections adopted by reference, to total at least seven (7) credit points.

NORMATIVE APPENDIX E
TABLE E101.1 ADDITIONAL LEED CREDIT POINTS

Check Options:	Credit Type*	LEED v4.1 Section**	Points Available, Points Claiming	Summary of Requirement
Yes N/A ☐ ☐	LT Credit	Access to Quality Transit	1-5 (available) **Claiming:** _____	Development near multimodal transportation choices. Locate with ¼ mile of transit site. 1-5 points based on transit frequency.

Yes ☐ **N/A** ☐	LT Credit	Reduced Parking Footprint – No Parking or Reduce Parking, Carshare, or Unbundling Parking	1 (available) **Claiming:** _____	Do not exceed minimum local code requirements for parking capacity, provide 30% reduction below base parking ratios, projects with no off-street parking meet requirements. Or Carshare or Unbundling Parking.
Yes ☐ **N/A** ☐	LT Credit	Electric Vehicles – Electric Vehicle Supply Equipment, or Electric Vehicle Ready Infrastructure	1 (available) **Claiming:** _____	Provide charging infrastructure for electric vehicles for onsite parking.
Yes ☐ **N/A** ☐	SS Credit	Open Space	1 (available) **Claiming:** _____	Provide outdoor space greater than or equal to 30% of the total site area (including building footprint).
Yes ☐ **N/A** ☐	WE Credit	Outdoor Water Use Reduction – Option 2, Reduced Irrigation	1 (available) **Claiming:** _____	Enhanced reduction: (IgCC base accounts for 1 point), another 1 point available. Reduce outdoor potable water consumption and preserve no and low-cost potable water resources.
Yes ☐ **N/A** ☐	WE Credit	Indoor Water Use Reduction	2-5 (available) **Claiming:** _____	Enhanced reduction: (IgCC base accounts for 1 point), up to 5 other points available. Reduce indoor potable water consumption and preserve no and low-cost potable water resources.
Yes ☐ **N/A** ☐	EA Credit	Optimize Energy Performance	1-18 (available) **Claiming:** _____	Analyze efficiency measures during the design process and account for the results in design decision making. Up to 18 points awarded based on percentage improvement with energy modeling.
Yes ☐ **N/A** ☐	EA Credit	Renewable Energy	1-3 (available) **Claiming:** _____	Off-site existing renewable energy system up to 3 points (all 3 points if on geothermal system).
Yes ☐ **N/A** ☐	EA Credit	Renewable Energy	1-5 (available) **Claiming:** _____	Require onsite renewable energy for up to 5 points for onsite or new renewables (or 2 points if on geothermal system).
Yes ☐ **N/A** ☐	EA Credit	Enhanced Refrigeration Management – Option 1, No Refrigerants or Low-Impact Refrigerants	1 (available) **Claiming:** _____	Prohibit chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) based refrigerants in new heating, ventilating, air conditioning, and refrigeration (HVAC&R) systems.
Yes ☐ **N/A** ☐	MR Credit	Sourcing of Raw Materials	1-2 (available) **Claiming:** _____	Use products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts.
			Total Points: _____ (7 minimum)	

*****Credit Type refers to the LEED Section. LT=Location and Transportation, SS=Sustainable Sites, WE=Water Efficiency, EA=Energy and Atmosphere, MR=Materials and Resources.
**LEED v4.1 provides sections and details for these provisions to obtain credit points.

Deferred Submittals

Yes **N/A**

☐ ☐ **Deferred submittal items.** List any deferred submittals on the plans (e.g., construction material and waste management plan, final construction waste management report, deconstruction/demolition material and waste management plan and report, or others). [Page(s) _____]

☐ ☐ **The FTP Documentation,** (installation, startup, testing, calibration, verification, balance reports, deliverance of O&M manuals/warranties to owner, etc.…) submitted to Building Official, prior to issuance of a Certificate of Occupancy. Note requirement under Deferred Submittals on the plans.
[Page(s) _____]

☐ ☐ **Acoustical Field Measurement,** for Interior Sound Transmission per the IgCC, submitted to Building Official, prior to issuance of the final Certificate of Occupancy. Other acoustical elements per designer option shall also be provided prior to occupancy. Note requirement under Deferred Submittals on the plans.
[Page(s) _____]

☐ ☐ **Post-Construction, Pre-Occupancy Building Flush-out Documentation** or **Post-Construction, Pre-Occupancy Baseline IAQ Monitoring Documentation** (as applicable) per the IgCC shall be submitted to Building Official prior to occupancy. Note requirement under Deferred Submittals on the plans.
[Page(s) _____]

☐ ☐ **Preliminary commissioning report** submitted to Building Official prior to issuance of a Certificate of Occupancy. Note requirement under Deferred Submittals on the plans.
[Page(s) _____]

Applicant Acknowledgement

I have completed the above checklist noting all pages and supporting documents for the project.

_____ _____

Name of Submitting Design Professional of Record (or applicant if design professional not required)

Date