



CITY OF KIRKLAND

Planning and Community Development Department
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MEMORANDUM

To: Kurt Triplett, City Manager

From: David Barnes, Green Building Lead and Project Manager
Paul Stewart, Deputy Planning Director

Date: December 15, 2010

Subject: Green Codes Project
File NO. ZON10-00026

RECOMMENDATION

Request that City Council review the tasks and items that will be addressed as part of the Green Codes project and provide feedback and direction as appropriate. These items include:

- Phase One - Sustainable Actions Worksheet
- Draft Work Program Schedule
- Public Outreach Plan

BACKGROUND DISCUSSION

Why are we doing this and what policies support it?

The 2010-2012 adopted Planning Work Program includes the LID/Green Codes project which began in the spring of 2010. It is an extension of several City sponsored initiatives, policies and goals to encourage Low Impact Development (LID) techniques, sustainable site development, energy efficiency for public and private facilities and responsible use of natural resources. This project is supported by policies, goals and plans identified in the Natural Resources Management Plan, the Comprehensive Plan and Kirkland's Climate Protection Action Plan.

[The Natural Resource Management Plan \(NRMP\)](#) states in the Guiding Principles section (page 34) that the City should, "Improve management of stormwater runoff from existing and new impervious surfaces by employing Low Impact Development (LID) practices where feasible through City projects, incentive programs and development standards". In addition, the implementation strategies section of the NRMP on page 49, section 6 states that Kirkland's Comprehensive Plan, Zoning Code and other plans and regulations should be updated to address low impact development practices.

The Comprehensive Plan emphasizes the importance of community stewardship of the environment. This vision has been translated into two framework goals, FG-5 and FG-7, which emphasize protection of environmentally sensitive areas, preservation of a healthy environment, and encouragement of low-impact development (LID) and sustainable building practices.

Additionally, the Natural Environment policy NE-1.5 also indicates that the City should educate, promote, support incentives and provide resources to encourage citizens, businesses, builders and the development community to adopt sustainable building practices.

[Kirkland's Climate Protection Action Plan](#) (April 2009) also discusses the need to reduce our green house gas production for not only our public facilities, but also in residences and businesses. These targets are referenced and were adopted in 2007 by the City Council by resolution R-4659:

- ⦿ Primary: 20% below 2005 levels by 2020
- ⦿ Interim: 10% below 2005 levels by 2012
- ⦿ Long-term: 80% below 2005 levels by 2050

Programs and policies are in effect to address these reduction goals, but more incentives, standards, and educational initiatives as suggested by the Green Code project can be adopted to help achieve them.

What are we doing?

Project Definition: The purpose of this project is to develop specific sustainable development action items that can be translated into City practices, initiatives and amendments to the Zoning and Municipal Codes. These changes should help incentivize citizens, developers and property owners in Kirkland to protect and enhance our water, energy and material resources. In addition, these new standards and practices will contribute to more sustainable building sites by creating healthier buildings, reducing their carbon footprints and in turn helping Kirkland grow into a healthier community.

Specific items have been identified as being “doable” in the first phase for 2011. These are noted in Attachment 1. There are four general categories each with individual subtasks. The categories are noted as:

- Sustainable Green Infrastructure
- Potable Water Conservation
- Stormwater and Landscaping
- Energy Efficiency and Independence

Sustainable Actions Worksheet

Action items have been developed by the Green Codes work group consisting of staff from Planning, Public Works and Building. The entire worksheet for all actions is attached (see Attachment 2). It has been organized by actions, degree of difficulty and value. The worksheet also cross references the specific natural resource that is being enhanced. Some action items

influence several other categories and have been given a point value which is summed to provide an objective total. For example, zoning code regulations that incorporate a low impact development technique such as a green roof have the potential to reduce stormwater runoff, improve water quality, reduce energy use and minimize the heat island effect. All of these contribute to a more sustainable building site. This particular action item meets four objectives and therefore scores four points.

The action items have also been prioritized and grouped into 3 separate phases based on evaluation by the Green Codes work group. The phase one actions were pulled from the larger worksheet to create the smaller Phase One Sustainable Actions Worksheet (see Attachment 1). Specific items are organized by reviewing body (either the City Council or Planning Commission). It is recognized that all code changes will go through the required review process which includes the Planning Commission and Houghton Community Council. The City Council will have final approval on all actions.

How and when are we proposing to do this?

Process: The process by which an action item goes from conception to approval and then adoption will involve several outside entities interacting with the Green Codes workgroup (GCW). After receiving Council direction, it is expected that the GCW will meet with the Planning Commission for its review and recommendations on the proposed code amendments and public outreach plan. It is also anticipated that the workgroup will convene a technical advisory group comprised of local professionals to help determine best management practices, and flesh out or add some ideas that will help the project achieve its objectives. The GCW will also meet with the Houghton Community Council. A public hearing will be held on any proposed Zoning Code additions and amendments. Staff intends to survey other cities for their best management practices as well. The proposed project timing is outlined in the draft Work Program schedule (see Attachment 3).

Public Outreach Plan

The outreach for this project will involve conferring with local development professionals such as architects, landscape architects and stormwater engineers (referred to as a technical advisory group). Local and regional subject matter experts will also be consulted to provide additional background, context and rationale for proposed changes. The Kirkland Chamber of Commerce, Sustainable Kirkland, Kirkland's Alliance of Neighborhoods and the King & Snohomish County Master Builders will also be brought into this discussion of proposed changes and used as a sounding board in order to gain feedback on this project and ensure good public involvement. An open house is also proposed to get as much input from the general public prior to any public hearings.

Attachments

1. Phase One Sustainable Action Worksheet
2. Sustainable Actions Work Sheet
3. Draft Work Program Schedule

PHASE ONE - SUSTAINABLE ACTIONS

CITY COUNCIL REVIEW			PROJECT TEAM	REQUIRED ACTION
A SUSTAINABLE "GREEN" INFRASTRUCTURE				
1	Develop Ordinance for City owned facilities that requires LEED Gold certification for all new facilities and LEED Silver for all renovated facilities.	Green Building Team (GBT)	Policy Decision/Ordinance	
2	Evaluate existing policies for City Capital Improvement Roads Projects and consider comparing to Green Roads certification or similar rating program.	Green Building Team (GBT)	Policy Decision	
3	Develop deconstruction program for the Green Building Section of the Climate Protection Action Plan with an emphasis on GHG reduction.	GBT	Policy Decision	
4	Require all project applicants to complete a Sustainability and/or Carbon Footprint checklist with building permit applications.	GBT	Policy Decision	
B POTABLE WATER CONSERVATION				
1	Develop tools to help manage gray water and its reuse by creating an educational program	GBT	Educational Program	
C STORMWATER & LANDSCAPING				
1	Evaluate the the City of Seattle's "Green Factor" list after comparing with current landscaping standards.	GBT	Policy Decision/Ordinance	
2	Consider Surface Water Utility Rate discounts for storm Low Impact Development (LID) installed on site	Jenny, Stacey, Rob, GBT	Policy Decision	
3	Consider a rebate ("Treebate") to residential homeowners to encourage them to plant trees on their private property.	Jenny, Stacey, Rob, Urban Forester	Policy Decision/Program	

PLANNING COMMISSION REVIEW			PROJECT TEAM	REQUIRED ACTION
A SUSTAINABLE "GREEN" INFRASTRUCTURE				
1	Modify design regulations to incorporate bicycle storage and low-emission & fuel-efficient vehicle parking.	Green Building Team (GBT)	Zoning Code Amendment	
B STORMWATER & LANDSCAPING				
1	Promote LID through lot coverage/open space standards.	GBT, UF, PW and PCD	Zoning Code Amendment	
2	Provide incentives for single family use regulations to encourage clustered housing (like King County).	GBT, Jeremy	Zoning /Municipal Code Amendment	
3	Revise standards to encourage pervious surfaces for driveways, private roads, and parking lots	GBT, Jenny, Rob	Zoning Code Amendment	
4	Revise landscape regulations to incorporate natural drainage structures and native plants for commercial and multi-family sites	GBT	Zoning Code Amendment	
5	Incorporate soil amendment provisions into KZC Chapter 95	Stacey	Zoning Code Amendment	
C ENERGY EFFICIENCY & INDEPENDENCE				
1	Create regulations and incentives for small scale wind, photovoltaic, solar hot water, and passive solar design.	GBT	Zoning Code Amendment	
2	Allow building envelopes to encroach into required setback yards for exterior rigid insulation	GBT	Zoning Code Amendment	

Sustainable Actions Worksheet - Continued

SUSTAINABLE ACTIONS	Value	Difficulty	WATER RESOURCES			ENERGY RESOURCES		SUSTAINABLE SITES			HEALTHY COMMUNITY			MATERIAL RESOURCES				OBJECTIVE TOTALS
			Reduce the amount of potable water use	Reduce the amount of stormwater runoff	Increase Water Quality Treatment	Reduce Existing Energy Use	Increase Use of Renewable Energy Sources	Reduce Heat Island Effect	Increase Open Space	Increase Tree Canopy	Increase Use of Local Food Source	Increase Modes of Alternative Transportation	Reduce Light Pollution	Increase Reuse of Existing Buildings	Divert Building Waste	Support the Use of Local Materials	Reduce the Use of Hazardous Materials	
13 Incorporate vegetated roof provisions into KZC Chapter 5 (definitions) and KZC 115.90 (lot coverage exemptions)				1		1												
D ENERGY EFFICIENCY & INDEPENDENCE																		0
1 Create an incentive program promoting project based energy independence (Clarify what incentive is).	h	h				1	1											2
2 Create energy districts for the purpose of creating local energy independence(find Development Incentives)ParMac?	h	h				1												1
3 Consider regulations to incentivize small scale solar and Passive Solar 1. Create regulations that restrict new tree plantings that impede solar access (passive solar heat) 2. Possible incentive: height bonuses given if solar power is installed 3. Require development not to impede the solar access of neighboring properties.	m	h				1	1											2
4 Allow building envelopes to encroach 3 inches into required setback yards for exterior rigid insulation(to exceed energy code in new construction or to retro fit existing).	h	e				1												1
5 Develop regulations to incentivize wind energy systems 1. Height and Setback encroachments	m	h				1	1											2
E Materials & Resources																		0
1 Adopt the use of the International Building Institute's materials redlist.(Educational Sessions and handouts and update website)	m	e															1	1
2 Partner with other agencies and programs supporting local deconstruction effort. (Education and Code Amendments)	h	m											1	1	1	1		4

**Green Codes Project
Draft Work Program
January 4, 2011**

DATE	ITEM
January 4, 2011	City Council Update and Direction
January 2011	Meetings with Technical Advisory Board & internet outreach
January 27, 2011	Planning Commission Study Session – Scope and Work Program
March 2011	Planning commission Study Session – Key Issues
March 2011	Houghton Community Study Session – Key Issues
April 2011	Planning Commission Study Session – Draft Amendments
April 2011	Houghton Community Council Study Session- Draft Amendments
May 2011	SEPA Review and Determination?
May 2011	Planning Commission Study Session – Draft Amendments
May 2011	Houghton Community Council Study Session – Draft Amendments
May 2011	Public Open House
June 2011	Notice to CTED (at least 60 days prior to City action)
June 2011	Planning Commission Public Hearing
June 2011	Houghton Community Council Public Hearing
July 2011	City Council Review
August 2011	City Council Action