

## STAFF REPORT

**TO:** Hailey City Council

**FROM:** Mariel Platt, Planner 

**RE:** Ordinance Amendment – Chapter 15.08, Building Code, of the Hailey Municipal Code

**HEARING:** October 25, 2010

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### Notice

Notice for the August 23, 2010 public hearing was published in the Idaho Mountain Express and mailed to public agencies and area media on August 4, 2010. The public hearing was postponed at the August 23, 2010 meeting and was published in the Idaho Mountain Express and mailed to public agencies and area media again on September 8, 2010. The public hearing was continued at the September 27, 2010 meeting and at the October 11, 2010 meeting to October 25, 2010.

### Proposal

Amendments to Chapter 15.08 of the Municipal Code are proposed by the City. These amendments would:

1. Adopt the 2009 IECC with an effective date of January 1, 2011.
2. Add a new Section - Section 15.08.012, Build Better Program - creating an above-code building standard, with a one (1) year voluntary period starting on January 1, 2011 and an effective date of January 1, 2012.

Refer to the attached ordinance for the proposed language.

### Procedural History

At the last meeting, on September 27, 2010, staff presented the ordinance to the Council. At this meeting, the Council requested the following additional information:

1. Financial evaluation of additional construction costs to comply with the Build Better Program verses the 2009 IECC.
2. Review of building permit fees to identify potential for reductions in fees and compare fees to other jurisdictions.

The Council requested the following changes:

1. Remove new windows from the Build Better Program's requirement for an energy analysis (audit).
2. Add language to allow a one year voluntary period.

On October 21, 2010, staff met again with members of the AIA.

The Council first reviewed the proposal on April 26, 2010, when the Sustainable Building Committee presented its recommendation for an above-code building program. During the April review, the Council instructed staff to 1) draft an ordinance, 2) respond to follow up questions asked by the Council, and 3) continue education and outreach efforts with the public.

Staff presented responses to the Council's questions in May 24, 2010 and has continued with education and outreach efforts, hosting the Build Better, Build Smart Community Series events on July 22, 2010 and August 12, 2010. In addition, the Committee met with members or affiliates of the Hailey Chamber and Rotary and discussed the proposed amendments.

In May 2010, staff submitted the draft ordinance to a technical review committee assigned by the U.S. Department of Energy and the State of Idaho, for a thorough review by building and energy experts. Staff received both groups' comments and follow up on questions and further discussion. The draft amendments reflect the suggestions and comments made by the review committees.

### **Requested Information**

#### **HERS for Energy Analysis (audit) and for New Residential Construction:**

HERS is a whole systems approach for performance testing that models the entire home and all elements that affect energy efficiency, such as insulation levels, window efficiency, wall-to-window ratios, the heating and cooling system efficiency, the solar orientation of the home, and the water heating system. HERS can be used to establish an existing home's energy performance as well as forecast the energy performance of planned homes and verify the performance after the home is built.

The data gathered by the home energy rater is entered into a Residential Energy Services Network (RESNET) accredited computer program called REMRATE and translated into a rating score. The home receives a score between 0 and 100 and is compared to the IECC 2009 code. An estimate of the home's energy usage and associated costs is also provided in the report.

The benefits to using HERS over the traditional prescriptive method of verification are as follows:

- Determines the most cost-effective energy efficiency measures and proper equipment sizing.
- The performance path provides the most flexibility for the building and design community.
- The HERS tool incorporates various design and construction elements such as orientation, overhangs, window placement, ceiling systems, that is not contemplated in Res-check.
- HERS requires a more integrative design process, versus a linear design process. Studies have shown the integrative design process creates increased energy efficiencies for the least amount of money<sup>1</sup>. Informal input from the building community indicates architects can fail to address "energy" outcomes or infrastructure in their designs. This creates large hurdles for implementing cost-effective energy efficiencies. Performance standards would promote designers to evaluate the energy efficiency outcomes of their design choices and work with contractors and mechanical engineers to meet those goals.
- HERS is a nationally recognized energy performance label that allows comparison between homes.
- HERS is the tool of choice for most locally adopted above-code building programs and is

<sup>1</sup> International Initiative for Sustainable Built Environment (iISBE) "The Integrated Design Process". Nils Larsson. January 31, 2004.

- used as a method of verification in LEED for Homes and ENERGY STAR programs.
- HERS provides quality assurance and verification, peer review and testing.

HERS can also be used as a tool to address new buildings to ensure that energy efficiency is considered and basic principles are incorporated into the design and construction of new homes. Although new construction will be a small percentage of the buildings in Hailey for many decades, it may be the most feasible time to build a higher performing building. Retrofits or after construction improvements are often much more costly than planning for a higher performing building. For instance, when you buy a more energy efficient furnace for an existing home the cost may be about \$300 more than a conventional furnace; however, the return on investment is within 3-5 years and afterward, the building owner continues to save money and energy. If you were retrofitting an existing building with a new energy efficient furnace the cost would be \$1,400, instead of the cost difference of \$300, assuming you don't already need a new furnace anyhow. That is precisely why the recommendation does not include improvements to be made to the existing structure HERS energy analysis or audit. Building a home right the first time prevents unnecessary retrofits and energy expenses for the next 75 years (average life span of a building) or for the life of the appliance, depending on what energy efficient building component is evaluated.

Hailey began enforcing an energy code in 1991. According to the 2000 U.S. Census, over 74% of the existing buildings in Hailey were built before 1990. It is anticipated that the existing building stock will continue to represent a large proportion of buildings in Hailey for many more decades. The proportion of newly constructed buildings remains relatively insignificant when trying to address overall energy efficiency. Generally, homes built before 1991 can expect to see the greatest energy efficiency improvements, with higher returns on investment than homes built more recently. By requiring energy analyses on existing buildings, the committee hopes it will raise awareness and provide home owners with information that could be used at anytime to increase the energy performance of their home. It would also begin to establish an energy rating for existing homes, so prospective buyers would be informed and future owners could make improvements if desired.

#### **Financial Evaluation: New Construction**

It is difficult to quantify how much energy will be saved and what the costs to build to 10% better than the 2009 IECC would be without modeling the building. Staff called David Neiger from Populus Sustainable Design, in Boulder, CO (David presented to the Council and held a community workshop on REMRATE and HERS last October), to see if he could provide some consulting services for staff to address the Council's request. David estimated the time it would take to re-run the software and quantify the construction costs at about \$750 per home, based on his rate of \$125/hr. Due to the expense, staff asked Jolyon Sawrey, architect and HERS rater, to do the analysis on a Hailey home that Jolyon had already modeled and that the City has building permit information on, prior to hiring a consultant.

Jolyon took an existing REMRATE model of a 1,600 square foot home built in Hailey to the 2009 IECC and made upgrades to specific components of the building that increase energy efficiency to 10% better than the 2009 IECC. The design of the home itself and the orientation was not changed. This is important to note, because studies have shown that strategic placement

of window and building orientation alone can increase energy efficiency up to 25%. This home was not designed with this in mind. The upgrades included the following:

- Increase U-value of windows
- Increased ductwork air sealing
- Increased attic, wall, stem wall, and rim of floor insulation r-value
- Increased lighting to 50% CFL
- Increased furnace to 94% efficiency

Jolyon estimated the additional expenses associated with each of these upgrades and reported the yearly energy savings calculated by REMRATE. The information resulted in the following evaluation conducted by staff:

**Cost increase:** 0.4% compared to 2009 IECC, based on the 2009 IECC cost of construction for this particular home estimated at \$300,000 (this figure includes HERS rater fees).

**Annual energy costs for home built to 2009 IECC:** \$1,395

**Annual energy savings (built 10% more efficient):** \$139.50

**5 year savings:** \$697.50

**50 year savings:** \$7,000

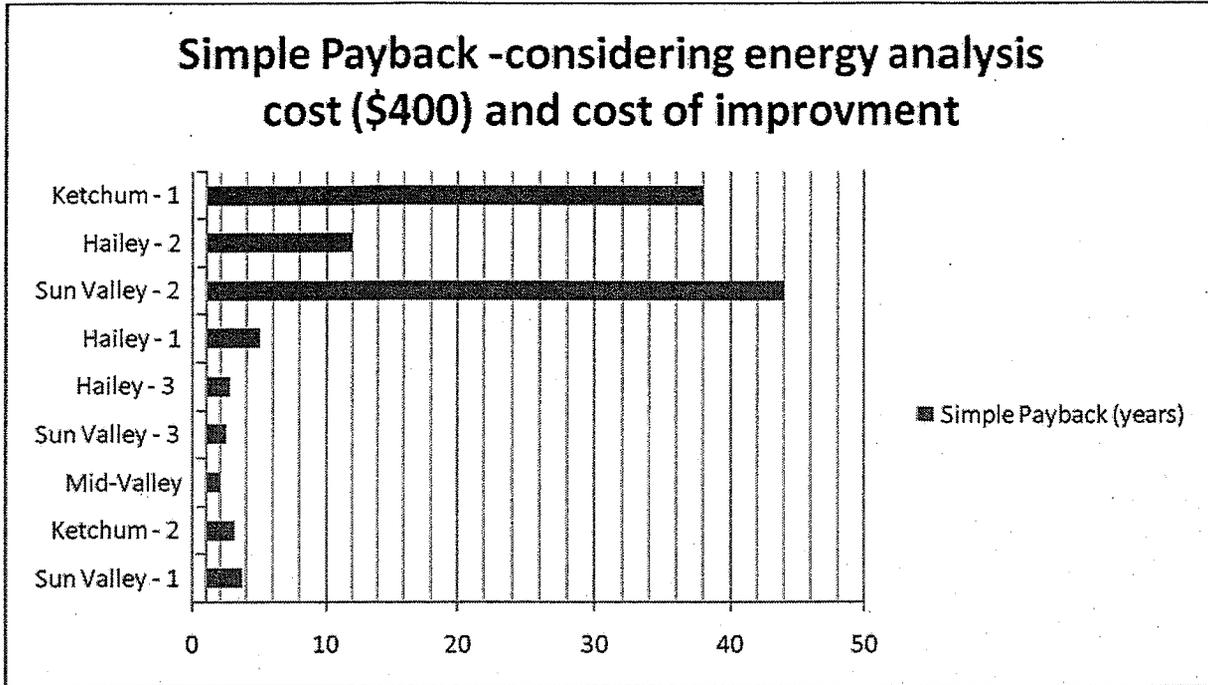
**Simple payback:** 8.7 years

If the Council wishes, staff could contract with Populus Sustainable Design to provide further evaluation using houses of varying sizes.

#### **Financial Evaluation: HERS Energy Analysis (Audits)**

One of the largest barriers to individuals making improvements to their building is lack of information. The purpose of the energy analysis is simply to provide the owner or occupant with valuable information on the building, its performance, and prioritize a list of improvements, their costs and associated energy savings, that can be expected if improvements are completed. No improvements are required. In order to justify the cost of a HERS energy analysis (approximately \$400) for additions over 500 square feet of conditioned space and certain alterations, staff felt it was important to evaluate whether there was financial value in the information. Therefore, by including the cost of the HERS energy analysis and the cost of the improvement when evaluating the simple payback, we get an understanding of the total value in an energy analysis.

Staff gathered nine (9) energy analyses performed in the valley by local raters and did a financial evaluation, assuming each recipient chose the one suggested improvement that presented the greatest payback to install or improve. This is a small sample size, but no final CARRP applications have been submitted to the city to date. Once we receive these final applications we will have an additional 18-25 Hailey energy analyses to include in the data. The data resulted in the following paybacks:



For more data please see attachment A.

**Points Menu**

The Council did not request a financial evaluation of the points menu; however, it was questioned by the Robert Crosby of the Sawtooth Board of Realtors and was determined to be important information by staff. The points menu applies to new residential construction, some residential additions greater than 500 sq. ft. of conditioned space, and exterior snowmelt systems. The number of points is based on the square footage of conditioned space and the number of bedrooms or the just the square footage in the case of snowmelt systems. The impetus for the creation of the points menu is to create a flexible approach that gives numerous options to choose from in an effort to off-set the amount of resources required for larger homes and additions. It attempts to encourage smaller, more efficient homes and additions based on the fact that the larger the home the greater the amount of energy and resources are consumed. Therefore, more points or greater sustainable practices and materials would be required.

Staff has re-reviewed the points menu to determine which points and how many points could be obtained for little to no additional cost. Staff identified point options that were thought to have little to no additional cost. Staff did not price out each point option in the points menu, due to the time required to contact manufactures, installers, and contractors. If the Council wishes, this is something that could be done during the following one (1) year voluntary period. It is estimated based on staff research that 31 points can be obtained with no additional cost. Another 11 points can be obtained for less than \$100 a point. Thirty-one (31) of the following 39 points can be obtained for no additional cost:

**Reuse Existing Building: Up to 5 points.**

Points	Percent of Exterior Walls saved (external sheathing and framing)
3	50%

5	75%
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**New Construction Waste Recycling: Up to 3 points.**

- i) Application: points will be awarded according to the following table:

Points	Percentage Waste	Percentage Diverted
1	75%	25%
2	50%	50%
3	25%	75%

**Passive Cooling: 2 to 5 points.**

i) Application: Any combination of natural cooling techniques can be used to reduce overheating in homes. Use awnings and window overhangs primarily on south-facing glass to provide a balance between summer cooling and winter heating through solar gain. Points will be awarded for passive cooling systems using any two or more of these techniques (one point per option):

- (1) Exterior vertical shading devices for east- and west-facing glass.
- (2) Low emissivity films on glass on east- and west-facing windows.
- (3) Radiant barriers installed in the attic space.
- (4) Landscaping that shades east- and west-facing windows during the cooling season (June to September).
- (5) South window overhang sized to effectively shade the window (from June to September).

**Energy Efficient Appliances: Up to 6 points.**

(1) Application: points will be awarded for ENERGY STAR appliances according to the following:

Points	Type of ENERGY STAR rated appliance
2	Refrigerator
2	Clothes washer
1	Freezer, not part of refrigerator appliance
1	Dishwasher

**Advanced Framing Techniques: 2 to 10 points.**

i) Verification: Checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

- ii) 24-inch On-Center Framing: 2 points.
- iii) Resource Efficient Insulated Headers: 2 points.
  - (1) Application: points are awarded for incorporating a minimum R-10 insulation in the header section.
- iv) Trusses with energy heel: 2 points.
- v) HVAC Ducts Within Conditioned Spaces: 2 points.
- vi) Minimum 24-inch Roof Overhangs: 2 points.

**Environmentally Preferred, Low Emission, and Local Materials: Up to 10 points from Chart A.**

i) Application: For each assembly, all product specification type requirements shall be met in order to receive the points available. Environmentally preferred and low emission qualifying products have more than one of these attributes: recycled content, reclaimed, bio-based, agricultural residue, rapidly renewable, and low or no volatile organic compounds (VOCs) emissions. A "recycled content" product must contain a minimum of 25 percent post-consumer recycled content except as noted otherwise above. Post-industrial (pre-consumer) recycled content is counted at half the rate of post-consumer content. Except as otherwise noted in Chart A, 90 percent of the component, by weight or volume, must meet the specification shown. Locally sourced materials are products that are manufactured within 500 miles of the city are considered local. (For more details on these points refer to Chart A in the Points Menu section of the attached ordinance)

### **Reduction in Building Permit Fees**

Due to the HERS rater providing verification with the building permit plans submittal and certificate of occupancy request as well as conducting inspections during the interim, the Building Department would no longer inspect the plans for energy code compliance. The Building Department has estimated that approximately 50% of the time spent on building permits for new residential construction is dedicated to energy code compliance. With the HERS rater providing this service, the building permit fee could be reduced by 50%. For a \$300,000 home, this equates to a \$1,500 reduction, approximately. HERS rater fees for new construction is estimated to cost \$1,000 to \$1,500.

In April 2010, staff presented development impact fee (DIF) comparisons at the Council's request. In addition to this research, staff has also researched building permit fees and sewer and water connection fees for these jurisdictions, at the Council's request. The comparative analysis is attached (Attachment B).

### **Requested Changes**

Staff has made changes to exempt all windows, including new windows, from obtaining an energy analysis (audit). Staff has made changes to specify that from January 1, 2011 to January 1, 2012, the Building Better Program would be voluntary and would be eligible for building permit fee deferrals during this one year period as well.

### **Overview of Amendments**

#### **Compliance with State Codes**

According to the Building Official, the state of Idaho will require the adoption of the 2009 codes including the 2009 International Energy Conservation Code (IECC), by municipalities on January 1, 2011. Staff suggests that the Council review the recommended Build Better Program and the 2009 IECC adoption now, but that neither amendment become effective until January 1, 2011. The Building Official will later present further code amendments, which would adopt the remaining 2009 building codes, later this fall, prior to the January 1, 2011 deadline.

The 2009 IECC is a stand alone code that does not conflict with other building codes; therefore, its adoption can be reviewed separately from the adoption of the remaining building codes.

Due to the state requirement to adopt the 2009 IECC, any above-code or local program, must

show compliance with 2009 IECC. Therefore, staff has drafted the amendments to reflect the adoption of the 2009 IECC and adheres to the mandatory requirements specified by the 2009 IECC, but makes changes to the methods of compliance and specifies that a 10% increase in energy efficiency above the 2009 IECC standards will be met in order to meet the specifications of the Build Better Program.

### **Ordinance Formatting**

A summary of the proposed amendments and additions to Chapter 15.08, Building Codes, are as follows:

Amends Section 15.08.010, Adoption of codes.

- Adopts the 2009 IECC.

Creates Section 15.08.012, Build Better Program.

- Adds Applicability (Section 15.08.012.A)
- Adds Definitions (Section 15.08.012.B)
- Adds Energy Efficiency (Section 15.08.012.C)
- Adds Water conservation, indoor air quality, construction waste, and durability and assurance (WICDA) (Section 15.08.012.D)
- Adds Points Menu (Section 15.08.012.E)

Amends Section 15.08.020, Amendment of codes.

- Requires the performance method as a compliance path, not the prescriptive method, for both commercial and residential buildings.

Amends Section 15.08.030, Additional requirements.

- References Section 15.08.012, Build Better Program as a requirement above the 2009 IECC.

### **Administration**

The Planning and Building Departments will jointly verify and implement the Build Better Program, in the following manner:

- Building Department will administer energy efficiency, Section 15.08.012.C.
- Building and Planning Department will administer the water conservation, indoor air quality, construction waste, and durability and assurance (WICDA), Section 15.08.012.D.
- Planning Department will administer the points menu, Section 15.08.012.E, excluding parts of Section 15.08.012.E.5 (the energy efficiency section of the points menu).

### **Summary**

The Council should review the proposed ordinance amendment and approve, deny, or modify the amendment.

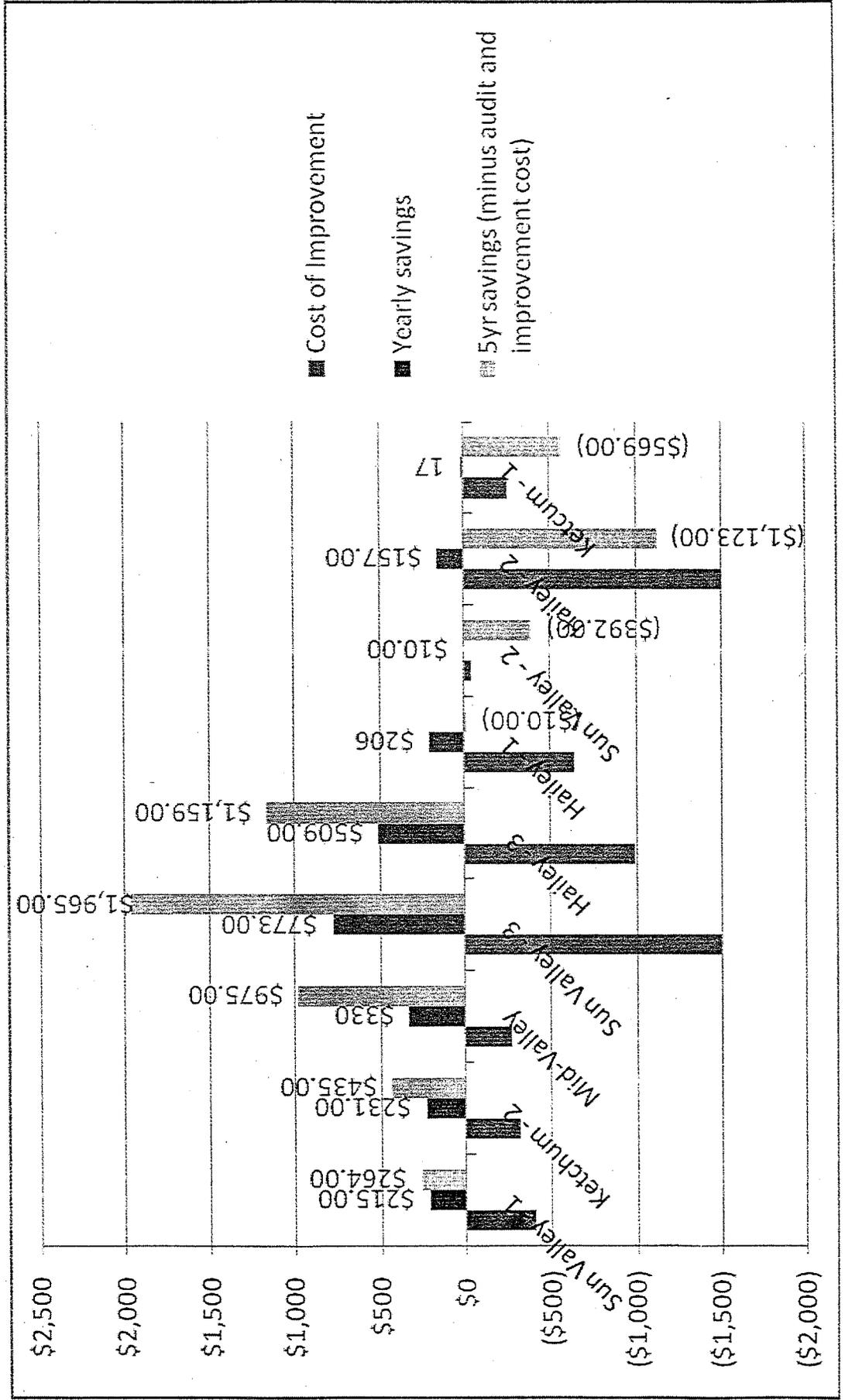
If the proposed change is approved, the Council is required to pass an ordinance making said amendment part of Hailey Municipal Code. The draft ordinance is attached.

### **Motion Language**

Approval:

# Attachment A

Energy analysis (audit) results from 9 local examples – the improvement with the highest payback was selected from the list of suggested improvements from each analysis.





Motion to approve the proposed amendments to Chapter 15.08, adopting Ordinance \_\_\_\_ and authorize the mayor to conduct the first reading by title only.

Denial:

Motion to deny the proposed amendments to Chapter 15.08, finding that \_\_\_\_\_ [the Council should state reasons why the amendment is denied].

Continuation:

Motion to continue the public hearing upon the proposed amendment to Chapter 15.08 to \_\_\_\_\_ [the Council should specify a date].

# Attachment B

City	DIC (single-family dwelling)	Additional Requirements (not included in totals)	Current Residential Building Permit Fees	Sewer and Water hook up, meters and inspections	Total
Twin Falls	\$1624		\$1612	undetermined	
Meridian and ACHD	\$5276-5826		\$2663	\$4870	\$12,809-13,359
Boise and ACHD	\$5451-6001	Erosion and Sediment Control Plan (\$200-500)	\$2225	undetermined	
Nampa	\$2268	Erosion and Sediment Control Plan (\$200-500) & Manual J, D, S calculations (\$200-500)	\$2801	\$5759	\$10,828
Hailey	\$2629		\$2963	\$7596	\$13,188
McCall	In the process of adopting		\$2941	\$9600	

## Mary Cone

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**From:** David Hertel [david@dhertel.com]  
**Sent:** Wednesday, October 20, 2010 4:39 PM  
**To:** Mary Cone  
**Subject:** FW: Council

----- Forwarded Message

**From:** David Hertel <david@dhertel.com>  
**Date:** Wed, 20 Oct 2010 13:45:04 -0600

To Whom It May Concern,

The Better Building Program is a well-crafted, thoughtful document that has been authored by a special interest group that is proposing to impose their idealistic standards on an entire community. There are numerous flaws with the proposal as it stands.

1. The level of building performance is a subjective decision that was made by a select group of people, many of whom will benefit from the enactment of the standards. Why does this group of individuals have the right to choose some random number such as 10% greater than the 2009 IECC?
2. The 2009 IECC will be a substantial increase over the previous 2006 standards and will result in a higher level of construction than has previously been required. Since these standards haven't been enacted yet it is unreasonable to say that we have to require a higher level of building performance.
3. It appears that the 2009 IECC will require more accountability than the previous code through 3rd party review that will result in a much better conformance to building code requirements.
4. Incentivize compliance for several years, at least until the current economic slump has passed and give the public the opportunity to test the merits of this new code.
5. The new code will provide members of the community, that want to build to a higher standard, with a tool to guide them in their personal endeavor. By giving people the choice to build to a higher standard and follow the proposed guidelines the city can monitor the successes and challenges of the program. In doing so the program can be refined and eventually made code or abandoned if it is found to be unacceptable by the public or the new building code is found to produce a high enough standard of construction.

Thank you

*David Hertel*  
*Principal Architect*  
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October 20, 2010

Hailey City Council  
c/o City of Hailey Clerks Office  
115 Main Street South  
Hailey Idaho  
83333

By Email: [mary.cone@haileycityhall.org](mailto:mary.cone@haileycityhall.org)

Re: Ordinance Amendment, Chapter 15.08 Building Code of the Hailey Municipal Code

Local Architects and local Architect members of the American Institute of Architects certainly agree with the spirit of the proposed amendment and can unequivocally assure the Council that sustainable design principles are currently an integral part of architectural practice.

Our profession responded many years ago to market demand for a decrease in the use of energy and natural resources in the construction and maintenance of buildings. Architects embraced sustainability as a necessary avocation and welcomed the new design challenges and technologies. States, including Idaho, passed statutes requiring all registered Architects to complete continuing education units each year specific to sustainable materials, methods and design.

This amendment ignores the expertise, knowledge and accountability our profession can and does currently provide for all aspects of the building codes. By relatively untrained program administrators contradicts the assumption that trained, tested, state licensed and regulated professionals are best suited to interpret and ensure compliance with all codes and ordinances. We believe this represents an unwarranted and ill advised leap by the Council.

Local Architects are continuing to evaluate this amendment. To follow are brief examples of specific concerns being expressed.

We believe that the increased standards from the 2006 to the 2009 IECC are a significant improvement that the community will need some time to digest without further bureaucratic process at this time.

Increased 2009 standards coupled with complete enforcement of the current codes would make the proposed additional 10% increase unnecessary.

Methods should be found to verify compliance with the code without utilizing third party inspections.

We would encourage a voluntary period of incentivized compliance to enable the City to refine the amendment.

We note that previous Ordinance Amendments increasing burdens on development that were written as mandatory requirements as opposed to based on incentive have been stricken down by the Court.

The nearby City of Ketchum today announced that permit fees for construction projects costing less than fifty thousand dollars will be waived in an effort to encourage construction in this poor economy. The timing could not be worse politically or practically for the City of Hailey to adopt an ordinance with significant known hard costs and additional unknown and possibly prohibitive associated costs to homeowners and developers.

This is unarguably a complex subject with many relevant and complex issues affecting the premise and specifics of the amendment. While two years of work by the committee is certainly considerable, additional work needs to be done. We urge the council to continue this discussion and direct staff and the committee to address your concerns and those concerns expressed in this letter.

Respectfully,

Derek Ryan & Other Members of AIA Mountain Section

## **Mariei Platt**

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**From:** robert crosby [sbrgad1@cox.net]  
**Sent:** Wednesday, October 20, 2010 9:57 AM  
**To:** Rick Davis1; Rick Davis; Carol Brown; Don Keirn; Fritz Haemmerle; Martha Burke  
**Cc:** Mariel Platt  
**Subject:** Comments - Build Better Program  
**Attachments:** Hailey green bld position paper as dlvr'd 10-20-10.pdf

Mayor Davis and Hailey City Council:

Please find attached our comments regarding the above code Build Better Program currently before you for deliberation. The paper has been approved by our Government Affairs Committee as well as our Board of Directors, which is comprised of eleven elected representatives of our over 300 members which are geographically dispersed throughout the Wood River Valley, including as residents of Hailey. We hope that you will take its contents into consideration as you discuss this policy.

Our process of approval requires that both of the above mentioned bodies review and comment on or approve the document. As you will see, it is dated October 13, 2010, which is the effective date of our comments, and the subsequent week was used for our internal approval process. We understand that the proposed ordinance has undergone revision but will not be available for public review until tomorrow. We would like to point out that we cannot logistically accomplish the review and approval process that is mandated within our own organization for any revised provisions (read the revised ordinance, update this letter if necessary, have it reviewed internally by both bodies, and deliver it to you) in time to present it to you with ample time for review before your Monday evening council meeting.

We have been told that the ordinance revision may include a twelve month period where residents may comply voluntarily, before its terms become mandatory. As you will see, our comments apply whether or not there is a pre-mandatory, voluntary introduction period, and the introduction of this change, while beneficial to Hailey residents in the short term, does nothing to alter our concerns relative to the life of the ordinance after that period. As to the advisability of this provision, we respectfully submit that it does not change our reasons for concern nor our belief that the program ought to be completely voluntary, as outlined throughout our letter. Furthermore, a one year voluntary period only puts us closer to the point in time when nationally mandated changes to building codes will likely accomplish the goals of the program without the need for Hailey to construct an enforcement and compliance bureaucracy, or depend upon outside verification of compliance which in and of itself has potential quality control concerns, with the attendant costs associated with establishing these procedures.

Thank you in advance for taking the time to review our position on this topic. We believe that the experience that comes from our daily involvement in the real estate industry will provide you with insight into this issue that is unique to our organization. Please feel free to call (721-8353) should you have any questions. As I have been throughout the outreach process, I am available at any time to meet with you or staff to better articulate our concerns, suggested alternatives and potential solutions.

Sincerely,  
Bob Crosby

Robert W. Crosby  
Government Affairs Director  
Sawtooth Board of Realtors

208-721-8353 cell  
[sbrgad1@cox.net](mailto:sbrgad1@cox.net)





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October 13, 2010

Mayor Davis  
Hailey City Council  
115 Main Street South, Suite H  
Hailey, ID 83333

Re: Above Code Building Requirements and the Build Better Program

Dear Mayor and Council:

On behalf of the Board of Directors and the Government Affairs Committee of the Sawtooth Board of Realtors, we are writing to offer suggestions and alternatives to the proposed above code Build Better Program. While our organization supports efforts that encourage energy efficiency and sustainable building practices, we feel that such measures need to be voluntary and incentive based, as compared to mandatory and in excess of already established building codes.

Before proceeding with our comments, we would like to acknowledge the effort put forth by the Sustainable Building Advisory Committee (the "Committee") in crafting and following an inclusive plan intended to seek information, make recommendations and then inform the public as to its conclusions. Its methodology was well conceived and well managed. However as is often the case with such activities, based on our observation through participation in the outreach events the Committee facilitated, it appears to have been very difficult to engage those who may oppose the mandatory or other aspects of the proposal until now. As a result the majority of the Committee may have been comprised of, or received input from, individuals already predisposed toward mandatory enforcement and the introduction of mandatory, widespread energy audits. The proposed speed limit reduction on Highway 75 is a similar example of an issue that has a very high level of concern among residents now, even though they did not participate in earlier public meetings on the topic.

We have broken our comments into several categories to highlight their respective areas of importance. For example, in some cases we believe inaccurate data may have tainted the committee's viewpoint and resulted in excessive policy recommendations, and in other areas we believe there are hardship issues that should be considered as potential exemptions. We begin with comments or concerns, and finish with alternatives and possible solutions.

## **Data Inconsistency:**

### **Natural Gas Consumption Data Incorrect:**

On the bottom of the first page and top of the second page of the Hailey Sustainable Building Advisory Committee's Recommendation dated April 26<sup>th</sup>, 2010, which describes the methodology and research the Committee utilized in developing its recommendations is the following sentence, referring to gas consumption in the Wood River Valley as compared to the Idaho average: "The average Idaho home consumes on average 3.2 therms per/day, while Wood River consumption is 16 therms per/day." This statement says that the Wood River Valley consumption rate for natural gas is **500% or 5 times** the consumption rate for the state (including the Wood River Valley) on average.

We investigated this ratio with Intermountain Gas and were told that there must have been a misunderstanding and that the data were wrong. In fact the true relationship, according to Intermountain Gas' revised data, is that a Wood River Valley home uses about 3.87 therms more than the state average on a peak winter day, not 12.8 therms more as the recommendations say, a misunderstanding equating to a mistake of over 3.5 times in magnitude. Furthermore, using Idaho Falls versus Ketchum as an example, the average temperature in those two cities during the months of January, February and March are 18.3 and 10.1 respectively, a colder temperature difference of 8.2 degrees in Ketchum over that three month period. It is Intermountain Gas' opinion that such a temperature differential would have been a major contributor to the 2.9 therms differential in gas consumption rates that exists between Idaho Falls and the Wood River Valley.

Given that it appears that these flawed data were initially identified as an early justification for moving toward a mandatory above code policy, we are concerned that:

- a) The Committee may have taken a more severe approach to recommended policy due to its belief that Wood River Valley residents use more than 5 times as much natural gas as everywhere else in the State, when in fact they do not.
- b) Recommended policy relative to the points system required to mitigate housing designs that do not meet the legislation's ideal in terms of efficiency (small in area and/or with a relatively high ratio of bedrooms to overall size), may be more stringent than would have been otherwise required if the Committee had been operating with correct data.
- c) In the event the points system is too restrictive as a result of this misinformation, residents' property rights may be overly impacted due to the extra expense of complying with the points equation, to the degree that a given resident may not ultimately build the home he or she desires for reasons based on incorrect data, or worse still, may choose to move to another jurisdiction so that the desired home can be built.

### **Legal Concerns:**

Whenever property rights are restricted, as many would deem to be the case with this ordinance, the question of legal challenges arises. Past ordinances regarding inclusionary zoning and home size have failed in Idaho after review by the courts. We are not legal professionals and do not presume to give legal advice, but would like to draw attention to some areas where it may be possible that this type of mandatory ordinance, no matter how well-meaning, might be challenged, with the attendant time, effort and cost that would be wasted if that were to occur.

### **House Bill No. 220:**

Again, we are not lawyers and as such cannot render a legal opinion on any matter, but would refer the City to House Bill No. 220 from 2009 which amended Idaho Code Section 39-4116 (3) (b), among others, to add the following language:

"A local jurisdiction shall not adopt any provision of the International Building Code or International Residential Code or appendices thereto, that has not been adopted ... by the Idaho building code board ... Provided however, that, after a finding by the local jurisdiction that good cause exists for such an amendment to such codes and that such amendment is reasonably necessary, a local jurisdiction may adopt such provision by ordinance...".

There appears to be the possibility that the proposed ordinance could be challenged on the basis of this section, if it were deemed that good cause or reasonable necessity does not exist, and the changes were not first adopted by the Idaho building code board.

### **Is mandatory Cash-in-Lieu a Tax?**

Is it possible that the cash-in-lieu provisions of the proposal might be construed to be a tax, since they would be the result of mandatory, not voluntary, above code requirements, similar to the inclusionary housing requirements that have recently been repealed by local municipalities?

### **Does the Points System Act as a Cap on Building Size?**

As we discuss in more detail below, how does the point system impact the ability to economically construct a home that may have, for example, few bedrooms relative to size, or outside snow melt systems? Do the restrictions or requirements under the proposed mandatory policy act in a way that is similar to the home size cap that was initiated in Sun Valley but ultimately failed in court?

### **Conceptual Concerns:**

#### **New Jobs:**

This ordinance has been promoted as one which will create some new jobs in the Wood River Valley; certainly it is easy to see that the energy audit industry would be greatly stimulated by its provisions. While the creation of new jobs is a desirable outcome, this is only true if the revenue required to fund those new jobs is sourced outside the community. As long as local Hailey residents are required by the mandatory provisions of the proposed ordinance to fund these jobs there is something of a 'robbing Peter to pay Paul' aspect to this outcome; a transfer of money occurs from residents to auditors and energy renovators/contractors, but no new money is inserted into the community. We believe it is the wrong economic time to force residents to pay for the cost of establishing a new industry. Let residents choose voluntarily to have an energy audit if they feel it is worthwhile and that it will lead to economically beneficial results for them, rather than force them to do so whether the results are good for them or not.

#### **Changing Consumer Principles - Voluntary versus Mandatory:**

We believe that consumer preferences have already begun to demonstrate the desire to move toward more energy efficient and sustainably built homes; in addition to our own data much of the

information provided by the Committee during outreach events confirms this. Furthermore, we believe consumers will demand such design elements purely from an investment perspective, as they recognize that such preferences will become even more prevalent in the future, and that a home will need these characteristics to be competitive in the for sale market at the time in the future when it needs to be sold.

Finally, we believe the historical data used to defend the supposition that a voluntary program will not work, are out of date. Communities which instituted mandatory above code requirements more than two to three years ago, in theoretical response to a voluntary program which did not work, would have done so based on even older consumer mores that very likely would not have been as inclined toward energy efficiency and sustainability as they would be today. Said differently, if a voluntary program did not work in the 1990s or early 2000s, that does not mean that the very same group of citizens would not now, in 2010, choose to voluntarily embrace the very same efficiency and sustainability standards.

With regard to what is fair to your citizens, looking at the City of Moscow, Idaho may be instructive. Its voluntary program has been in place since 2006. The Committee states that the city is considering a mandatory green building code within 2 to 3 more years. This means that the City of Moscow will have allowed its residents 6 to 7 years of voluntary participation before even considering mandatory provisions. It is our opinion that the combination of changing consumer preferences and significantly more stringent national building codes will obviate the need for any mandatory provisions in Moscow and result in continuation of a voluntary, incentive oriented set of efficiency and sustainability goals.

#### **Property Rights:**

##### **The Points Equation:**

Our concern with the points approach to mandating certain design performance is that it is very difficult to ascertain as a layman what design elements are required in order to offset other design elements. Has the relationship between design features that 'cost' points been properly vetted against those that 'give' points to ensure that a homeowner is not absolutely prevented from building the home he or she desires, i.e. is the points system fair? If a couple without children desires a larger home with fewer bedrooms relative to overall size because they like to entertain, or have offices, dens, exercise rooms, bonus rooms, mud rooms, storage rooms or any of the many other non-bedroom uses that may be part of their dream home, should they be prevented from doing this because the points system makes the construction of such a home so expensive that they either choose not to build or to leave Hailey? Preparation of detailed examples of larger homes and the resultant additional hard and soft costs related to complying with the proposed code amendments would be instructive. The idea of potentially legislating out the possibility of building a home that does not meet the Committee's ideals in terms of size seems to us to be too much of an infringement on personal property rights to be acceptable.

**Large Homes and the Economy:**

While larger homes by definition use more materials to construct, and may require more resources to maintain depending on the owner's approach to maintenance, they also provide a larger positive impact on the economy. This is especially true in Hailey and elsewhere in Blaine County where we have an unusually high percentage of residents who work in the building trades and related industries, which in themselves have comprised an unusually high percentage of our County GDP. For sake of discussion one could say that a 5,000 square foot home has twice the economic impact of a 2,500 square foot home, and everyone from the architect, to the developer, the suppliers, the contractor and subcontractors, the Realtor and the owner, should expect twice as much economic benefit from it, not to mention the municipality which will receive twice as much property tax revenue. Doesn't it make more sense to allow consumer preferences to voluntarily provide more sustainable building practices, which we believe they and market pressures will do, rather than institute mandatory requirements that might stunt the recovery of the building industry that is so critical to our economy?

**Return on Investment:**

If the concepts embodied in the Build Better proposal make economic sense, Hailey residents will embrace them voluntarily; who wouldn't? But how do we define 'economic sense'? Is an appropriate return on this type of investment reflected by a 1, or 2 or 3 year payback of funds initially invested, or by a 5 or 10 year payback. How would the duration of a home owner's expected occupancy of a home play into the definition of 'economic sense'? Shouldn't an owner with a two year occupancy horizon expect to have the same percentage return on investment as an owner with a 22 year occupancy expectation?

The answers to these questions can only be provided by individual home owners, after taking their own financial circumstances into consideration. If the proposed ordinance is compelling economically, it does not need to be forced onto the citizens of Hailey. If it is not compelling, we must ask if it is government's place to mandate uneconomic requirements upon its citizens, especially when times are so financially tough for so many.

**Alternatives and Possible Solutions:**

**Education Leads to Acceptance:**

Hailey's residents need to be made aware of the goals and opportunities within a program like the Build Better Program before it becomes a mandated law. By providing such education, including the possible benefits of having an energy audit, the City will give its residents the opportunity to understand and support the goals of the project and embrace green building and sustainability concepts willingly, versus having a difficult to understand law forced upon them before they have the opportunity to evaluate its conceptual benefits for themselves.

**Hardship Exemption Cases:**

We believe that certain home owners will find any additional costs for any purpose, including those related to the proposed ordinance, very difficult to afford. As such, we would urge you to consider

the following additional exemptions to the proposed ordinance, were it to be implemented on a mandatory basis:

- a) Where the size of the job is relatively small, such that the additional costs attributable to the proposed ordinance (energy audit, supplies, labor, etc.) are, say, equal to or greater than 25% of the cost to construct the non-ordinance related work,
- b) Where an addition or alteration is required to a home owned either by a person on a fixed government funded income or where family income is less than say, 90% of Area Median Income for Blaine County

**Utilize National Codes:**

The Better Building Program seeks to institute requirements that are 20% in excess of current building codes (2006 IECC). The 2009 IECC, which will be adopted effective January 1, 2011, is estimated to be 10% more energy efficient than the 2006 IECC. According to the Committee's recommendations report, the 2012 IECC, which would have to be adopted no later than 2014, is estimated to be 30% more energy efficient than 2009's, with a further code update that provides 50% more stringent requirements being considered for 2015. Assuming the new codes are adopted, it appears that the Committee's goals would be exceeded by mere passage of time within no more than four years, and there is no need to:

- a) Accelerate by way of mandatory provisions upon residents that which will become law through national and state requirement anyway.
- b) Undergo the cost to the City in employee time, business disruption and training to create the administrative and enforcement bureaucracy required to administer the above-code provisions in advance of the time when building officials will be required to police changes to upcoming IECC updates anyway.
- c) Depend on third party verification of provisions that will likely fall under the building officials' purview if taken on within the framework of newly adopted codes.
- d) Potentially create confusion within the design and building community related to becoming knowledgeable about the new Build Better Program requirements, and then having to adapt to new IECC regulations as they are subsequently introduced.

**Go Voluntary:**

Providing a voluntary, incentive based green building program, versus a mandatory program or a program that only includes a voluntary introduction period before becoming mandatory, meets the needs of Hailey's residents because:

- a) It allows those who can afford the additional costs of the program to choose to utilize it for whatever reason or reasons appeal to them (belief in the program goals, personal desire to use sustainable products, protection of their housing investment, and/or ease of future resale) without unduly harming those of limited means.
- b) It allows design and building professionals more time to become familiar with green and sustainable building options which will likely be embodied in updated national or state building codes
- c) It puts pressure on the City of Hailey to ensure that its program is economically compelling, which will ensure its acceptance by Hailey's residents

- d) It allows the City to depend on updated, more energy efficient building codes as they are adopted, putting Hailey on an even playing field with other communities relative to cost to construct while meeting significantly increased energy efficiency goals within the near term
- e) It allows Hailey elected officials and staff to monitor the impacts, both intended and unintended, of the provisions so that adjustments can be made as required without having to go through the legislative process.

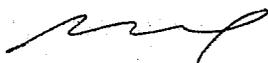
**Incentivize:**

Using incentives to reward residents for including green building practices in their designs for new homes, alterations or additions should cause an increased awareness of the goals of the project and work with changing consumer principles to increase participation in such practices. Such incentives, some of which are already in practice, could include:

- a) Fast tracking the permit process
- b) Waiving or delaying permit fees
- c) Offering to rebate the cost of energy audits if the estimated payback of the audit suggested work including the cost of the audit is greater than two years
- d) Seeking grants to allocate toward energy audit costs that refund the cost of the audit if the home owner completes any of the suggested improvements at a cost to them at least equal to the cost of the audit
- e) Providing educational opportunities for building professionals and home owners that highlight the benefits of green building programs, with attendance at such events offsetting a small portion of permit or inspection fees

We appreciate this opportunity to comment and look forward to your deliberations taking our input into consideration. As a real estate organization of over 300 members and affiliates which are spread throughout our area including within the City of Hailey, we believe that we offer unique perspective and expertise on this topic. Our relationships with architects, builders, suppliers and, very importantly, homeowners give us insight into the impacts that the proposed above code legislation may have on the Hailey marketplace. We respectfully ask you to use incentives to create an atmosphere that will encourage the voluntary involvement of your residents in energy efficient, sustainable building practices.

Yours very truly,



Robert W. Crosby  
Government Affairs Director

HAILEY ORDINANCE NO. \_\_\_\_

AN ORDINANCE OF THE CITY OF HAILEY, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO, AMENDING THE CITY OF HAILEY MUNICIPAL CODE, CHAPTER 15.08, BUILDING CODE ORDINANCE, BY ADOPTING THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE, ALONG WITH AMENDMENTS THERETO RELATIVE TO LOCAL CONDITIONS; BY AMENDING CHAPTER 15.08, BUILDING CODE ORDINANCE, BY ADOPTING A NEW SECTION 15.08.012, BUILD BETTER PROGRAM, TO INCREASE ENERGY CONSERVATION AND SUSTAINABLE BUILDING PRACTICES; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A REPEALER CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Idaho Code Sections 39-4109 and 39-4116 require the City of Hailey to adopt the 2009 International Energy Conservation Code ("2009 IECC"), excluding certain provisions and appendices;

WHEREAS, Idaho Code Section 30-4116 allows the City of Hailey to amend the 2009 IECC to reflect local conditions, provided the amendments provide an equivalent level of protection;

WHEREAS, Idaho Code Section 39-4109 allows the adoption of the 2009 IECC effective January 1, 2011;

WHEREAS, the adoption of the 2009 IECC and the Build Better Program will conserve energy, water and other natural resources and preserve the health of our environment through requirements related to design, construction, operations, recycling, and thereby promotes the public health, safety, and welfare;

WHEREAS, buildings use the most energy of any sector in the US - more than the transportation sector - therefore; it makes sense to curtail impact where they are greatest;

WHEREAS, Hailey's climate requires significant amounts of energy to heat during the winter months, which translates to higher energy costs and provides an opportunity to substantially increase efficiencies and savings;

WHEREAS, the average life span of a building is 75 years and during this time the status of energy prices and availability could change, especially considering the potential impacts of climate change and future policies aimed at curtailing emissions associated with climate change; and

WHEREAS, the City Council finds that enactment of this ordinance is required to ensure the enforcement of Section 15.08.010 of this ordinance by January 1, 2011 and the remaining Sections of this ordinance by January 1, 2012, following a one (1) year voluntary period beginning on January 1, 2011.

NOW, THEREFORE BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF HAILEY, IDAHO, AS FOLLOWS:

Section 1. Section 15.08.010 of the Hailey Municipal Code is amended by the deletion of the stricken language and addition of the underlined language, as follows:

15.08.010 Adoption of Codes. Pursuant to Idaho Code Section 39-4116(1), the following Codes published by the International Code Council are hereby adopted by reference:

- A. 2006 International Building Code (“2006 IBC”), including all rules promulgated by the Idaho Building Code Board to provide equivalency with the provisions of the Americans with Disabilities Act accessibility guidelines and the Federal Fair Housing Act accessibility guidelines; and including Appendix E: Supplemental Accessibility Requirements;
- B. 2006 International Residential Code (“2006 IRC”), parts I-IV and IX, including Appendix F: Radon Control Methods;
- C. 2006~~9~~ International Energy Conservation Code (“2006~~9~~ IECC”);
- D. 1997 Uniform Code for the Abatement of Dangerous Buildings;
- E. 1997 Uniform Building Code (“97 UBC”) Volume 3, Material, Testing and Installation Standards; and
- F. 1997 Uniform Building Code, Volume 1, Table 1-A, Building Permit Fees.

Section 2. Section 15.08.012, of the Hailey Municipal Code, Build Better Program, is created by the addition of the following language:

A. Applicability: This Section 15.08.012 is a supplement to the other adopted International Codes and is not intended to be used as independent construction regulations or to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances. All commercial and residential New Construction, Additions, Repairs and Alterations shall comply with the standards of Section 15.08.012, unless otherwise stated herein.

1. Referenced Codes and Standards. It is the expressed intent of this section to require higher minimum standards relating to Building performance than the corresponding minimum standards set by the referenced codes and standards, and in such cases, the higher minimum standards of this section shall take precedence.

2. Other Laws and Codes. The provisions of this chapter shall not be deemed to nullify any provisions of local, state or federal laws and codes.

3. Residential New Construction Exemptions. U.S. Green Building Council’s Leadership in Energy and Environmental Design for Homes certification level or National Association of Home Builder’s Green Building Program bronze level project are exempt from the Build Better Program requirements. Either exemption must verify that the project is 10% more energy efficient than the 2009 IECC, using a HERS Index. The exemptions listed above must show intent to meet the requirements at the Building Permit review stage through plans and

an initial HERS score based on the proposed design. Prior to receiving a certificate of occupancy, copies of all program documentation and a final HERS score shall be submitted to the Building Department.

4. Commercial New Construction Exemptions. U.S. Green Building Council's Leadership in Energy and Environmental Design for New Construction minimum certification level projects are exempt from the Build Better Program requirements, provided the applicant verifies that the project meets the minimum energy efficiency requirements for Commercial Buildings, as identified in Section 15.08.012.C.2.a of the Hailey Municipal Code. The applicant must identify the intent to meet U.S. Green Building Council's Leadership in Energy and Environmental Design for New Construction certification level, at a minimum, at the Building Permit review stage with an indication on the plans and with a written narrative what Leadership in Energy and Environmental Design points will be achieved. Prior to receiving a certificate of occupancy, copies of all program documentation shall be submitted to the Building Department.

5. Exemptions for Commercial and Residential Alterations and Additions. In Addition to the exemptions listed in Section 101.4 of the 2009 IECC, the following projects are exempt from Section 15.08.012:

- a. Window frame and glass replacements of the same size and location.
- b. Bathroom remodel projects limited to the replacement of fixtures and cabinets.
- c. Kitchen remodel projects limited to the replacement of cabinets, counter tops, plumbing fixtures, and appliances.
- d. Electrical work associated with permits issued only for electrical work
- e. Plumbing associated with permits issued only for plumbing.
- f. Replacement of HVAC appliances associated with permits issued only for appliance replacement.
- g. Reroofs.
- h. Additions less than 500 square feet of Conditioned Floor Area.
- i. New construction or Additions of any size that do not include any Conditioned Floor Area.
- j. Alterations that do not affect the integrity of the Building envelope.
- k. Alterations that do not require a Building Permit.
- l. Tenant and ADA improvements required by the Building Department.
- m. Structures listed on the National Historic Register.

6. In-lieu fees. The city may accept voluntary cash contributions, in lieu of meeting the additional energy efficiency increase percentage beyond the minimum requirements set forth by the 2009 IECC, Section 15.08.012.C and in lieu of meeting the points requirement set forth by Section 15.08.012.E.

- a. The contribution amount shall be \$400 for every percentage point beyond the minimum energy efficiency requirement specified by Section 15.08.012, (C) and \$100 for every 0.5 points that are required, but not satisfied.

b. Collected in lieu fees shall be used for energy, water and waste conservation projects that have a public benefit, as identified and approved by the Council.

B. Definitions. For the purpose of this Section 15.18.012, the following capitalized words and phrases shall apply as defined herein, in addition to definitions found in Chapter 2 of the 2009 IECC.

“Program Administrators” shall mean city staff from the Building and Planning Departments who administer Section 15.08.012 of the Hailey Municipal Code, the Build Better Program.

“Certified HERS Rater” shall mean a Home Energy Rating System provider who has current and valid certification under Residential Energy Services Network (RESNET) and who adheres to the RESNET defined standards of practice and code of ethics.

“Compact fluorescent light bulb” or “CFL” shall mean a fluorescent light bulb that has been compressed into the size of a standard-issue incandescent light bulb, known for its long life span and superior energy efficiency when compared to incandescent lights.

“COMcheck Energy Analysis” shall mean a software used to verify commercial code compliance and above code requirements with the 2009 IECC.

“EnergyPlus” shall mean software used to evaluate and analyze building energy performance.

“ENERGY STAR Advanced Lighting Package” or “(ALP)” shall mean an ENERGY STAR Certified Home that includes a comprehensive set of ENERGY STAR qualified light fixtures that at a minimum consist of 60% ENERGY STAR qualified hard-wired fixtures and 100% ENERGY STAR qualified ceiling fans where installed.

“ENERGY STAR Builder” shall mean a builder who has completed ENERGY STAR’s Partnership Agreement, has selected a Home Energy Rater, and who is listed on the ENERGY STAR website as an ENERGY STAR partner.

“ENERGY STAR Indoor airPLUS” or “IAP” shall mean an ENERGY STAR Certified Home that includes a number of construction practices and technologies to decrease the risk of poor indoor air quality, including careful selection and installation of moisture control systems, heating, cooling, and ventilation (HVAC) equipment, combustion venting systems, and building materials. that are tested and verified by an independent party.

“ENERGY STAR Northwest Program” shall mean an independently tested and verified home energy certification program that ensures homes are built 15% more energy efficient compared to current code building homes.

“EQuest” shall mean a software used to evaluate and analyze building energy performance.

“Forest Stewardship Council Certified” or “FSC Certified” shall mean a label that verifies a chain of custody certification that wood that has been grown in a manner that meets the FSC’s sustainable forestry practices and standards.

“Home Energy Rating System Audit” or “HERS Audit” shall mean a comprehensive visual and technical energy analysis of a home using Residential Energy Services Network’s (RESNET) protocol and a REM/Rate™ Energy Analysis and includes a prioritized list of suggested improvements and their associated energy and financial savings. At a minimum, the audit evaluates the following, to determining the rating of the home: blower door test, duct blaster test (if applicable), an inventory of the lighting, appliances, insulation, solar orientation, and heating and cooling equipment.

“Home Energy Rating System Index” or “HERS Index” shall mean a scoring system established by the Residential Energy Services Network (RESNET) in which a home built to the specifications of the HERS Reference Home scores a HERS Index of 100, while a net zero energy home scores a HERS Index of 0. The lower a home's HERS Index, the more energy efficient it is in comparison to the HERS Reference Home.

“Light Emitting Diode” or “LED” shall mean an electronic device that emits light when an electrical current is passed through it, known for its long life span and superior energy efficiency when compared to incandescent lights.

“Leadership in Energy and Environmental Design Accredited Professional” or “LEED AP” shall mean a person who has successfully passed a test on the LEED process, points, and documentation requirements, in accordance with the US Green Building Council's specifications

“Minimum Efficiency Reporting Value” or “MERV” shall mean a rating method used for comparing the efficiency of an air filter; the higher the MERV rating, the better the filter is at removing particles from the air.

“National Association of Home Builder's Green Building Program” shall mean a program based on the International Code Council 700-2008 National Green Building Standard™ and is a 3<sup>rd</sup> party tested and verified green building program.

“Natural Air Changes Per Hour” or “NACH” shall mean the natural movement of the total volume of air in a given space that is exchanged over a period of one hour, measured using a blower door test at 50 Pascal.

“New Construction” shall mean any building with less than 50% of its exterior walls and foundation remaining or that is being built on a vacant building envelope, where no previously built structure exists at the time of building.

“REM/Rate™ Energy Analysis” shall mean a residential code compliance and rating software developed specifically for the needs of HERS raters, that calculates heating, cooling, hot water, lighting, and appliance energy loads, consumption and costs for new and existing single and multi-family homes.

“REScheck Energy Analysis” shall mean a software used to verify residential code compliance and above code requirements with the IECC.

“Residential Energy Services Network” or “RESNET” shall mean an industry not-for-profit membership corporation that is the national standards making body for building energy efficiency rating systems.

“Structural Insulated Panels” shall mean a high performance building panels used in floors, walls, and roofs for residential and light commercial buildings. The panels are typically made by sandwiching a core of rigid foam plastic insulation between two structural skins of oriented strand board (OSB).

“U.S. Green Building Council's Leadership in Energy and Environmental Design for Homes” or “LEED for Homes” shall mean a consensus-developed, third party-verified, voluntary rating system which promotes the design and construction of high-performance green homes.

“U.S. Green Building Council's Leadership in Energy and Environmental Design for New Construction” or “LEED for New Construction” shall mean a rating system designed to guide and distinguish high-performance commercial and institutional projects, including office buildings, high-rise residential buildings, government buildings, recreational facilities, manufacturing plants and laboratories.

“Verification of Accountability by Responsible Party” shall mean a form furnished by the Program Administrators for the use of verifying, by the Building owner, contractor, or other responsible party, that points have been met in accordance with the requirements of Section 15.08.012.E, Points Menu.

“WaterSense Program” shall mean a water conservation program with oversight by the U.S. Environmental Protection Agency that requires all toilets, urinals, faucets, showerheads, and other products labeled under the program to undergo independent 3<sup>rd</sup> party testing to ensure that water conservation is at least 20% greater than conventional items in the respective category.

“Whole House Fan” shall mean a type of fan installed in a building's ceiling, designed to pull hot air out of the building and increase building cooling.

“Zoned Hydronic Radiant Heating” shall mean a heating system using a boiler to heat water and a pump to circulate hot water through radiant floor panels, wall radiators, or baseboard convectors. The pipes, embedded in the floor, carry heated water that conduct warmth to the surface where it broadcasts energy to separated radiant heat zones, which are controlled a thermostat and served by a manifold which distributes the flow of warm water to the individual circuits of tubing within each zone.

C. Energy Efficiency: All commercial and residential New Construction and Additions shall comply with the 2009 IECC, and shall increase energy efficiency 10% beyond the 2009 IECC requirements.

1. Residential Energy Efficiency. Energy Efficiency shall be 10% greater than the 2009 IECC requirements for New Construction, Additions, and Alterations with Conditioned Space, 500 square feet or greater.

a. New Construction. Energy efficiency shall be verified by a RESNET Certified HERS Rater using a REM/RATE™ Energy Analysis and IECC Section 405 criteria. Applicants shall submit an initial HERS Index score based on the proposed design with a Building Permit application. Prior to receiving a certificate of occupancy, a final HERS Index score shall be submitted to the Building Department, verifying that both project is 10% more energy efficient compared to the 2009 IECC.

i) New residential construction certified under the current ENERGY STAR Northwest Program is exempt from Section 15.08.012.C.1, providing the Building plans and the constructed building are certified ENERGY STAR Northwest.

b. Additions. A RESNET Certified HERS Rater shall conduct a Certified HERS Audit of the entire Building associated with the Addition, unless a previous Certified HERS Audit has been conducted and submitted to the Building Department within the last 5 years. The energy efficiency of the Addition itself shall be verified by a REScheck Energy Analysis. Applicants shall submit a REScheck Energy Analysis based on the proposed design with a Building Permit application. Prior to receiving a certificate of occupancy, the specifications of the REScheck Energy Analysis will be verified by the Building Department during routine inspections. The REScheck Energy Analysis shall project a 10% more energy efficient design compared to the 2009 IECC.

c. Alterations. All Alterations that require a Building Permit and affect the Building envelope are required to conduct a Certified HERS Audit by a RESNET Certified HERS Rater of the entire Building associated with the Alteration, unless a previous Certified HERS Audit has been conducted and submitted to the Building Department within the last 5 years. A REScheck Energy Analysis shall be submitted to the Building Department

verifying that the Alteration exceeds the energy efficiency requirements of the 2009 IECC by 10% or by calculating the energy efficiency rating of a specific component that affects energy efficiency associated with the alteration. For example: the 2009 IECC requires a U-factor of 0.3 for a new window installation. A new window that is 10% more efficient would have a U-factor of 0.27 or better.

i) Any window installation is not required to conduct a Certified HERS Audit.

2. Commercial Energy Efficiency.

a. New Construction. Buildings less than 10,000 square feet of Conditioned Space shall verify energy efficiency using a COMcheck Energy Analysis and Buildings 10,000 square feet or larger shall verify energy efficiency using an energy model.

i) Buildings under 10,000 square feet of Conditioned Space. Applicants shall submit a COMcheck Energy Analysis based on the proposed design with a Building Permit application. Prior to receiving a certificate of occupancy, the specifications of the COMcheck Energy Analysis will be verified by the Building Department during routine inspections. The COMcheck Energy Analysis shall project a 10% more energy efficient design compared to the 2009 IECC.

ii) Buildings 10,000 square feet of Conditioned Space or larger shall be energy modeled by a licensed engineer using Building Department Approved energy modeling software. Approved software includes, but is not limited to, the most recently published version of the following: eQuest, Trace, Carrier HAP, and EnergyPlus. The model shall verify that amount of energy used is 10% more energy efficient compared to the 2009 IECC and shall be submitted to the Building Department with the Building Permit application. Prior to receiving a certificate of occupancy, the specifications of the energy model will be verified by the Building Department during routine inspections.

b. Additions. An energy audit shall be conducted by an Idaho licensed engineer on the entire Building associated with the Addition, unless an energy audit by an Idaho licensed engineer has been conducted and submitted to the Building Department within the last 5 years. Energy efficiency shall be verified by a COMcheck Energy Analysis. Applicants shall submit a COMcheck Energy Analysis based on the proposed design with a Building Permit application. Prior to receiving a certificate of occupancy, the specifications of the COMcheck Energy Analysis will be verified by the Building Department during routine inspections. The COMcheck Energy Analysis shall project a 10% more energy efficient design compared to the 2009 IECC.

c. Alterations. An energy audit shall be conducted by an Idaho licensed engineer on the entire Building associated with the Addition, unless an energy audit by an Idaho licensed engineer has been conducted and submitted to the Building Department within the last 5 years. A COMcheck Energy Analysis shall be submitted to the Building Department verifying that the Alteration exceeds the energy efficiency requirements of the 2009 IECC by 10% or by calculating the energy efficiency rating of a specific component that affects energy efficiency associated with the alteration. For example: the 2009 IECC requires a U-factor of 0.3 for a new window installation. A new window that is 10% more efficient shall have a U-factor of 0.27 or better.

i) Any window installation is not required to conduct an Audit.

D. Water, Indoor Air, Construction Waste, Durability and Assurance (WICDA). The provisions of WICDA apply to new residential and commercial construction.

1. Water Conservation. All faucets, showerheads, and toilets installed in a Building for domestic use and restroom facilities, shall use 20% less water than standard fixtures or be labeled by the WaterSense Program, which use at least 20% less water than standard fixtures. Water Sense labels or equivalent documentation shall be submitted to the Building Department or provided during final inspection for verification.

2. Indoor Air. 2009 International Mechanical Code shall be met to ensure proper ventilation.

3. Construction Waste. In Addition to waste receptacles, bins for cardboard and clean wood waste shall be provided and sorted accordingly on-site during construction and will be verified by the Program Administrators during regularly scheduled inspections.

4. Durability and Assurance. Details and specifications shall be submitted in the drawings, details, or in packet form with the Building Permit in order to promote durability, and high performance of the Building enclosure and its components and systems through appropriate design, materials, selection, and construction practices.

a. Under the following categories, the Program Administrators shall specify what items shall be applicable and provide a list of these items with the Building Permit:

- i) Foundations
- ii) Walls
- iii) Roofs
- iv) Air infiltration
- v) Heat loss

b. Before the issuance of a certificate of occupancy, applicants shall sign a declaration that states all items are installed to manufacturer's specifications and plan details.

E. Points Menu. Unless a qualifying exemption applies, the following construction activities: exterior snow melt systems, residential New Construction, and residential Additions of 500 square feet of Conditioned Space or greater, shall obtain points from Sections (4) through (11) herein, in an amount determined by the applicable points equation in (a), (b), or (c), below. Any two or more building permits for the same structure that are applied for in any 12 month period shall be considered as one application for the purpose of calculating points.

1. Calculation of Points. Points are accumulated based on the total square feet of Conditioned Space and the number of bedrooms included in the Addition or New Construction project or the square footage of an exterior snow melt system. Points shall be rounded down to the nearest 0.5 (example: a points equation resulting in 2.7 points shall be rounded down to 2.5 points and a points equation resulting in 3.4 points shall be rounded down to 3.0 points)

a. Points equation for New Construction. (Square footage of Conditioned Space)/(number of bedrooms) x 0.01 = required points.

i) Points shall be applied to the construction of the new residential Building.

b. Points equation for Additions. (Square footage of Conditioned Space of Addition) / (Number of bedrooms included in Addition + 1) x 0.01 = required points.

i) Points shall be applied to the Addition, existing structure, or a combination of both.

c. Points equation for exterior snow melt systems. (Square footage of exterior snow melt)/100 = required points.

i) Points shall be applied to the new or existing structure, or a combination of both, if applicable, and shall only be obtained from Section 15.08.012.E.5, Energy Efficiency.

2. Restrictions. When points are required for more than one construction activity, the same item cannot count as a point(s) for satisfying multiple point requirements under more than one construction activity.

3. Verification. Before final inspection, a Verification of Accountability by Responsible Party form shall be submitted, along with supporting documentation such as copies of receipts and invoices, material packaging, and photos, unless an alternative method of verification is specified herein.

4. Waste Management.

a. Reuse Existing Building: Up to 5 points.

Points	Percent of Exterior Walls saved (external sheathing and framing)
3	50%
5	75%

b. New Construction Waste Recycling: Up to 3 points.

i) Application: points will be awarded according to the

following table:

Points	Percentage Waste	Percentage Diverted
1	75%	25%
2	50%	50%
3	25%	75%

5. Energy Efficiency.

a. Insulation: Up to 7 points.

i) Wall Insulation: 2 points.

(1) Application: R-24 minimum wall cavity

insulation.

(2) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

ii) Basement or Foundation Insulation: 1 to 5 points.

(1) Application: Insulation must be installed on the full height of a basement or foundation wall.

(2) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

Points	R-Value and insulated concrete forms
1	15, or
2	20, or
3	25, and
2	Use of insulated concrete forms on the foundation (stem wall and footing)

b. Windows: Up to 3 points.

i) Application: new windows or replacement windows installed as part of an Addition are awarded points as follows:

Points	Maximum U-factor*
1	0.3
2	0.28
3	0.26

\*U-factor, as established by the National Fenestration Rating Council (NFRC).

ii) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions. The inspector must be able to clearly identify the U-factor and Solar Heat Gain Coefficient (SHGC) ratings and window type by the National Fenestration Rating Council's stamp or the manufacturer's label. Applicant must show the number of windows to be upgraded on Building plans.

c. Air Sealing of an Existing Building: Up to 4 points.

i) These points shall not be applied to New Construction activity. Points will be awarded when a HERS rating is applied to the existing structure before and after construction showing the following blower door results:

Points	Natural Air Changes Per Hour at 50 Pascal
1	4
2	3
3	2
4	1

d. Heating, Ventilation, and Air Conditioning (HVAC) Systems.

i) HVAC Commissioning: 1 point for each commissioning that applies; up to 3 points.

(1) Application: 1) test for duct leakage at a 6% target to floor area ratio at 50 Pascal, 2) test and adjust firing rate to within recommended manufacturer specifications and suitable to occupant conditions, and 3) test and adjust refrigerant charge to manufacturer specifications.

ii) Heat Pumps.

Points	Type of source pump installed
8	Water
6	Ground
4	Air

iii) Sealed combustion or power vent assisted Water Heating System: 2 Points.

(1) Verification: New Constructions - checked during plan review by the Program Administrators and verified by the Certified HERS Rater. Additions - checked during plan review and verified by the Program Administrators.

iv) ENERGY STAR boiler, furnace, or hot water heater: 2 points each.

e. Zoned, Hydronic Radiant Heating: 2 points.

i) Application: use a Zoned Hydronic Radiant Heating system that circulates hot water through radiant floor panels, wall radiators, or baseboard convectors located in different areas or zones of the house.

ii) Verification: checked during plan review. Inspected in field.

f. Passive Cooling: 2 to 5 points.

i) Application: Any combination of natural cooling techniques can be used to reduce overheating in homes. Use awnings and window overhangs primarily on south-facing glass to provide a balance between summer cooling and winter heating through solar gain. Points will be awarded for passive cooling systems using any two or more of these techniques (one point per option):

(1) Exterior vertical shading devices for east- and west-facing glass.

(2) Low emissivity films on glass on east- and west-facing windows.

(3) Radiant barriers installed in the attic space.

(4) Landscaping that shades east- and west-facing windows during the cooling season (June to September).

(5) South window overhang sized to effectively shade the window (from June to September).

ii) Verification.

(1) New Constructions: checked during plan review by the Program Administrators and verified by the Certified HERS Rater.

(2) Additions: checked during plan review and verified by the Program Administrators. Indicate the passive cooling design features on the Building Permit plan, for option number 5 above; submit a calculation that demonstrates overhangs have been designed in accordance with the equation below for all south-facing glass. The formula below will result in window overhangs that shade 100 percent of south-facing window glazing on June 21 (summer solstice).

(3) Applicants should use this formula as a guide for sizing all south-facing overhangs:

$D = H/F$  where:

D = Distance of overhang

H = Height from bottom of glass to overhang

F = 3.38 (F is a value corresponding to the noon sun altitude angle on June 21st)

g. Whole House Fan: 2 points.

i) Application: Install a Whole House Fan with an

insulated cover that creates an airtight seal between attic and living space when the fan is off. For maximum effectiveness, the fan should be mounted in a hallway ceiling on the top floor of the house, and should be sized to produce four to five air changes per hour within the home.

ii) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

h. Water Heating: Up to 2 points.

i) Application: Point-of-use water heating uses a mini-water heater at remote fixtures to reduce the energy and water use associated with long piping runs. They are sized to supply hot water to a single fixture such as a sink. Gas-fired models must have a minimum energy factor of 0.82 to achieve this credit.

Points	Type of water heater
2	Tankless
2	Point of Use
2	Indirect fired

ii) Verification.

(1) New Constructions. Checked during plan review by the Program Administrators and verified by the Certified HERS Rater.

(2) Additions. Checked during plan review and verified by the Program Administrators.

i. Lighting and Appliances.

i) ENERGY STAR qualified CFLs or LEDs: 5 points.

(1) Application: Lighting shall be installed in accordance with the lighting table below.

(2) Any exterior lighting fixture must comply with city of Hailey Outdoor Lighting Ordinance requirements.

Area	Rooms	Required percentage of installed ENERGY STAR qualified CFL or LEDs
High-Use Rooms	Kitchen, dining room, living room, family room bathroom(s), hall(s)/stairway(s)	50 percent of total number of fixtures
Medium/Low-Use Rooms	Bedroom(s), den, office, basement, laundry room, garage, closet(s), and all other rooms	25 percent of total number of fixtures
Outdoor	Outdoor lighting affixed to the structure or free-standing pole(s) except for landscape and solar lighting	50 percent of total number of fixtures including all flood lighting

(3) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

ii) Efficient Light Controls: Up to 2 points.

(1) Efficient lighting controls include occupancy sensors, dimming controls, and automatic daylight dimming controls. Points will be awarded for efficient light controls according to the following:

Points	Number of control devices
1	4
2	6

(2) Verification: New Construction shall be checked during plan review by the Program Administrators and verified by the Certified HERS Rater and Additions shall be checked during plan review and verified by the Program Administrators.

j. Energy Efficient Appliances: Up to 6 points.

(1) Application: points will be awarded for ENERGY STAR appliances according to the following:

Points	Type of ENERGY STAR rated appliance
2	Refrigerator
2	Clothes washer
1	Freezer, not part of refrigerator appliance
1	Dishwasher

(2) Verification: New Construction will be verified by

the Certified HERS Rater and Additions will be verified by the Program Administrators. Appliance ENERGY STAR labels must remain on the equipment for inspection by a Certified HERS Rater or Building Inspector.

6. Solar,

a. Passive Solar Heating Design: Up to 12 points.

i) Application: points will be awarded in accordance with the following table, by designing with passive solar heating elements of south-facing glazing, appropriate thermal mass, and Building overhangs:

Points	Percent verifying calculations of the Solar Heat Gain Coefficient
6	40-49%
8	50-59%
10	60-69%
12	More than 70%

ii) Verification: inspected during plan review. Submit modeling documentation with the designer or architect's signature verifying calculations of the Solar Heat Gain Coefficient.

b. Solar Thermal Domestic Hot Water System: 8 points.

i) Application: A solar water heating system shall include south-facing rooftop or ground-mounted collectors, a heat exchanger to transfer the solar heat to the domestic water, and an insulated storage tank to store the heated water. The system shall be sized to provide at least 50 percent of the domestic hot water load. Sufficient unshaded south-facing roof area for collectors and space in a mechanical equipment room must be provided for the additional hot water storage tank.

ii) Verification: checked during plan review by the Program Administrators and verified by the Certified HERS Rater for New Construction and checked during plan review and verified by the Program Administrators for Additions.

c. Pre-Plumb for Solar Thermal System Retrofit and include area required for future tanks and pumps: 2 points.

i) Application: install minimum 1/2" (5/8" OD) copper pipes, minimum 1" wall thickness high temperature 250°F rated insulation, and THN shielded 4 conductor sensor wiring between the attic and the water heater location. To accommodate "active" systems, provisions shall be made for a solar storage tank footprint, with pressure relief drain line, and an electrical outlet for a pump. An 8 ft. by 8 ft. section of south-facing roof suitable for future installation of solar panels shall be provided.

ii) Verification: checked during plan review by the Program Administrators and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

d. Active Solar Electric System: Up to 12 Points.

ii) Application: design and install a solar PV system to meet some of the electrical load of the Building.

Points	size of kilowatt (kW) system
6	2
8	3
10	4
12	5 or larger

i) Verification: the applicant must submit documentation by a qualified engineer or equivalent of the solar installation company of the electrical production calculations using industry-accepted formulas. Installation verified by the Certified HERS Rater.

e. Pre-Wire, or Chase Way, or Conduit, and Provide Area for Future Solar Electric, Photovoltaic (PV) System Retrofit: 2 points.

i) Application: Prewire, chase way, or conduit from the attic to a location near the electric service entrance/circuit breaker panel, allowing space for installation of PV modules on south-facing roofs, and ensuring that roof trusses are adequate to accommodate any added roof loads. maintain a 200 square foot or larger section of unshaded south roof area clear of vent pipes and other obstructions to allow for the installation of modules. Install ¾-inch or larger EMT (electrical metal tubing) or FMC (flexible metal conduit) to accommodate wires run from the attic to a junction box near the main panel and meter. Provide the owner with a roof plan with the preferred location for PV modules and the conduit location clearly marked, and provide structural information on what added loads the roof can accommodate.

ii) Verification: checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

7. Material Efficient Framing and Structure

a. Advanced Framing Techniques: 2 to 10 points.

i) Verification: Checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

ii) 24-inch On-Center Framing: 2 points.

iii) Resource Efficient Insulated Headers: 2 points.

(1) Application: points are awarded for incorporating a minimum R-10 insulation in the header section.

iv) Trusses with energy heel: 2 points.

v) HVAC Ducts Within Conditioned Spaces: 2 points.

vi) Minimum 24-inch Roof Overhangs: 2 points.

(1) Application: design at least a 12-inch overhang with gutters around the Building's entire roof. Install gutter and downspout system to divert water five feet away from foundation and, from there, into the overall on-site drainage area or install crushed stone or other material below roof drip line to minimize splash on siding in high snow areas. All overhangs must meet Building code and zoning restrictions.

b. Structural Insulated Panels (SIPs) in Conditioned Spaces or an Alternatives to Wood Framing Approved by the Program Administrators: Up to 8 points.

i) Application: incorporating SIP construction requires that stamped plans be submitted from a designer.

Points	Percent of structure
5	At least 50% of Exterior Walls
8	At least 50% of Exterior Walls and roof

ii) Verification: Checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

c. Other Alternatives to Wood Framing: Up to 8 points.

i) Application: exterior walls must be constructed with alternative materials. Alternative Building methods that demonstrate energy- and resource-efficient construction with less embodied energy are awarded points according to the following:

Points	Percent of structure
5	At least 50% of Exterior Walls
8	At least 50% of Exterior Walls and roof

ii) Verification: Checked during plans review and a Verification of Accountability by Responsible Party form shall be submitted, before the final inspection.

8. Sustainable Products.

a. Forest Stewardship Council (FSC) Certified: Up to 6 points.

Points	Number of board feet (BF) of FSC lumber per square feet (SF) of floor area
2	2 BF per SF of floor area (2BF/SF)
4	3 BF per SF of floor area (3 BF/SF)
6	50% or more of dimensional lumber in total BF is FSC, excluding engineered wood products

b. Environmentally Preferred, Low Emission, and Local Materials: Up to 10 points from Chart A.

i) Application: For each assembly, all product specification type requirements shall be met in order to receive the points available. Environmentally preferred and low emission qualifying products have more than one of these attributes: recycled content, reclaimed, bio-based, agricultural residue, rapidly renewable, and low or no volatile organic compounds (VOCs) emissions. A "recycled content" product must contain a minimum of 25 percent post-consumer recycled content except as noted otherwise above. Post-industrial (pre-consumer) recycled content is counted at half the rate of post-consumer content. Except as otherwise noted in Chart A, 90 percent of the component, by weight or volume, must meet the specification shown. Locally sourced materials are products that are manufactured within 500 miles of the city are considered local.

Chart A: Environmentally Preferable Products/Locally Sourced Materials

Assembly	Component	Product Specification Types			Points Available
		EPP Specifications	Emission Specifications	Local	
Exterior Wall	Framing	Forest Stewardship Council (FSC) Certified		X	1
Exterior Wall	Framing	Finger-jointed studs (vertical use only for structural components)		X	1
Exterior	Siding or	Recycled		X	1

Wall	masonry	content or Forest Stewardship Council (FSC) Certified			
Floor	Flooring	90% of home	NO carpet in home		1
Floor	Framing	Forest Stewardship Council (FSC) Certified		X	1
Foundation	Cement	Fly ash or slag as replacement for, not Addition to, cement content (min. 20%)		X	1
Interior Wall	Framing	Forest Stewardship Council (FSC) Certified		X	1
Interior Wall	Framing	Finger-Jointed, (vertical use only for structural components)		X	1
Interior Walls AND ceilings	Gypsum board	Recycled content		X	1
Interior Walls AND millwork	Paint		Comply with Green Seal Standard GS-11, Paints, First Edition, May 20, 1993 (0.5 points)  48 hour pre-occupancy flush (0.5 points)		0.5
Interior	Wood		VOC		0.5

Walls AND millwork	finishes		concentrations of 150 gpl or less		
Landscape	Decking or patio material	Recycled content or Forest Stewardship Council (FSC) Certified		X	1
Other	Cabinets	Recovered, recycled content, or Forest Stewardship Council (FSC) Certified	Wood and/or agrifiber products with no added urea- formaldehyde resins	X	1.5
Other	Counters	Recycled content	Wood and/or agrifiber products with no added urea- formaldehyde resins		1
Other	Doors (not incl. garage)	Recycled content or Forest Stewardship Council (FSC) Certified	Wood and/or agrifiber products with no added urea- formaldehyde resins	X	1.5
Other	Trim	Recovered, recycled content, or Forest Stewardship Council (FSC) Certified	Wood and/or agrifiber products with no added urea- formaldehyde resins	X	1.5
Other	Adhesives and sealants		VOC concentrations of 70 gpl or less		0.5
Other	Windows	Recycled content or Forest Stewardship		X	1

		Council (FSC) Certified			
Roof	Framing	Forest Stewardship Council (FSC) Certified		X	1
Roof	Roofing	Recycled content or vegetated (min. 200 sf)		X	1
Roof AND floor AND wall	Insulation	Recycled content (min 20%)		X	1
Roof, floor, wall (2 of 3)	Sheathing	Recycled content or Forest Stewardship Council (FSC) Certified		X	1

9. Indoor Air Quality

a. ENERGY STAR's Indoor airPLUS (IAP) Requirements: 5 points.

i) Application: only New Construction that obtains ENERGY STAR is eligible for this label. For this point option, all of the requirements of ENERGY STAR IAP must be met.

ii) Verification: An ENERGY STAR Home Performance Specialist must perform a visual inspection of installed measure(s) and relevant documents/test results, to affirm compliance or submit an IAP certificate prior to final inspection.

b. Mechanical Ventilation: Up to 5 points.

ii) Application: Energy Recovery Ventilators must be integrated into the HVAC system. points are awarded for providing mechanical ventilation according to the following table:

Points	Type of fan and location
1	Kitchen exhaust fan (minimum 100 cfm)
1	Bath exhaust fan with timer or Humidistat controls (minimum 50 cfm)
1	Ventilation integrated into the HVAC system
2	Energy Recovery Ventilation System

ii) Verification: checked during mechanical inspection. The state mechanical inspector shall complete a Verification of Accountability by Responsible Party form, which shall be submitted, before the final inspection.

c. High-Efficiency HVAC Filter.

i) Filters with MERV ratings of 6 to 10: 1 point.

(1) Application: any MERV with a rating from 6 to 10.

Filters with a MERV rating of higher than 10 may be used only if the HVAC fan system is specifically designed for it.

d. Attached Garage Exhaust Fan: 1 point.

i) Application: install an exhaust fan on the opposite wall from the door to the house. It shall be wired to an electric garage door to run after the door has been opened or closed or put on a timer.

10. Homeowner Information - Operations and Maintenance Binder: 3 points.

a. The builder shall provide a binder to be left in the dwelling for future occupants that includes the following three items:

i) The points checklist

ii) HERS Index score certificate

iii) The equipment manufacturers' installation manuals, except for manuals required to be affixed to the equipment, for all installed equipment, fixtures, and appliances

b. Verification: Submitted to the Program Administrators for review and inspected during final inspection.

11. Design Process and Innovation.

a. Green Building Consultants: 1 point.

i) Application: use services provided by a consultant(s) certified through, Green Advantage, LEED AP, Certified Sustainable Building Advisor, or similar certification Approved by the Program Administrators during the design and construction process.

ii) Verification: A green building consultant must sign the Verification of Accountability by Responsible Party form and provide proof of certification or accreditation during Building plans submittal.

b. ENERGY STAR Builder: 1 point

i) Application: Applies to New Construction Only. The general contractor must be an ENERGY STAR Builder.

ii) Verification: The builder must sign the Verification of Accountability by Responsible Party form and the builder's name must be listed on ENERGY STAR's web site.

c. Innovation Points: 3 points.

i) Application: minimize the environmental impact of the house by incorporating green design and construction measures that have tangible and demonstrable benefits beyond those outlined in the points program. Suggested innovations include: exceptional performance (e.g., zero energy, carbon neutral); innovative design strategies; or emerging technologies, materials, or construction practices. The applicant MUST prepare a written submittal that includes:

(1) The intent of the innovation measure(s)

(2) The proposed requirement for compliance

(3) The proposed documentation to demonstrate compliance

(4) A description and an estimate of the benefit/impact provided by the proposed measure

ii) The above information must document how such an approach will minimize the impacts of the Building in a tangible and demonstrable way beyond the methods outlined in the Build Better Point Menu. The product, design, or technology must

comply with existing city codes and standards.

iii) Verification: Applicant must provide the above documentation in writing and any other supporting documentation, such as an evaluation report or specifications to quantify performance. This information is submitted with Building Permit plans and will be awarded during city staff's evaluation and determination of measures proposed.

Section 3. Section 15.08.020 (E) and (P) of the Hailey Municipal Code is amended by the deletion of the stricken language and addition of the underlined language, as follows:

15.08.020 Amendment of codes. Pursuant to Idaho Code Section 39-4116(3), the following codes adopted pursuant to Section 15.08.010 herein or provisions thereof are added to, amended, altered and/or modified as follows:

E. Fees, Deposits and Refunds: For buildings, structures and other improvements requiring a building or other permit under this chapter, fees, deposits and refunds shall be paid to the city of Hailey as specified herein.

1. Building Permit Fee. Fees shall be charged utilizing Table 1-A of the 97 UBC, published by the International Conference of Building Officials (ICBO). Building valuation shall be factored at one hundred twenty dollars (\$120.00) per square foot. For new construction or substantial remodels, an application fee of \$500 shall be made at the time the building permit application is submitted to the city. Said fee shall be credited to the total amount of the building permit fee, but shall be forfeited if the building permit is not obtained by the applicant within 180 days of permit approval. Except as otherwise provided for herein, the remainder of the building permit fee and the deposit for final inspection shall be collected when the building permit is issued. At the election of the applicant, payment of the remainder of the building permit fee for an Energy Star certified single family residence or a Building built to the Build Better Program during the introductory period, which shall expire January 1, 2012, may be deferred to the date of the issuance of a certificate of occupancy. For the purpose of Section 15.08.020(E), an Energy Star certified single family residence shall mean a single family residence certified as an Energy Star project in accordance with the Northwest Energy Star Program, as amended. The Building built Build Better Program shall mean a Building that meets the specifications outlined in Section 15.08.012.

2. Plan Review Fee: Building Department review will be 65% of the building permit fee. Except as otherwise provided for herein, the plan review fee shall be collected when the building permit is issued. At the election of the applicant, payment of the plan review fee for an Energy Star certified single family residence or a Building built to the Build Better Program specifications may be deferred to the date of the issuance of a certificate of occupancy.

3. Fire Review Fee: Fire Department review for commercial or multi-family projects shall be 35% of the building plan review fee. Except as otherwise provided for herein, the fire review fee shall be collected when the building permit is issued. At the election of the applicant, payment of the fire review fee of an Energy Star certified single family residence or a Building built to the Build Better Program specifications may be deferred to the date of the issuance of a certificate of occupancy.

P. 2009 IECC shall be amended as follows:

1. 2009 IECC Chapter 4, Residential Energy Efficiency.

a. Section 401.2 Compliance. Projects shall comply with Sections 401, 402.4, and 403.1, 403.2.2, 403.2.3, and 403.3 through 403.9 (referred to as mandatory provisions), and Section 405 (performance)

b. Sections 402.1 through 402.3, 403.2.1 and 404.1, shall be deleted.

c. Section 402.4.2 Air Sealing and Insulation. Building envelope air tightness and insulation installation shall be demonstrated to comply by Section 402.4.2.1, Testing Option.

d. Section 402.4.2.2, Visual Inspection Option, shall be deleted.

e. Section 405, Simulated Performance Alternative (Performance).

This section shall be met using Residential Energy Services Network's (RESNET) Home Energy Rating System (HERS) by developing a simulated model of the proposed design and comparing it to the 2009 IECC standard reference design using a REM/RATE™ ENERGY ANALYSIS.

2. 2009 IECC Chapter 5, Commercial Energy Efficiency.

a. Section 501.2, Application. The Commercial Building project shall comply with the requirements of Section 506, provided Sections 502.4, 503.2, 504, 505.1, 505.2, 505.3, 505.4, 505.6, and 505.7 are each satisfied.

b. Sections 502.1 through 502.3, 503.3, 503.4, and 505.5 shall be deleted.

c. Section 506, Total Building Performance. Buildings less than 10,000 square feet shall comply with Section 506 using a COMcheck Energy Analysis. Buildings 10,000 square feet or more shall comply with Section 506 using Building Department Approved energy modeling software, including but not limited to the most recent published version of the following: eQuest, Trace, Carrier HAP, or EnergyPlus.

3. Climate Zone: Figure 902.1(13) 303.1(9) in the 20069 IECC represents that the city of Hailey is in climate zone 16, the most extreme climate zone in Idaho. Said figure 902.1(13) 303.1(9) shall supersede the climate zone for the city of Hailey referenced in the 2006 IRC Table N 1101.2 for all construction.

Section 4. Section 15.08.030 of the Hailey Municipal Code is amended by the addition of the underlined language, as follows:

15.08.030 Additional requirements. The following regulations shall apply in addition to those contained in the adopted codes and standards.

A. Manufactured Homes: The city of Hailey adopts by reference the "Idaho Manufactured Home Installation Standard" as published by the state of Idaho, September, 1999, compiled jointly by the Manufactured Housing Industry, as may be modified and adopted by the state of Idaho. Said "Standard" shall be known as the "Manufactured Housing Code."

B. Special Natural Hazards: Understanding that certain natural hazards exist in the jurisdiction including, but not limited to avalanche areas, earthquake, floodplain, snow loads, wildfires and soil qualities, site specific surveys and related engineering may be required as deemed appropriate by the authority of the jurisdiction.

C. Plumbing and Electrical Inspections Prerequisite: The framing inspection by the city of Hailey Building department shall not be conducted until the applicant has obtained a rough plumbing and electrical inspection from the Idaho State Plumbing and Electrical Inspectors. The

final inspection shall not be conducted until the applicant has obtained a final plumbing and electrical inspection.

D. Salvaged Building Materials: The use of salvaged Building materials may be Approved by the Building Official upon receipt of a complete list of those materials accompanied with written approval of such materials by an Idaho Licensed Structural Engineer. Said materials shall be capable of meeting design criteria for the proposed project.

E. Insulation of Stem Walls: In reference to residential construction, perimeter stem wall insulation practices shall be considered as equal and equivalent insulation criteria when considering thermal Building envelope efficiencies using energy code thermal design parameters.

F. Increased energy efficiency and sustainable Building practices: An increase in energy efficiency by 10% above the 2009 IECC and other sustainable Building practices and materials shall be followed, as specified by Section 15.08.012, Build Better Program, provided the activity is not listed as an exception in Section 101.4.3 of the 2009 IECC or an exemption in Section 15.08.012. A. 3. 4., or 5.

Section 5. If any section, paragraph, sentence or provision hereof or the application thereof to any particular circumstances shall ever be held invalid or unenforceable, such holding shall not affect the remainder hereof, which shall continue in full force and effect and applicable to all circumstances to which it may validly apply.

Section 6. All ordinances and parts of ordinances in conflict herewith are hereby repealed.

Section 7. The adoption of Section 15.08.010, Adoption of Codes, shall be in full force and effect on January 1, 2011, and the adoption of Section 15.08.012, Build Better Program, Section 15.08.020, Amendment of Codes, and Section 15.08.030, Additional Requirements, shall be in full force and effect of January 1, 2012, following passage and approval and posting in at least five (5) public places in the City of Hailey.

ADOPTED BY THE HAILEY CITY COUNCIL AND APPROVED BY THE MAYOR  
this \_\_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
Richard L. Davis  
Mayor, City of Hailey

ATTEST: \_\_\_\_\_  
Mary Cone, City Clerk (Seal)

