



Mainstream Green Home Design Contest

Brought to you by the Maine State Housing Authority

Request For Proposals

Invitation

Understanding our goals to design and construct healthy, affordable, and energy efficient living environments, the Maine State Housing Authority (MSHA), through its funding resources, wishes to promote its initiative to build housing that incorporates green building techniques and technologies. Therefore, the Maine State Housing Authority is pleased to invite all interested parties to participate in the *Mainstream Green Home Design Contest*.

Objectives

- Demonstrate that high performance housing can be constructed without compromising affordability.
- Contribute high-performance, sustainable, housing to Maine's affordable housing stock.
- Reduce developments' impacts upon natural resources.
- Create healthy, comfortable living environments.
- Minimize monthly electric and heating expenditures by conserving energy.
- Promote innovation in the development of green affordable housing.

Contest Focus

- Single Family Housing - Either "Stick-Built" or "Manufactured Housing Modules"
- Full compliance with the Maine State Housing Authority's Green Building Standards.
- Durable construction capable of enduring Maine's harsh winters.
- Attractive, functional, and affordable.
- Living space that is a minimum of 1,000 sq. ft.
- Minimum space needs: kitchen, dining area, living area, 3 bedrooms, 1 bathroom.
- Storage for bedrooms, bathrooms, kitchen, and entry area; mechanical rooms

Contest Parameters and Judging Categories

- Relative costs when compared to "conventional" construction – suggested basis of comparison to be Costs Per Square Foot of Gross Building Area and/or costs of operation over time, i.e., Life Cycle Costing demonstrating benefit over time, including long term affordability and ease of operation and maintenance.
- Quality of spaces – natural light, interior layouts, use of materials

- Innovative ideas, systems, products, and objectives
- Use of renewable energy and/or energy efficiency considerations
- Constructability – ease of construction, ability to replicate, marketability
- Building Materials Environmental Impacts

Registration

The Maine State Housing Authority will send additional contest specific information including but not limited to expanded judging criteria, degree day information, proposed hypothetical site location to all registrants starting on or before January 11, 2006 and ongoing. Pre-registration is encouraged and registration forms can be found on-line at www.mainehousing.org and can be sent to Kathy Poulin's attention at MSHA.

Mainstream Green Home Design Contest

Attention: Kathy Poulin

Maine State Housing Authority

353 Water Street

Augusta, ME 04330

The contest is open but not limited to:

- professional architects and engineers
- students of architecture or design
- owner/builders
- builders
- manufactured housing builders licensed in the State of Maine by the Manufactured Housing Board

Submissions

Submissions shall be postmarked no later than midnight, March 17, 2006. Entries postmarked after this deadline will not be accepted.

Required Information for Submissions:

- Estimated cost of building the project based on a June 2006 construction start. Statements of cost benefits either by comparisons with conventional construction costs or Life Cycle Costing or combinations of both.
- 1-3 page written project description with a general overview of the design's primary objectives and how those were met.
- Single un-mounted 24"x36" sheet of paper picturing the building and surrounding site, floor plans, and typical building elevations drawn to scale.
- Materials list, outline specifications, and any other brief descriptive narratives that are needed to adequately define the applicant's design intent, objectives, and/or goals.

All submissions should be confined to a single un-mounted 24" x 36" sheet of paper. Submissions should be rolled and mailed in a mailing tube to the following address:

Mainstream Green Home Design Contest
Attention: Kathy Poulin
Maine State Housing Authority
353 Water Street
Augusta, ME 04330

Contest Winners

All entries will be reviewed and judged on their merit per this RFP and any subsequent requirements. MSHA plans to announce the contest winners in late April/early May.

Prizes will be awarded as follows:

- 3rd Place – \$500.00
- 2nd Place – \$1,000.00
- 1st Place – \$2,000.00

In addition to the cash awards, MSHA, in collaboration with its housing partners, may finance the construction of up to 3 winning entries with the understanding and agreement that, once complete, MSHA be allowed to monitor each project's energy consumption and overall function.

Also, MSHA intends to include the results of this competition in its 2005 Annual Report, solicit press coverage for the winning designs, and otherwise attempt to promote both the contest and the winners in appropriate local and national publications.

Resources

Contest participants will receive a complimentary two month subscription to BuildingGreen Suite, a well-respected Online Resource that integrates essential, relevant, unbiased information on sustainable design and construction. Access to the BuildingGreen Suite includes all articles from Environmental Building News - an authoritative resource on green strategies and topics, GreenSpec - a national directory of green building products, and a case studies database with over 130 high performance buildings. The annual subscription cost to the BuildingGreen Suite is \$199. However, through the generosity of BuildingGreen, Inc., free access to the BuildingGreen Suite will be offered to all participants registered in the *Mainstream Green Home Design Contest*. To learn more about BuildingGreen, Inc. and the resources they offer visit their website at:

<http://www.buildinggreen.com/index.cfm>

Participants are encouraged to view MSHA's Green Building Standards at: www.mainehousing.org

End of RFP for MSHA's Mainstream Green Home Design Contest

Additional Information for Contestant Entrants January 9, 2006

Introduction

The Maine State Housing Authority is pleased that you are interested in submitting an entry for the *Mainstream Green Home Design Contest*. This document is a supplement to the "Request For Proposals," which introduced our contest and is intended to provide additional information for consideration in preparing an entry.

General Site Criteria

The housing design is to be based on a fictitious site in the greater Bangor, Maine area with the following characteristics:

1. Site Size is 150' by 150' square lot fronting a sidewalk of a secondary street with a driveway curb cut allowed and is an urban setting of one and two story residential structures.
2. The site is relatively flat and easily accessible.
3. Lot is fully forested with deciduous trees of mature growth.
4. Except for the tree cover, there are no other factors that affect access to the daytime sun.
5. Soils will support conventional foundations systems at depths below frost (4 foot).
6. There are no groundwater issues of concern.
7. There are no environmental issues of concern on the site.
8. Public Water, Public Sewer, Electric and Telephone Utilities are all located in front of the lot at the street line with no complications for tie-ins.
9. On-site development costs (clearing, grading, utilities, landscaping, gravel drive, and building excavation and backfill) are not to exceed \$50,000.
10. Foundations and building construction (exclusive of Site costs in #9 above) are not to exceed \$150,000.
11. For general weather Data please go to:

www.worldclimate.com/cgi-bin/grid.pl?gr=N44W068

Go to: **BANGOR AIRPORT, PENOBSCOT COUNTY, MAINE USA** for:

- Average Maximum Temperature
- 24-hr Average Temperature
- Average Minimum Temperature
- Heating Degree Days
- Cooling Degree Days
- Average Rainfall

12. For general solar information go to:

http://rredc.nrel.gov/solar/old_data/nsrdb/bluebook/state.html

Go to **MAINE** and you will need to interpret the data between Portland and Caribou.

Judging Criteria and Point System

The winners will be determined based on the following structure:

- | | |
|---|-------------------|
| 1. Relative costs when compared to “conventional” construction – suggested basis of comparison to be Costs Per Square Foot of Gross Building Area and/or costs of operation over time, i.e., Life Cycle Costing demonstrating benefit over time, including long term affordability and ease of operation and maintenance. | 20 Points |
| 2. Quality of spaces – natural light, interior layouts, use of materials | 15 Points |
| 3. Innovative ideas, systems, products, and objectives | 15 Points |
| 4. Use of renewable energy and/or energy efficiency considerations | 15 Points |
| 5. Constructability – ease of construction, ability to replicate, marketability | 20 Points |
| 6. Building Materials Environmental Impacts | 15 Points |
| Total Possible Score: | 100 Points |

End of Additional Information for MSHA’s Mainstream Green Home Design Contest