PROPOSED REGULATION OF THE STATE PUBLIC WORKS BOARD

LCB File No. R105-11

INCORPORATION OF GREEN BUILDING DESIGN MEASURES IN PROJECTS FOR THE CONSTRUCTION OR REMODELING OF LARGER STATE BUILDINGS

- **NAC 341.301 Definitions.** (NRS 341.110, 341.144) As used in NAC 341.301 to 341.376, inclusive, unless the context otherwise requires, the words and terms defined in NAC 341.306 to 341.341, inclusive, have the meanings ascribed to them in those sections.
- **NAC 341.306 "Design consultant" defined.** (NRS 341.110, 341.144) "Design consultant" means a natural person, partnership, corporation, limited-liability company or other business organization or association that engages in the practice of architecture pursuant to chapter 623 of NRS and that has entered into an agreement with the Board to provide design services for a project.
- **NAC 341.311 "Design services" defined.** (NRS 341.110, 341.144) "Design services" includes, without limitation:
 - 1. Preliminary planning;
 - 2. Designing;
 - 3. Estimating of costs; and
 - 4. Preparation of detailed plans and specifications.
- **NAC 341.316 "Green building design measure" defined.** (NRS 341.110, 341.144) "Green building design measure" means a design feature, material, site location, construction technique, principle, practice, device or other natural process or technological system that is designed or intended to contribute to the efficient use of energy or water in a project. The term includes the use of a source of renewable energy.
- **NAC 341.321 "Project" defined.** (NRS 341.110, 341.144) "Project" means a capital improvement project of the State for the construction or remodeling of a building with a gross floor area greater than 20,000 square feet.
- **NAC 341.326 "Project manager" defined.** (NRS 341.110, 341.144) "Project manager" means a person who holds a certificate of registration to engage in the practice of architecture pursuant to chapter 623 of NRS, or a certificate of registration to engage in the practice of engineering pursuant to chapter 625 of NRS, and who is employed by the Board to provide design services for a project.
- **NAC 341.331 "Remodeling" defined.** (NRS 341.110, 341.144) "Remodeling" includes, without limitation, the construction of an addition to, or the renovation or retrofit of, an existing building.

- **NAC 341.336 "Renewable energy" defined.** (NRS 341.110, 341.144) "Renewable energy" has the meaning ascribed to it in NRS 341.144.
- NAC 341.341 "Simple payback period" defined. (NRS 341.110, 341.144) "Simple payback period" means the time required for the cumulative dollar value of savings in energy or water that are attributable to a green building design measure to equal the initial cost of the measure excluding the time value of money.

NAC 341.346 Review by Manager of preliminary plans, designs and detailed plans and specifications of project to ensure achievement of certain efficiencies in use of energy and water. (NRS 341.100, 341.110, 341.144)

- 1. The Manager shall review the preliminary plans, designs and detailed plans and specifications of a project to ensure that the project will achieve:
- (a) Efficiency in the use of energy that meets or exceeds the standards for the efficient use of energy established by:
- (1) ANSI/ASHRAE Standard 90.1-2007, <u>Energy Standard for Buildings Except Low-Rise</u> Residential Buildings, as adopted by reference pursuant to NAC 341.045; and
- (2) The United States Environmental Protection Agency pursuant to the Energy Star Program; and
- (b) Efficiency in the use of water for plumbing fixtures and landscape irrigation that is at least 10 percent more efficient than the standards for the efficient use of water established by the United States Environmental Protection Agency pursuant to the [WaterSense program] Energy Policy Act of 1992.
- 2. If the project is the remodeling of a building, the requirements of subsection 1 apply only to the use of energy or water in the remodeled portion of the building.

NAC 341.351 Contents of report concerning measures to accompany preliminary plans of project. (NRS 341.110, 341.144)

- 1. The preliminary plans of a project submitted to the Manager by a design consultant or project manager must be accompanied by a report that identifies each green building design measure that could reasonably be incorporated into the [designs] design of the project to ensure that the project will achieve the efficiencies in the use of energy and water set forth in NAC 341.346. For each such measure, the report must include, without limitation:
- (a) A brief description of how the green building design measure is intended to contribute to the efficient use of energy or water in the project.
- (b) The estimated dollar value of the savings in energy or water that are attributable to the green building design measure during its estimated useful life. The estimates must be supported by appropriate documentation.
- (c) A life cycle cost analysis of the green building design measure. The life cycle cost analysis must be performed in a manner prescribed by the Manager and include, without limitation, the calculation of the simple payback period of the green building design measure.
- 2. The report must include a study evaluating the feasibility of including a source of renewable energy in the project.

NAC 341.356 Determination of measures to be incorporated into project. (NRS 341.100, 341.110, 341.144) The Manager shall review the preliminary plans of a project and the

accompanying report submitted pursuant to NAC 341.351 and determine the green building design measures that must be incorporated into the [designs] design of the project to ensure that the project will achieve the efficiencies in the use of energy and water set forth in NAC 341.346. In reaching this determination, the Manager shall consider, in addition to the information provided by the design consultant or project manager pursuant to NAC 341.351:

- 1. The initial cost of the green building design measure in relation to the budget for the project set forth in the State's capital improvement program.
- 2. The simple payback period of the green building design measure. The simple payback period must not be longer than 10 years, unless the Manager determines that the use of a longer period is in the best interests of the State.
 - 3. Any other information that the Manager considers to be relevant to the determination.

NAC 341.361 Incorporation of measures into [designs] design of project; preparation of summary report on incorporated measures. (NRS 341.110, 341.144)

- 1. The design consultant or project manager of a project shall incorporate into the **[designs]** *design* of a project each green building design measure that the Manager has determined must be incorporated into **[those designs]** *the design* pursuant to NAC 341.356.
- 2. The [designs] design of a project submitted to the Manager by a design consultant or project manager must be accompanied by a summary report that identifies each green building design measure that has been incorporated into the [designs] design of the project and includes the information concerning the green building design measure required pursuant to NAC 341.351.

NAC 341.366 Retention or employment of persons to review [designs] design of projects. (NRS 341.100, 341.110, 341.144)

- 1. Before approving the [designs] design of a project submitted by a design consultant or project manager, the Manager shall retain or employ a person with competence and expertise equal to that of the design consultant or project manager to conduct a review of [those designs] the design.
- 2. A person who conducts the review of the [designs] design of a project pursuant to subsection 1 shall:
- (a) Express his or her professional opinion regarding whether the **[designs]** *design* of the project ensure that the project will achieve the efficiencies in the use of energy and water set forth in NAC 341.346.
 - (b) Submit his or her opinion directly to the Manager.

NAC 341.371 Confirmation that project will achieve certain efficiencies in use of energy and water required before approval of final payment for preparation of detailed plans and specifications of project. (NRS 341.100, 341.110, 341.144) Before approving the final payment to a design consultant [or project manager] for the preparation of the detailed plans and specifications of a project, the Manager shall confirm that the detailed plans and specifications of the project ensure that the project will achieve the efficiencies in the use of energy and water set forth in NAC 341.346.

NAC 341.376 Duties of contractor awarded contract for project: Recycling; submission of waste management plan and report. (NRS 341.110, 341.144)

- 1. A contractor who is awarded a contract for the construction of a project shall:
- (a) Recycle or cause to be recycled not less than 50 percent by weight *or volume* of the total amount of solid waste generated by the construction of the project, including, without limitation, any associated demolition.
- (b) Submit to the Manager a waste management plan for complying with the requirements of paragraph (a). The waste management plan must be in a form prescribed by the Manager and include, without limitation, provisions concerning the storage, collection, recycling and disposal of all solid waste generated by the construction of the project, including, without limitation, any associated demolition.
- (c) Submit to the Manager with each progress bill or retainage bill a waste management report documenting the contractor's adherence to the waste management plan and measuring the contractor's progress toward compliance with the requirements of paragraph (a).
 - 2. The provisions of subsection 1 must be included in:
- (a) The plans and specifications of the project submitted by a design consultant or project manager to the Manager for approval;
- (b) The plans and specifications of a project approved by the Manager and made available to bidders on the contract for the project pursuant to NRS 338.1385; and
 - (c) The contract between the Board and the contractor for the project.
 - 3. As used in this section:
 - (a) "Progress bill" has the meaning ascribed to it in NRS 338.415.
 - (b) "Retainage bill" has the meaning ascribed to it in NRS 338.430.