

GREEN ROOF WORKING COMMITTEE MEETING

July 24, 2008 1pm

Environmental Services, 3015 Menke Circle

The Green Roof Working Committee (GRWC) met at the Environmental Services office at 1pm.

Attendees: Dennis Bryers, Amanda Grint, Kent Holm, Kevin Flecky, Derek Miller, Paul Woodward, Kim Davidson, Mike Oestmann, Christine Hall

Subcommittee Reports

- Stormwater Design Manual – Paul Woodward, Chair

The committee has been collecting information from other design manuals across the country. They are finding that there are not a lot of design manuals out there that have “green roof” information, especially regarding standards of design. The State of Minnesota manual for example only has a couple of pages of fact sheets devoted to green roofs. Chapter 8 of the Omaha manual has a number of best management practices and it would probably be helpful then to include “green roofs” as an example of a BMP but not going into a lot of detail on the actual design of green roofs. The committee drafted a “green roof” section that follows the current format of the Omaha manual (a copy was handed out to attendees and is appended to this meeting summary). It was noted in the discussion the need to have good basic knowledge about green roofs (defining extensive, intensive, built-in-place, modular, etc.) in the design manual but not to show preference for one over another because there will be situational differences in the application of green roof technology.

Mike Oestmann commented on the two structural analysis studies on City facilities, the sewer maintenance building at 68th and Q and the downtown W. Dale Clark library. Both were evaluated for being able to accommodate the loading from a modular green roof system and both were found to be deficient in terms of supporting a 4” (depth) modular unit. Mike indicated that they were going to evaluate whether a 2” depth modular unit would be able to support the plant material (the 2” unit would be supported by the library roof). Mike indicated that he was also going to look at some other buildings that had a precast concrete single T or double T roof systems and these potentially could handle heavier loads. Kent indicated that he was looking at the Eastern Nebraska Office on Aging (ENOA) building at 42nd and Center as a potential green roof location.

Paul requested that if anyone had additional information on the differences between built-in-place and modular roof systems to get that information to him. He also indicated that in the subcommittee’s review of the current Omaha design manual that there didn’t appear to be any language that would contradict the use of green roofs (consistent with the general language proposed in the committee’s draft handout). The draft language does not address “effectiveness” to any degree but Paul noted that if a half inch of runoff is the design standard then a 4 inch (depth) modular pan system should easily be able to handle that amount.

- Covenants – Derek Miller, Chair

Derek indicated that the subcommittee has a work plan in place as follows:

GREEN ROOF WORKING COMMITTEE MEETING
July 24, 2008 1pm
Environmental Services, 3015 Menke Circle

Covenant Subcommittee Work plan

1. Outreach

Work with developers, attorneys, MOBA, SID Boards, neighborhood associations, etc. about incorporating green roofs in subdivision covenants.

2. Education

Educate the public, developers, attorneys, MOBA, SID Boards, neighborhood associations, etc. how to incorporate green roofs in subdivision covenants.

3. Case Studies

Draw up a case study of how green roofs were incorporated in subdivision covenants and the benefits as such.

4. Draft Covenant Language

Get a copy of model covenant language and provide changes to allow green roofs in existing and proposed subdivisions. (This could be done by working with land use attorneys in Omaha.)

The question was asked about the amount of “stormwater BMPs” that would potentially contribute towards “landscape” credits that are required by the zoning code. It was also noted that there may need to be some adjustments in the way “impervious cover” is calculated for development that utilizes a green roof, for example. Derek indicated that the landscape buffer requirements shouldn't be reduced as an offset to other pervious surfaces (i.e. a green roof) and there would still be setback requirements.

- Building Codes – Dennis Breyers, Chair

An initial question was raised about whether “zoning code” issues (for potential conflicts, etc. with green roof development) were being evaluated. Amanda Grint indicated that the Policy Subcommittee was looking at some zoning code related issues.

Dennis indicated that he was waiting for a response about fire code issues. He also indicated that in his discussions with City Permits staff that they may have a new hire to devote some time to looking at potential green roof barriers in the current building code. It was noted that “structural” issues will likely need to be addressed.

- Appraisal/Financing – Karen Klein, Chair

Karen was unable to attend but Kent Holm passed on information (from Karen) about a new insurance policy that would be marketed to property owners and address green building standards and she is following up on that. She also noted that she's collected some information about how valuations can/should incorporate consideration of green building. There are some standards set for residential appraisal for energy efficient features but otherwise it is a relatively emerging field.

Karen also noted that her subcommittee would be looking into a range of related topics as well, including leasing issues and affordable housing development.

Derek Miller noted an article that had been forwarded by Barbi Hayes on a New York City green roof tax credit that was being implemented. Kent indicated that he would

GREEN ROOF WORKING COMMITTEE MEETING

July 24, 2008 1pm

Environmental Services, 3015 Menke Circle

forward that article on to the committee. Derek also indicated that Ken Johnson in City Planning would have some information for Karen with regards to potential TIF (tax increment financing) and other state initiatives related to green building.

Kent noted the development of a “sustainable development code” by the Rocky Mountain Land Use Institute and that information (available at the RMLUI website) might be of use to all of the subcommittees.

“Greening the built environment with building codes” (a National Associations of Counties presentation) was another information link identified by Kent and he indicated that he would pass that on to everyone.

- Education/Outreach – Addie Kinghorn, Chair

Addie was unable to attend the meeting so Kent Holm presented the subcommittee information on her behalf.

The subcommittee last met on June 19th and is continuing efforts to get the word out about green roofs.

Addie is working with Todd Morrissey at Metro on a “horticulture” publication that would be distributed free of charge at nursery outlets, etc. She has asked Kent to work up an article on “green roofs” and Andy Szatko to pen an article on rain gardens.

Kent has contacted the Nebraska Nursery and Landscape Association (NNLA), Nebraska Arborists Association (NAA), and the Nebraska Turfgrass Association (NTA) about potential speaking opportunities at their respective annual conferences in January/February. Both NNLA and NAA have offered free space in their trade show/exhibit areas for a green roof/stormwater display and we will pursue those opportunities. Kent is also developing a stormwater display for River City Roundup and the Douglas County Fair and that display will include mention of green roofs. That display will then also be used for the NNLA and NAA conferences.

Kent noted that he had presented information on the GRWC to a Douglas County Board committee in June and that he would do the same at the County Planning Commission meeting in August.

- Policy Development – Amanda Grint, Chair

The subcommittee started out collecting policy information from various cities around the country with the primary objective of obtaining information from similar sized (to Omaha) cities in the Midwest. They found that not a lot of that comparable information was available so the information they have (as summarized in the handout distributed at the meeting) is mainly from larger cities. Most of the information is contained in the zoning codes for the respective cities.

She noted that there are really three different ways that government is influencing development of green roofs: Direct financial incentives, indirect financial incentives, and

GREEN ROOF WORKING COMMITTEE MEETING

July 24, 2008 1pm

Environmental Services, 3015 Menke Circle

through development regulations. The subcommittee also found that each of the cities had specific goals in terms of what they wanted to accomplish with their green roof policy. Amanda therefore posed the question to the group – do we need to more clearly specify the goal here in the Omaha metropolitan area for a green roof policy?

It was noted that a lot of these cities have green roofs, etc. as an incentive to reduce stormwater fees. Tax exemptions and credits are not possible here without some legislative action at the state level. Grants and other local funding might be able to provide some financial incentives for green roofs but the subcommittee found that where grants are available there generally wasn't a "policy" in place. LEED certification might also be a component of the regulatory approach. Perhaps a requirement that all government buildings that could support the additional green roof loading would be retrofitted with green roofs.

A discussion followed about the "goal" here in the Omaha metro for developing more green roofs. Kent noted that it certainly would be desirable in the CSO (combined sewer overflow) areas of Omaha to have green roofs that would reduce the overall amount of stormwater entering the system. Amanda noted that Portland has a similar issue and that their "water quality" goal was consistent with reducing stormwater input to the combined sewers there. She also noted that some cities implement the green roof policy in terms of an "overlay district" such that it only applies to specific areas (e.g. a CSO area). Amanda also noted her discussions with Karen Klein and the potential incorporation of TIF with green roofs and perhaps that (identifying blighted areas that would be eligible for TIF) would define where a policy applied.

Derek Miller noted that in the course of HDR updating the interceptor (sanitary) sewer plan they are finding that some problems with capacity are being caused by infiltration from stormwater.

Further discussion about the need for a defined "goal" really centered around the need to identify the benefits of green roofs and then to simply encourage the implementation rather than trying to single out a specific "goal" of, for example, energy conservation or reducing the urban heat island effect. Amanda and her subcommittee were tasked with defining that "goal" and providing the supporting information on benefits.

Meeting adjourned at 2pm.

[GRWC meeting summaries and other documents, including the subcommittee work plans, are posted on the Environmental Services webpage (www.dcplanning.org).]

Attachments:

Stormwater design manual – draft green roof section