CITY OF BOISE

INTER-DEPARTMENT CORRESPONDENCE

Date: March 4, 2008

To: Public Works Commission
From: Johanna M. Bell, P.E., Stormwater Program
Subject: Boise City Stormwater Program Update

NO ACTION REQUESTED - INFORMATION ONLY

Proposed Planning and Development Services Landscape Ordinance

Boise City Public Works (PW) has been working with Planning and Development Services (PDS) on a proposed Landscape Ordinance. Originally, the draft ordinance identified that stormwater system integration in landscaped areas was a goal, but did not allow swales within required landscaped areas including front setbacks or perimeter buffers. It was recognized by Public Works and members of the Stormwater PAG that these restrictions would cause a significant increase in both sub-surface and offsite stormwater management solutions at a number of sites (shallow ground water or small, high density).

Working together and with stakeholder advisory group members, Boise City PW and PDS sought an increased awareness of how design requirements established to ensure proper system function (i.e., infiltration) could also provide for vigorous tree growth, but that additional aesthetic requirements were needed in order to meet the needs of the Landscape Ordinance. Two key sections in the proposed Landscape Ordinance were modified in order to address these needs and are attached. Section 3.2 identifies the design review process when swales are proposed in front setback landscaping; Section 10 identifies specific design requirements when integrating swales in to the required landscaped areas.

The proposed Landscape Ordinance will go before the Design Review Committee on March 12th, Boise Planning and Zoning Commission on April 7th. Staff contact: Johanna Bell, 384-3928

Update on Efforts to Facilitate More Downtown Cleaning

Last fall Council Member Eberle made a request for the members of the Public Works Commission to revisit the issue of stormwater, with an emphasis on the 2004 Boise City Non-Stormwater Disposal Best Management Practices guidelines and how they impact sidewalk washing in downtown Boise. Councilman Eberle’s memo prompted a review of the sidewalk washing needs. Initially it was thought that a meeting with the
Downtown Task Force Infrastructure Committee would be helpful. To prepare for a more general discussion, City staff facilitated a few meetings with the Downtown Business Association (DBA), City staff representatives on the Special Events Planning Committee, and City staff representatives for the Solid Waste Program. A three-pronged strategy was developed, of which the first was for DBA to develop an MOU with Ada Co. Sheriff to use the “Sheriff Inmate Labor Detail” (SILD) to supplement downtown sweeping during two week-long, semi-annual cleaning periods and on an monthly basis. The use of the SILD will allow the Downtown Boise Association 2-person cleaning crew to operate CCDC pressure washing equipment for additional sidewalk cleaning.

As of February 25th, the MOU is in the hands of the DBA Legal Department and Board. Some liability issues are being “ironed out.” In March DBA plans to put together a “focus group” of downtown property owners/managers to discuss the role the DBA plays in sidewalk services and to inform the direction for DBA to follow - including sidewalk washing activities. Staff contact: Johanna Bell, 384-3928.

**Boise/Garden City MS4 Water Quality Monitoring Review – Meeting Summary**

The Boise/Garden City MS4 Copermittees met on February 14th to review the current stormwater water quality monitoring program. A brief overview of the monitoring program and comparison with the permit language was presented. The current monitoring program seeks to characterize the quality of the MS4 discharges. Boise City’s contribution towards this program is roughly 15.3%, or approximately $31,000 annually.

According to the EPA’s 1996 policy on water quality based effluent permit limitations for stormwater,1 any harmful impacts to a receiving water body’s beneficial uses or water quality are to be eliminated through BMPs. As the permit continues to be implemented and the monitoring data collected, the Boise/Garden City MS4 copermittees hope to avoid permit conditions that require additional structural controls for existing systems (i.e., retrofits in order to further reduce stormwater pollutant loads to receiving water bodies).

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1 Summary of the 1996 Interim Policy – “Adaptive Management Framework”

1. uses Best Management Practices in 1st round stormwater permits
2. “with expanded or better-tailored BMPs in subsequent permits, when necessary to provide for the attainment of water quality standards”
3. does not apply to “technology based limitations, such as those based on effluent guidelines,” unless provided for through “best professional judgment”
4. each permit should include monitoring requirements “…to gather necessary information to determine the extent to which the permit provides for attainment of applicable water quality standards and to determine appropriate conditions or limitations for subsequent permits.”
During the meeting it was observed that the copermittees do not route MS4 discharges into receiving water bodies to assess potential water quality impacts, nor are the discharges compared with the load allocations provided by TMDLs. Therefore, there is no way for the copermittees to determine if receiving water body requirements are being met now or will be met in the future (i.e., due to transportation right-of-way expansion). It was noted that limited revisions to the monitoring program were proposed in the reapplication packet submitted to the EPA in 2004.

The current approach is for the copermittees to demonstrate (1) compliance with the permit conditions (i.e., by implementing the proposed monitoring program) and (2) assess EPA’s justification if a change to the existing monitoring program requirements is proposed. Staff contact: Johanna Bell, 384-3928.

Draft Phase II MS4 Permits for the Coeur d’Alene and Post Falls Area
EPA Region 10 has proposed five Phase II municipal stormwater permits for the following entities:
- City of Coeur d’Alene,
- City of Post Falls,
- Post Falls Highway District,
- Lakes Highway District, and
- Idaho Transportation Department #1.

The public comment period for each permit ends on April 29, 2008. A public meeting and hearing has been scheduled to discuss these proposed permits on Wednesday, April 2, 2008, starting at 6:00 pm, at the Lake City Senior Center, 1916 Lakewood Drive, Coeur d’Alene, ID. Technical EPA Contact: Misha Vakoc, (206) 553-6650 or toll free 1-800-424-4372, extension 6650; e-mail: vakoc.misha@epa.gov
3.2 Alternative Compliance

3.2.1 Purpose

The purpose of this process is to provide for alternative means in which to meet the intended purposes of the landscape requirements when explicit compliance is not feasible or the alternative means is superior to what is required. The regulations of this section are intended to encourage creative solutions to land use problems. The city recognizes that some specific requirements of this title do not anticipate all possible situations. Further, the city recognizes that there may be land use proposals that conform to the purpose, intent, and objectives of the regulations in this title but were not anticipated in the specific regulations. This section sets forth an alternative method of compliance in the event of these situations.

3.2.2 Applicability

Requests for alternative compliance are allowed only when one or more of the following conditions exists:

A. Topography, soil, vegetation, or other site conditions are such that full compliance is impossible or impractical;
B. The site involves space limitations or an unusually shaped lot;
C. Safety considerations make alternative compliance desirable;
D. Other regulatory agencies or departments having jurisdiction are requiring design standards that conflict with the requirements of this article;
E. The proposed design includes innovative design features based on "new urbanism", "neotraditional design", or other site designs that promote walkable and mixed use neighborhoods; or
F. Additional environmental quality improvements would result from the alternative compliance.

3.2.3 Process

The applicant shall request alternative compliance in conjunction with the submittal of a Conditional Use Permit or Design Review application or upon the determination that the development does not comply with the specific provisions of this title. The request will be considered by the same approval body as the base application.

The request shall specify:

A. The specific requirements that are proposed to be modified;
B. The reasons for the modification; and
C. A demonstration of how the alternative means for compliance meets the requirements’ intended purpose.

Stormwater Swales: Stormwater swales within front setbacks can be approved at staff level provided that the landscape plans approved by the Design Review Committee are not changed substantially and comply with Section 10.2. A landscape plan with swale construction details which incorporate the landscape design shall be submitted for the staff level review.

3.2.4 Standard

The proposed alternative means for compliance with the specific requirements shall demonstrate that the
alternative provides an equal or superior means of meeting the intent and purpose of the regulation.

3.2.5 Required Findings

In order to grant approval for an alternative compliance, the director shall determine the following:

A. Strict adherence or application of the requirements is not feasible; or

B. The alternative compliance provides an equal or superior means for meeting the requirements; and

C. The alternative means will not be materially detrimental to the public welfare or impair the intended uses and character of surrounding properties.

SECTION 10. STORMWATER INTEGRATION

10.1 Purpose

The City encourages the incorporation of vegetated, well-designed stormwater filtration swales into landscape areas where topography and hydrologic features allow. Such integrated site designs can improve water quality and provide a natural, effective form of flood and water pollution control. Landscape areas which incorporate stormwater swales shall generally be above and beyond the landscaping required by this Ordinance.

10.2 Design Guidelines

Below are requirements for designing a landscape area that integrates stormwater facilities. The Planning & Zoning and Public Works Departments should be involved in the initial design and determining the appropriateness of any site. Additional information regarding stormwater system design is provided in the publications titled Boise Stormwater Design Manual and Stormwater Plant Materials Resource Guide, which are available from Boise City Public Works.

A. Street Buffers

Swales shall generally not be located in required landscape buffers along streets, with the exception of industrial areas which typically do not have large amounts of landscaping required. Swales located along streets within required landscape buffers may be approved through the Alternative Compliance process at staff level provided that the landscape plans approved by the Design Review Committee are not changed substantially and comply with this section. Swales located within street buffers shall meet the following standards:

1. Swales shall not exceed twelve inches (12") in storage depth.

2. Swales shall be separated from back of sidewalk by a minimum of two feet (2').

3. Street trees shall be provided as required by this ordinance.

4. Rapid sand infiltration windows shall be integrated for timely drainage of stormwater.

5. No infiltration basins are allowed.
B. Perimeter Buffers

Swales located within required buffers in side and rear yards shall meet the following standards:

1. Swales shall not exceed eighteen inches (18") in storage depth.
2. Trees shall be provided as required by this ordinance.
3. Rapid sand infiltration windows shall be integrated for timely drainage of stormwater.

C. Gravel, rock, or cobble on the surface of swales shall not exceed 20% of the surface area of the bottom of the swale. Cobble may be incorporated into required landscape areas if designed as a dry creek bed or other design feature.

D. Stormwater swales shall be vegetated with appropriate plant materials. Plant materials shall be a species that are able to withstand the anticipated changes in soil wetness and moisture levels. Examples of appropriate plants materials include, but are not limited to:

1. Trees: River Birch (Betula nigra), American Hornbeam (Carpinus caroliniana), Green Ash (Fraxinus pennsylvanica), Sweetgum (Liquidambar styraciflua), Sycamore (Platanus occidentalis) and Mountain Alder (Alnus tenuifolia)

2. Shrubs: Red Osier Dogwood (Cornus sericea), Serviceberry (Amelanchier alnifolia), Rhododendrons (Rhododendron sp.), American Cranberry Bush (Viburnum trilobum), Golden Currant (Ribes aureum) and Drummond Willow (Salix drummondiana)

3. Groundcovers: Sedges (Carex sp.), Spike Rush (Eleocharus acicularis), Maiden Grass (Miscanthus sp.), Japanese Blood Grass (Imperata cylindrica) and Fountain Grass (Pennisetum sp.)

E. Organic mulch shall not be used directly adjacent to the flow path due to potential sediment clogging. Established plant material shall be installed adjacent to the flow path and infiltration area to aid in capturing sediment and reducing clogging.

F. Open water ponds and holding areas with a permanent water level are not permitted in required landscape or buffer areas, except along Interstate-84. However, ponds that are aesthetically designed with special grading and vegetative features may be approved as provided for in the Alternative Compliance section of this ordinance.

G. Slopes shall not exceed 3:1 (horizontal: vertical).