

## Design Review for Sustainability

### LANL Division of Responsibility and High-Level Scope

Discipline	Review Task	Notes
Architect	Continuous air barrier	Check for continuous air barrier in Drawings and/or Spec (re. ASHRAE 90.1, 5.4.3.1)
Architect	Outdoor water use	Verify landscaping and irrigation meets the Guiding Principles and ESM Ch. 4.
Architect	Material Content and Performance	Verify <u>specs</u> include requirements for product categories to meet RCRA 6002, FSRIA 9002, and Federal Green Procurement Compilation.
Architect	Indoor air quality	Verify <u>specs</u> for paint/stain, floor coverings, cabinetry, adhesive, composite panels, etc. include low emitting materials requirements and/or building flush-out.
Architect @ 30%; Electrical @ 60/90/100	Daylighting and lighting controls	Occupancy sensors, daylighting in occupied spaces, task lighting, etc. Ref. ESM Ch. 7, D5020.
Cx SME	Commissioning (Cx)	Check that Specification's Cx sections represent the Project scope. Ref. ESM Chapter 15 and Masters in Divs 01, 23, 25, 26.
Mechanical	Energy usage/modeling	Referring to the ESM Ch. 14-required ASHRAE 90.1 edition: <u>All:</u> Verify the U-Factors and R-values by confirming matching values between the ASHRAE appendix G proposed values, heat load calculations, and architectural drawings <u>New Construction:</u> Check Performance Rating Method reports showing the percentage better and life cycle cost reports to support design decisions, if needed (e.g., Net Zero). <u>Major Reno/modernization:</u> Use baseline energy use data and projections to show energy savings per HPSB. Email <a href="mailto:site-sustainability@lanl.gov">site-sustainability@lanl.gov</a> for baseline energy data.
Mechanical	Indoor water use	Verify that plumbing fixtures are low water usage. Eliminate single pass cooling.
Mechanical	Ventilation Comfort and Thermal Comfort	Verify calculation to ensure design meets ASHRAE 62.1 and ASHRAE 55.
Mechanical	Avoid Ozone Depleting compounds and high GWP chemicals (refrigerants)	Check that specified refrigerants meet this criteria.
Metering Administrator (UI)	Metering	Verify that building has advanced electric, gas, water, and steam meters. Ref. metering attachment in ESM Ch. 14 (VAR-10538).

<b>Discipline</b>	<b>Review Task</b>	<b>Notes</b>
Sustainable Design Reviewer (SDR) in UI	Completion of Guiding Principles Checklist	Verify project completed the appropriate Guiding Principles Checklist and if marking any "n/a," provided LCCA to justify.

August 16, 2022 This reference maintained by Ch. 14 POC.