New developments are an essential part of the City's future: they create the urban environment as well as influence social wellbeing, economic strength and environmental conditions. As a result, developers and their consultants are important partners in achieving the long term goals of the local community.

The purpose of the Conservation Development Guidelines are to assist landowners or developers and their consultants to create the most sustainable project possible. The overriding goal is to maintain or improve the hydrological functionality of the site for surface water quality protection, flood control and groundwater quality and quantity. The questions in the Guidelines are meant to advance the following sustainability objectives:

Greenspace: To provide for the preservation of greenspace as a nonstructural stormwater runoff and watershed protection measure. This greenspace can then become a recreational amenity to the residents of the community;

Land use: To provide flexibility in development and permitting processes to promote designs that are environmentally sensitive and efficient uses of the land;

Preservation: To preserve unique or sensitive natural resources such as ground water, floodplains, wetlands, streams, steep slopes, woodlands and wildlife habitat;

Site Design: To encourage placement of houses and structures on less environmentally sensitive soils, which will reduce the amount of infrastructure, including paved surfaces and utility easements necessary for residential development?

Unified Planning: To promote interconnected greenways and corridors throughout the community and contiguous greenspace with adjacent communities. Developments must be considered in conjunction with the City's Park Plan, Green Infrastructure Identification and the region's Comprehensive Plan for maximum coordination.

CONSERVATION DEVELOPMENT SITE EVALUATION GUIDELINES

Instructions

All applications for development permits are required to complete this form, according to the following steps:

1. Review and complete the Guidelines Form.

2. If needed, prepare a supplementary letter explaining, in more detail, how the proposed development incorporates these, or other, low impact development principles.

3. Submit the completed Guidelines Form and supplementary information as part of your pre-application information for a rezoning or Development Permit application, or as part of your design review materials. Staff will provide comments on your submitted materials.

4. Re-submit the above information, addressing comments received, with your formal rezoning or Development Permit application.

5. Your Guidelines Form and supporting materials will be forwarded to the Planning Department, the Planning and Zoning Commission, and attached to their report, which is forwarded to the City Council.

Applicants are encouraged to provide as much information as possible to assist City Council, staff and advisory bodies in their review of development proposals. The relevance of the Guideline's questions will depend on the nature and scope of the project.

The intent of the Guidelines is not to "pass" or "fail" proposals, but to assist applicants and the City in working together to develop high quality projects that are a benefit to the community.

Site Location:

City	County	Section (1/4)	Township	Range	Street/Intersection

Developer Name	Address	Phone Number	Contact Name

Project information:

Development size (acres)	No. of Lots	Average lot size and range of lot sizes (Sq. ft.)	Area of all lots (Acre)	Area of streets and sidewalks (Acre)	Area of open space* (Acre) & % of open space

*Open Space-undeveloped land or common areas in a development reserved for parks, walking paths or other natural uses such as storm water management. Excludes utility and street right-of- ways.

Description of the Project

Include discussion of how project is integrated into City's Park Plan, Green Infrastructure Identification, and County Comprehensive Plan

SITE ASSESSMENT:

Have the following studies been performed and what are the results for the proposed development?	Yes	No	Comments
FEMA floodplain review. Is any part of the property to be developed in the floodplain or floodway?			
Wetland delineation as identified in the National Wetlands Inventory (www.nwi.fws.gov). Site inspection may also be required to determine if non-listed wetlands are present.			
Storm calculations. Must demonstrate water quality protection and flood control protection, and show assumptions made during the design process addressing stormwater.			
Watershed analysis @ HUC 14 level, identifying how development fits into the watershed as a whole.			
Topographic land survey showing pre- and post-development contours. Discuss how much change is to be made in the existing topography and how it improves the hydrologic functions.			

	Yes	No	Comments
Slopes greater than 15 percent. Are such slopes on site? What practices are being utilized to prevent erosion?			
Soil Analysis. Describe the soil types found on the property and any amendments necessary to improve the hydrologic functions			
Forested Areas Include discussion of the kind of tree species on site, are they native? How many and what kinds of trees are to be removed? What are plans for replanting trees and what species will be planted?			
Prairies, grasslands, grassy swales Are these resources on site and how will they be impacted by the development?			
Drainage ways, creeks, streams, rivers, etc Are these resources on site and how will they be impacted by the development?			

PROTECTING AND CREATING NATURAL LANDSCAPES & DRAINAGE SYSTEMS:

Is site development fitted to the topography and soil so as to create the least potential for vegetation loss and site disturbance	Yes	No	Comments

Does site plan avoid or minimize disturbance of existing site features –or- provide for restoration or improved condition of these existing site features	Yes	No	Comments
Drainage ways and floodplains			
Wetlands			
Uplands			
Remnant habitats- which could be forests or prairie			

Open space management-open space should meet following standards:	Yes	No	Comments
Be of sufficient size to be hydrologically functional and serve as the green infrastructure for storm water management.			
Be as contiguous as possible to allow for proper maintenance and provide interconnection to open space within and adjoining the development			
Be free of structures that interfere with infiltration. If structures are proposed, what are they and what steps will be taken to maximize their permeability?			
Be directly accessible to the largest practical number of lots within the development			
Stress preservation and reintroduction of native plant species and provide for the amendment of the soil to improve infiltration rates			
Management plan describes how open space is to be maintained			
Designation of legal entity responsible for maintenance of open space			

LOT DESIGN STANDARDS

	Yes	No	Comments
Lots and buildings are optimally clustered together on less environmentally sensitive soils to minimize negative impacts on the natural, scenic and cultural resources of the site			
Setbacks for residential lot. What are they? The following are optimal for clustered developments: Front ≤ 20 feet Back ≤ 25 feet Side ≤ 8 feet			

REDUCTION OF IMPERVIOUS SURFACES

	Yes	No	Comments
Street layout is efficient and reduces overall length requirement			
Street width. What is it? How is runoff from the street managed? The following are recommended: No parking expected – 16-18 feet wide Restricted parking – 22-24 feet wide Normal residential w/ parking – 24-26 feet wide			
Cul de Sac radius ≤ 45 feet. Can center be used as a bio-retention area to capture street runoff?			
Parking ratio for single family residential ≤ 2			
Is shared parking promoted			
Driveway width One lane - ≤ 9 feet Two lane - ≤ 18 feet			
Sidewalks. Recommended: Required on one side only Maximum width of 5 feet in general pedestrian traffic area			

IMPLEMENTATION OF SUSTAINABLE STORM WATER MANAGEMENT TECHNIQUES

Are the following Low Impact Development practices incorporated into the site? The development should use as many of these practices as necessary to accomplish effective storm water runoff management. <u>The objective is to retain storm water on site to be infiltrated and cleansed and slow its release into nearby water bodies</u>	Yes	No	Comments
<u>Bioretention cells-</u>areas constructed to manage and treat stormwater runoff by using a conditioned planting soil bed and plant material to filter runoff stored in a swallow depression			
<u>Dry wells-</u>excavated pits that are backfilled with gravel/stone which are designed to retain and release rooftop runoff			
<u>Filter/buffer strips-</u>bands of close-growing vegetation planted so that runoff can be slowed and filtered before reaching a water body			
<u>Drainage swales-</u>low areas with slopes and gradients that collect and divert water from impervious surfaces and allow water to move to other infiltration based processes			
<u>Infiltration trenches-</u>depressional, landscaped area used to retain and infiltration stormwater			
<u>Wetlands-</u>land whose soils retain sufficient moisture to support aquatic or semi-aquatic plant life			
<u>Ponds-</u>used as an area to retain stormwater			
<u>Rain gardens-</u>depressional, landscaped areas near buildings or within lawns used to retain and infiltrate stormwater			
<u>Riparian buffers-</u>vegetative buffer on land at the bank of a river or other body of water designed to slow and infiltrate runoff approaching the river or body of water			

Prairies-an extensive, level or slightly undulating, mostly treeless tract of land, characterized by highly fertile soil and covered with native grasses and wildflowers. This vegetation has the ability to absorb and purify a great deal of water.			
Floodplain preservation-minimize the construction of roads, buildings, and other impervious structures within the floodplain			
Permeable Pavement-pavement. What percent is this of total pavement?			
Soil Quality Restoration-intentionally amending and modifying soil composition to improve its ability to absorb water and provide nutrients to vegetation.			
Disconnectiveness of impervious areas-intentionally breaking up large spans of imperious materials to allow for more absorption of water			