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R-TRAC
Meeting # 3
Topic: NGBS Chapters 4&5 Overview and Benchmark Update
Wednesday May 26, 2010, 3 – 5:30 pm

PARTICIPANTS

Utilities Green Building Team

Amanda Sutton – Green Building Program Coordinator
 Doug Swartz - Green Building Program Manager
 Felix Lee – Green Building Code Project Manager
 John Phelan - Energy Services Manager

Facilitator

Susanne Durkin-Schindler

Consultant

The Brendle Group
 John Butler
 Julie Sieving

City Subject Matter Experts

Sheri Langenberger – Transportation Engineering, Development Review Manager
 Basil Hamdan - Water Engineering and Field Operations, Civil Engineer II
 Ted Shepard – Current Planning, Chief City Planner

R-TRAC Members

Company	Representative
Aspen Construction	Gil Paben
Aspen Homes of Colorado	Rob Sabin
The Atmosphere Conservancy	Alex Blackmer
Dana McBride Custom Homes	Dana McBride
Fort Collins Board of Realtors	Michelle Jacobs
Habitat for Humanity	Bob Hand
Highcraft Builders	Gordon Winner
Larkspur Homes, LLC	Michael Bello

Merten Design Studio	Rob Ross
National Center for Craftsmanship	Nick Bensen
Sovick Design Builders	Dennis Sovick
The Green Team Real Estate	Lara Williams
The Group Real Estate	James Mitchell
Vaught-Frye-Ripley Design	Linda Ripley
Vignette Studio	Terence Hoaglund
Jurisdiction	Representative
Larimer County	Tom Garton
City of Longmont	Chris Allison
City of Fort Collins	Russell Hovland

Key Points

NGBS Chapter 4 and 5. Review

As part of the development of a green building code the relationships between the building and the site need to be considered. Chapters 4 and 5 of the NGBS make an effort to address those relationships. The City of Fort Collins has an extensive Land Use Code and City Code that addresses the sections covered in the NGBS. After performing an initial review with subject matter experts the overall Staff recommendation is to defer to City regulations for all of Chapters 4 and 5 of the NGBS.

Staff will be making recommendations on possible improvements to current code. As part of that process Staff would like feedback from the TRAC about existing regulations and any conflicts/barriers that may exist between meeting existing code and green building.

Where Homes Can Be Built:

Infill

This section of the NGBS is encouraging development on infill sites as opposed to Greenfield sites.

Committee Comments:

One challenge that builders run into is that neighbors in a single-family home neighborhood do not want to see multi-family or mixed use development in their backyard. This issue can lead to increased costs due to requirements that the builder host neighborhood meetings and open houses. McBride is building single family homes on a previously multi family site. Will need to see how the community accepts this type of development. It is still important to hear what the neighborhoods are saying and take those comments into consideration.

Historic Preservation can also be a challenge for infill development because it requires builders to build to match the look of surrounding historic homes. This is currently subjective and needs to be defined.

There is very little land in Fort Collins that has not been built on. Most of the development going on is redevelopment where the existing building needs to be torn down or reconstructed. Don't need to provide an incentive for infill if the definition is referring to undeveloped land because there is not much left in Fort Collins.

There may be older, existing utility infrastructure that they City does not have a plan to upgrade or fix when it fails. Some of this infrastructure is already failing. Currently this is up to the developer to take care of. One incentive would be to provide a plan or assistance for infill sites to upgrade this infrastructure. The current code does not provide a process or the flexibility to deal with this type of issue.

The City is currently looking at a plan for asset management that will include the redevelopment of infrastructure. Need to align these two ideas. The City does not currently have a process in place to consider financial hardships associated with bringing existing infrastructure up to code.

Possible Incentive: If a developer is working on a unique, sustainable project, could the City help set it apart and get it to higher level City staff member who could help make the project happen?

Brownfield/Greyfield sites

The intent of this section is to encourage development on brownfield/greyfield sites.

One Staff recommendation for this section is to develop a map of areas that may be Brownfield/Greyfield sites that will help developers identify them easily. The NGBS Greyfield development definition will encompass much more in Fort Collins. The NGBS defines Greyfield development as, "A previously developed site with abandoned or underutilized structures, and little or no contamination or perceived contamination."

There has been development on Brownfields in Fort Collins. The City helps accommodate that development through design and planning. However, this type of development can result in increased costs to the developer.

Mass Transit

The intent of this section is to encourage development in areas that have access to mass transit.

Committee Comments:

Developers do not have control over where the mass transit system is located within the City. There are two fees currently associated with development in Fort Collins, the Transportation Development Review fee and the Street Over-Sizing fee. One possible incentive could be to reduce those fees, but need to make sure that we are thinking about what is happening with Plan Fort Collins and transit development.

What are the demographics of people using mass transit? Sometimes an effective transit system first must be created and then people will use it. It could go the other way around also. The Mason St Corridor will be a good test to see how that works out.

Master Plan

Density

Green Building code templates encourage higher density as a positive attribute. Four districts out of 24 specify minimum densities the others specify a maximum density.

Committee Comments:

The financing component of high density development can be limiting. FHA guidelines do not allow first time homebuyers to buy those houses. It is easier to get a loan for single family homes. Local banks are starting to get better about providing these loans.

One obstacle is getting all of the needed utilities into the buildings as things become denser. Each utility has its own minimums for spacing - could look at how those can be modified to create more flexibility. There is currently a joint-trench capability, but there is a financial disincentive because there are additional fees. The current system does allow for high density development. Also need to think about how this type of development fits in with the values of the community. More dense development will be effective along the mason corridor but may not be in other areas of the city.

Zones LMN and MMN have a gap in density. There is also a gap between these zones and the estate zone. Perhaps the City should look at how to blend these together.

Building Orientation:

This section addresses the orientation of the lot to help encourage passive solar that works with the building systems. The City has a code for this but it is not strictly enforced. Building orientation for solar is addressed in Chapter 7 of the NGBS

Committee Comments:

Lot orientation may not promote solar development because solar effectiveness depends on the project. The North-South lot orientation may not work as well as East-West orientation for passive solar. We want avoid shading neighbors and may need to have increased setbacks or a plan for dealing with that through the design of the home itself.

Any regulations on lot orientation need to be flexible. The current code is not working well with the development that is happening in Fort Collins. It may be too difficult to create a code that refers to building orientation. However, it may be a chance for an incentive for developing solar lots. One method for compliance could be for a developer to have a certain number of lots within a development with ideal solar orientation.

Using Existing Resources

This standard refers to the reuse/recycling of existing buildings. The City does not currently mandate recycling. Education and training is needed for contractors on these practices and the services available within the City. This could also be a good section to provide recognition for projects that reach a certain diversion level.

Committee Comments:

It may be difficult to mandate the use of recycled content materials on site (asphalt, concrete, etc.) due to the availability of materials. We don't want to have to start sending developers out of town to get materials.

The only place to currently recycle wood is Hageman's and you have to pay to drop off loads. The City could subsidize this cost or offer a drop off site where materials get turned into mulch.

Reuse/recycling of buildings directly relates to the historic preservation component.

Site Lighting

Site lighting is not addressed in the NGBS, City code addresses commercial, industrial and multifamily site lighting. The lighting code does not currently address porch lights or lighting on single family homes.

The residential applications would be projects where there is shared parking that needs to be lit. There is a fundamental standard that must be met. This lighting must also fit the neighborhood - "glare bombs" are not allowed and need to be mitigated. The City recognizes that the existing code needs to be updated to correlate with green building concepts. There is a disconnect between the night sky initiative and industry standards. Need to make sure the developer and the City are on the same page.

Street Widths

This standard is encouraging narrower streets to reduce runoff and impervious surfaces. Larimer county street standards call for wider streets than what the green building standard calls for. There have been some street width reduction projects in Fort Collins that have not been fully successful. There needs to be an integrated approach for the project as a whole that includes some education for users. Staff recommends that the city encourages pilot projects that address street widths.

Such an effect would need to coordinate with Poudre Fire Authority, Larimer County and Plan Fort Collins. Plan Fort Collins is also looking at the issue of multifunctional streets.

Benchmarking

The green building team is looking at benchmarking several projects and seeing where they rank in the NGBS. Energy Logic is going to be doing the benchmarking for us using the scoring tool associated with the NGBS. Staff is looking for additional projects that could be part of this benchmark project.

The Green Building Team (GBT) is already using an Aspen Homes home for the in depth benchmarking project with the Brendle group. We are looking for projects from the following sectors:

- Affordable Housing
- Production Homes that meet code
- Larger, semi or full custom home
- Remodel

Each project would need to have plans that could be reviewed and is complete or almost complete. Cost information does not need to be provided for this project, only the plans and specs are under review.

Committee Suggestions:

- The Villages at Stanford Place is an apartment complex that just underwent a major retrofit.

- Dana McBride Project - Rigden Lofts
- Sovick Design Home.
- Highcraft Builders may be able to provide a remodel.
- Sovick Remodel in Old Town
- Journey Homes House

Benchmarking Project Update -The Brendle Group

The Brendle group would like to define mainstream practices that will be used during the benchmark process. The Brendle group is looking for feedback from the TRAC team on the benchmarking tool.

This benchmarking project will be looking at the same house built to different levels. Want to look at the specs for a conventionally built home in Fort Collins. The Brendle Group worked with the green building team to come up with a list of assumptions for the types of building practices and equipment installed for a conventionally built home in Fort Collins. These assumptions seem reasonable but the R-TRAC is the reality check for this project.

Committee Comments on Baseline Assumptions

- Cantilever floor insulation - Grade 3, prescriptive minimum is R30
- Direct vented equipment not direct vented (Combustion intake)
- IEQ - Moisture control measures should be marked as "none."
- HERS rating would be done on lower end homes because most are built following the performance path.
- May be missing type of front doors (insulated, low e glass)
- Missing furnace blower info - standard

Comment Cards:

- New v. renovation - "We are spending a lot of time discussing the code in the context of new construction. I'd like to know how many new homes can be built within the City; I have a feeling it's fewer than I'd expect. If that is the case then shouldn't we be spending most of our time on remodeling/recycling of buildings and those codes?" - Lara Williams
- Mass Transit - "If the goal is to incorporate the use of mass transit, perhaps the parking code should not require so many spaces for multi-family housing -discouraging parking spaces would perhaps encourage the use of mass transit by residents." -Alex Blackmer
- Site Orientation "Needs site design review to determine solar potential for a lot." -Alex Blackmer
- Solar Orientation "Simply orienting lots within 20 degrees of N/S and E/W would create solar lots. "Diagonal" lots will not work for solar." - Anonymous

- Mass Transit – “Encourage/require bus service to new developments for infill projects especially in un-serviced GMAs. Developer would then be able to offer mass transit for his marketing.” - Anonymous
- Renewable energy – “Would it be possible to require a certain percentage of renewable energy for higher density projects?” -James Mitchell.

Homework:

Read NGBS Chapter 6: Resource Efficiency

NEXT MEETING

June 23rd – R-TRAC Meeting #4:

3-5:30 p.m. City of Fort Collins Streets Facility