

Richard Schillawski  
1160 N. 119<sup>th</sup> Street  
Lafayette, Colorado 80026

November 21, 2007

Michelle Krezek  
Boulder County Land Use Dept.  
Courthouse Annex  
Boulder, Colorado 80302 (via email)

Dear Michelle,

Below are comments on the draft of the proposed “BuildSmart” regulations which are to be before the Board of Review on Wednesday, November 28. I appreciate the changes that you have made based upon the public input and comments from the Board of Review at last month's meeting. I do have a number of concerns which do not appear to have been addressed as yet and these are reiterated below. I am also concerned with the appearance that this process is being rushed. It appears to me that you are trying to do too much in too short a time period; this most clearly is evident in your cover letter to the Board for the upcoming meeting which contains numerous errors in its composition, and I have to think that the current regulatory proposal has suffered from haste as well. Hopefully we can all agree that this is in nobody's best interests.

I understand that you again will forward this letter to the Board promptly for their information and consideration prior to their meeting. I hope that you also will have an opportunity to seriously address the issues raised prior to the meeting.

Comments on “**BOULDER COUNTY - BUILDSMART**”  
(Based upon the version of the proposed text prepared for the Nov. 28 BoR meeting.)

#### **PURPOSE**

The current draft adds some educational aspects to the program, but the “incentives” mentioned in “education, regulation, and incentives”, remain either unclear or absent.

#### **APPLICABILITY**

One of the major problems with the previous draft was that it was directed mainly toward major projects such as building an entire house, and which provisions were not applicable to a small project were most unclear. Your new draft has addressed this to some extent, but it could be improved if this section specified exemptions, rather redundantly reiterating projects which are included.

To clarify what I mean (perhaps redundantly), your phrase “new residential construction requiring a building permit” certainly includes all of the items included in your following bullet points (which are thus redundant), but fails to indicate the types of projects which would be excluded. Some of my candidates for the latter would include the water heater example I've used previously, replacement roofs, rewiring projects, etc. I would think that anything resembling routine maintenance of an existing house should be exempted.

(Second bullet, if retained) I would strongly recommend using the term “renovations” separately from “additions”, rather than grouping them together via a non-intuitive definition in the following section.

## **DEFINITIONS**

Some of the specifically defined terms from this section now appear to be emphasized later in the text by capitalization. I recommend a final proof-reading of the text to insure that this convention is universally followed.

I would strongly recommend separating “Renovations” and “Additions” into separate definitions. Renovations are not regarded as additions by most people and the current attempt to lump them into that category is unfortunate. It is also unnecessary – just add a straightforward definition of Renovations.

“Residential Structure” and “Nonresidential Structure” should be defined. Please note that you appear to be using “Structure” when you actually mean to indicate “Residential Structure” in some places later in this draft.

Instead of “Square Footage”, please consider using “Potentially Habitable Living Area” since this seems to be what you are trying to specify. At this point it is unclear whether this would include attached garages; if so, this should be specifically indicated. I would again advocate exclusion of attached greenhouses from this definition since they are intended largely or exclusively for energy conservation purposes. Personally I consider it neither necessary or desirable to use the same measure of area for the purposes of this program as is used by the Assessor's office for its purposes, or by your Land Use Dept. in other parts of the Building or Land Use Codes – assuming that this is what you are currently trying to accomplish with your definition of “Square Footage”.

## **STANDARDS**

*This section appears redundant at best. It doesn't appear to convey anything useful regarding any “standards” at all (comment from my last letter).*

This section might be beneficially used to indicate which of the following provisions apply to which of your various classes of projects. The current draft appears to exempt at least some Additions and Renovations of 500 sq. ft. or less from most of the “Mandatory Elements”, and it would seem logical to state that exclusion here rather than deep inside the “Mandatory Elements” section.

This probably also would be a good place to indicate that barns and other outbuildings are subject to the Deconstruction plus the Reuse and Recycling elements (if that's your intention), but are exempt from the balance of the “Mandatory Elements”.

## **MANDATORY ELEMENTS**

### **1. DECONSTRUCTION**

#### **a. Deconstruction plan**

Lumber which has been painted or cut up into short lengths is typically not accepted by recyclers. Recommend inclusion of sheathing and lumber in the sentence covering “reusable” cabinets, etc., which apparently allows disposal of “non-reusable” items.

#### **b. Deconstruction of a structure**

Consider combining this subsection with the deconstruction plan subsection. Also, under Verification, replace “deconstruction contractor” with “person completing the deconstruction”, or some such phrase which doesn't imply mandatory use of a contractor.

### **2. REUSE AND RECYCLING**

#### **a. Preservation and reuse of an existing structure**

This section now contains a provision addressing and encouraging moving and reuse of existing

buildings. This is one area where a significant incentive could be possible, exclusion of the area of such buildings from the “Square-Footage” thresholds below. Unfortunately no such incentive is present in this draft. The regulatory obstacles to reuse of buildings moved from elsewhere are also not addressed. These are mainly problems associated with meeting codes which have changed since the time the building was originally constructed. Typically exemptions are “grandfathered” for existing buildings, but are enforced if a building is moved. Some mechanism for exempting old buildings which are moved from strict compliance with the new codes will be necessary if many of these are to be reused.

**b. Construction Jobsite Recycling**

Under Mandatory: Suggest replacing the current sentence with “Diversion of construction materials from the landfills is required. On-site recycling, use elsewhere, donation, and/or sale of excess materials are acceptable methods of diversion.”

**3. ENERGY CONSERVATION/EFFICIENCY, RENEWABLE ENERGY AND CARBON EMISSIONS**

Recommend changing to read: “Coal fired plants generate about twice the greenhouse gas emissions as natural gas fired plants per kilowatt hour.” (See the lengthy discussion in my previous letter if this is unclear.)

**a. New home construction**

Suggest “**New home construction, and residential structures over 3000 square feet**” as the title for this section. These are what are actually covered by this section.

TABLE 1:

The requirements still appear extreme, but I am happy to see those involving carbon dioxide emissions have been omitted. Personally, I would much prefer use of smooth curves to define the requirements as functions of size rather than the proposed “stair-step” approach. This is particularly true given the very large sizes of the “steps” proposed. One of the probably unintended consequences of such “stair-step regulations” would be clustering over time at the boundaries imposed. This will interfere with maintaining the character of the rural county.

**b. Additions to existing residential structures greater than 500 square feet in size which are not considered new construction under Section 3.a, above**

Change to read “**Additions and Renovations of greater than 500 square feet to existing residential structures . . .**” Although changed elsewhere, it is still unclear that “500 square feet . . .” is intended to modify “Additions” rather than “structures” here in your current draft.

Would strongly recommend exemptions from the audit, etc. requirements for residences with documented energy uses below those required – particularly if the existing usage is very much below the requirements.

Under Mandatory, exemptions by the Land Use Director: typically the Chief Building Official is in charge of exemptions from the Building Codes.

**c. Additions of 500 square feet or less to existing residential structures**

Are the small additions in this category exempt from the Section 3.a requirements for houses over 3000 sq. ft.?

**4. RENEWABLE ENERGY OFF-SETS FOR HOMES OVER 5,000 SQUARE FEET AND EXTERIOR ENERGY USES**

No comments for this section.

## 5. WATER CONSERVATION – INTERIOR WATER USAGE

No comments for this section.

### WAIVER PROCESS

As indicated above, typically the Chief Building Official is in charge of exemptions to the Building Codes; if this is not to be the case for these regulations, the departure from usual practice should be explained and justified.

The quandary presented by strict enforcement of the proposed BuildSmart regulations for changes to older buildings was discussed in my previous letter:

*Boulder County currently has regulations concerning Historic Preservation and is currently considering major regulatory changes aimed at preserving “rural character” among other things. The changes to buildings which will be required to comply with the requirements proposed here conflict with preservation of building character, at least in the opinions often expressed by those in the “Historic Preservation community”. Replacement of single-pane windows is a major problem area (see the newspaper accounts of the “window war” on Mapleton Hill), as is replacement of siding (often associated with efforts to seal air leakage into many older buildings). Window replacement and leak stoppage will be essential to meet the regulations proposed here in very many cases. Consultation and resolution of these obvious conflicts between regulatory efforts should be accomplished before any regulations such as those proposed here are adopted.*

If it has not been done already, these proposed regulations should be reviewed for comment by the county's Historical Preservation Advisory Board. Only a few of the county's older buildings are currently designated Historical Landmarks or contributing structures, or located in Historical Districts. As currently proposed, the vast majority of other older structures worthy of special consideration would be ineligible for your waiver process.

Exemptions from current Codes for older buildings moved from elsewhere for reuse should also be added to this waiver process.

### OPTIONAL ELEMENTS

Again suggest making combustion venting and radon protection mandatory for new houses. These are easily added to such new construction but can be major headaches to retrofit; including them in new houses is thus the common-sense approach.

Thanks in advance to you and the Board for consideration of these points. I have generated this letter in some haste in order to complete it before the Thanksgiving holiday, and so may have some items to add at the meeting next Wednesday.

Sincerely,

R. D. Schillawski