



Oregon

Theodore R. Kulongoski, Governor

Department of Land Conservation and Development

635 Capitol Street, Suite 150

Salem, OR 97301-2540

(503) 373-0050

Fax (503) 378-5518

www.lcd.state.or.us



NOTICE OF ADOPTED AMENDMENT

11/23/2009

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: City of Medford Plan Amendment
DLCD File Number 018-09

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. A Copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office. This amendment was submitted without a signed ordinance.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Thursday, December 03, 2009

This amendment was submitted to DLCD for review prior to adoption. Pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

***NOTE:** THE APPEAL DEADLINE IS BASED UPON THE DATE THE DECISION WAS MAILED BY LOCAL GOVERNMENT. A DECISION MAY HAVE BEEN MAILED TO YOU ON A DIFFERENT DATE THAT IT WAS MAILED TO DLCD. AS A RESULT, YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE DATE SPECIFIED.

Cc: Carly Meske, City of Medford
Gloria Gardiner, DLCD Urban Planning Specialist
John Renz, DLCD Regional Representative

<paa> YA

In person electronic mailed

FORM
2

DLCD

Notice of Adoption

THIS FORM MUST BE MAILED TO DLCD
WITHIN 5 WORKING DAYS AFTER THE FINAL DECISION
PER ORS 197.610, OAR CHAPTER 660 - DIVISION 18

DEPT OF

NOV 16 2009

LAND CONSERVATION
AND DEVELOPMENT

For DLCD Use Only

Jurisdiction: CITY OF Medford City Council

Local file number: DCA-09-066

Date of Adoption: NOV. 5, 2009

Date Mailed: NOV. 10, 2009

Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? Yes Date: 07/24/09

Comprehensive Plan Text Amendment

Comprehensive Plan Map Amendment

Land Use Regulation Amendment

Zoning Map Amendment

New Land Use Regulation

Other:

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached".

Amendment to include requirements for Stormwater Quality and Detention Facilities for development of private property and public rights-of-way. The proposal also includes new definitions, and a new submittal requirement for some Class C applications (PUDs, CUPs, Land Divisions, and SPAC applications).

Does the Adoption differ from proposal? No, no explanation is necessary

Plan Map Changed from: N/A

to: N/A

Zone Map Changed from: N/A

to: N/A

Location: N/A

Acres Involved: N/A

Specify Density: Previous: N/A

New: N/A

Applicable statewide planning goals:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Was an Exception Adopted? YES NO

Did DLCD receive a Notice of Proposed Amendment...

45-days prior to first evidentiary hearing?

Yes No

If no, do the statewide planning goals apply?

Yes No

If no, did Emergency Circumstances require immediate adoption?

Yes No

DLCD file No. 018-09 (17722) [15830]

Please list all affected State or Federal Agencies, Local Governments or Special Districts:

CITY OF MEDFORD. ROGUE VALLEY SEWER SERVICE. OREGON DEPARTMENT OF TRANSPORTATION.

Local Contact: Carly Meske

Phone: (541) 774-2380 Extension:

Address: 200 S. Ivy Street, Rm 240

Fax Number: 541-774-2564

City: MEDFORD

Zip: 97501

E-mail Address:

carly.meske@cityofmedford.org

ADOPTION SUBMITTAL REQUIREMENTS

This form **must be mailed** to DLCD **within 5 working days after the final decision**
per ORS 197.610, OAR Chapter 660 - Division 18.

1. **Send this Form and TWO Complete Copies** (documents and maps) of the Adopted Amendment to:

ATTENTION: PLAN AMENDMENT SPECIALIST

DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT

635 CAPITOL STREET NE, SUITE 150

SALEM, OREGON 97301-2540

2. Electronic Submittals: At least **one** hard copy must be sent by mail or in person, or by emailing larry.french@state.or.us.
3. **Please Note:** Adopted materials must be sent to DLCD not later than **FIVE (5) working days** following the date of the final decision on the amendment.
4. Submittal of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.
5. The deadline to appeal will not be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **twenty-one (21) days** of the date, the Notice of Adoption is sent to DLCD.
6. In addition to sending the Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.
7. **Need More Copies?** You can now access these forms online at <http://www.lcd.state.or.us/>. Please print on **8-1/2x11 green paper only**. You may also call the DLCD Office at (503) 373-0050; or Fax your request to: (503) 378-5518; or Email your request to larry.french@state.or.us - **Attention: Plan Amendment Specialist**.



CITY OF MEDFORD

PLANNING DEPARTMENT

STAFF REPORT

Date: October 26, 2009
To: City Council
Reviewed By: Suzanne Myers, Principal Planner
By: Carly Meske, Planner II
Subject: Stormwater Quality and Detention Facilities Code Amendment
(DCA-09-066)
City of Medford, Applicant

BACKGROUND

Proposal

Consideration of amendment to *Medford Land Development Code* Sections 10.012, 10.235, 10.247, 10.267, 10.287, 10.485, 10.487, 10.708, 10.727, 10.728, and creating new Sections 10.486 and 10.729, to include requirements for *Stormwater Quality and Detention Facilities* for development of private property and public rights-of-way. The proposal also includes new definitions, and a new submittal requirement for some Class C applications (PUDs, CUPs, Land Divisions, and SPAC applications).

Background

The purpose of this ordinance is to preserve water quality in creeks and streams and to preserve public safety by managing stormwater to prevent erosion and flooding. It establishes development standards and procedures that are intended to decrease soil erosion, flooding, and pollution.

The role of the City in stormwater management is to reduce the risk of negative impacts to people; to residential, commercial, industrial, and institutional structures; to infrastructure, such as roads; and to the environment. The Stormwater Quality and Detention Facilities Ordinance proposal focuses on standards to do just this. The standards aim to improve water quality, sustain wildlife habitat, and provide open space. The proposal contains measures for on-site stormwater detention which is a preferred practice because it alters peak flows by making them small but over a longer period. It can also decrease the amount of runoff through infiltration. This proposal protects stormwater quality by regulating construction practices, and by requiring a conceptual detention facility plan at the time of submission of a development application. Managing

23

**Stormwater Quality and Detention Facilities
Code Amendment (DCA-09-068)
City Council Staff Report**

October 26, 2009

stormwater is an essential part of preserving the natural state of local rivers and streams.

The City's efforts in the proposed Stormwater Ordinance are based, in part, on the inventory of natural hazards conducted during development of the City's Pre-Disaster Mitigation Plan which was accepted by the Federal Emergency Management Administration (FEMA) in 2004. As part of that plan, the City identified a number of mitigation measures it could take to proactively deal with natural disasters and hazards. One identified mitigation measure was to develop an ordinance for post-construction run-off control. The proposed Ordinance represents a part of that mitigation. It specifies the detention facility requirements and the operations and maintenance requirements. It also proposes that new streets and any development creating 5,000 square feet or more of impervious surface provide stormwater detention facilities.

A stormwater ordinance proposal came before the City Council and Planning Commission at study sessions in 2003, as DCA-03-010. After comments received from the Citizen's Planning Advisory Committee (CPAC), members of the steering committee (including developers, engineers, and landowners), and others, the proposal was revised to its current version. The main revision between the two proposals deals with maintenance. The current proposal requires that a detention facility be publicly maintained if it receives runoff from public right-of-way; whereas a detention facility shall be privately maintained if it receives runoff from only private development.

The Planning Commission held a study session on this proposal on April 13, 2009. The Citizens' Planning Advisory Committee (CPAC) considered the Stormwater Ordinance at their August 25, 2009, meeting. Members discussed generally the idea of future maintenance and awareness of such requirements (Exhibit E). The City Council held a study session on October 8, 2009.

Approval Criteria

Medford Land Development Code, Section 10.182 Application Form (Exhibit B).

Proposed Legislative Amendment

Exhibit A provides the proposed code revision language.

Findings

The Proposed Findings of Fact and Conclusions of Law (Exhibit C) are, by this reference, incorporated as a part of this report. A discussion of the proposal relative to the approval criteria listed above is included in the Findings. The Findings substantiate that the proposal meets the approval criteria for a Land Development Code Amendment.

October 26, 2009

ISSUES/ANALYSIS

Major Provisions of the Ordinance.

Purpose

The proposed ordinance (Exhibit A) establishes development standards to mitigate the impacts of post-construction runoff as a result of development. The purpose of the ordinance is to provide stormwater management principals and techniques that mimic the natural hydrologic process and meet water quality goals. More specifically, the ordinance: establishes water quality standards for stormwater discharges from public and private developments; identifies best management practices that meet water quality standards; and establishes review procedures for stormwater management plans.

Applicability

Public stormwater detention facilities will be required for all developments constructing streets and associated surfaces exceeding 5,000 square feet of impervious surface, or when widening or improving existing streets. Private stormwater detention facilities shall be required for all development and building permits: creating 5,000 square feet or more of impervious surface; reconstructing 1,000 square feet or more of impervious surface; or the creation of private streets, minimum access easements, or other easements creating 5,000 square feet or more of impervious surface.

Class C Applications

All applications for site plans, preliminary planned unit developments, land divisions, and conditional use permits must submit a conceptual stormwater drainage facility plan at time of application submittal. Submittal of the conceptual drainage facility plan will allow all applicable elements of site design to be evaluated and approved by the approving authority, including, but not limited to: and detention facilities, landscaping, and site circulation and design.

Density Reduction

Section 10.708, *Residential Density Calculation*, contains a definition of "non-development areas (NDAs)." These NDAs may be removed from the density calculation at the discretion of the developer, and include reserve acreage, natural unbuildable areas, and oversize residential lots. This code amendment proposes the addition of stormwater detention and treatment facilities, including access to the facility. With this code amendment, these facilities, and access thereto, may be removed from the density calculation, at the discretion of the developer.

Comments Received

The draft ordinance was placed on the City's website and sent to Referral Agencies and developers for a 30-day Comment Period in June 2009. Comments were received from the Bear Creek Watershed Council, the Klamath-Siskiyou Wildlands Center, HEA, Inc., and the Oregon Department of Transportation. These comments are included as Exhibit C, along with all written responses.

**Stormwater Quality and Detention Facilities
Code Amendment (DCA-09-068)
City Council Staff Report**

October 26, 2009

Comments concern, but are not limited to: the minimization of pollutants; applicability; and percent open space for ponds. The Public Works Department responded to submitted comments in a memorandum dated August 11, 2009, (Exhibit D). The purpose of this ordinance is to add stormwater detention requirements to the *Land Development Code*. Water quality standards will be added to the code in the future. Standards for low impact development (LID) may also be developed in the future. LID standards are effective in managing stormwater on smaller developments. The Public Works Department is currently partnered with the Bear Creek Watershed Council in seeking and planning ways to improve the health of the watershed.

RECOMMENDED ACTION

The Planning Commission forwarded a favorable recommendation to the City Council for DCA-09-068, on September 10, 2009.

EXHIBITS

- Exhibit A Proposed Stormwater Quality and Detention Facility Ordinance, dated October 22, 2009;
- Exhibit B Approval Criteria dated August 27, 2009
- Exhibit C Findings of Fact and Conclusions of Law, dated August 27, 2009;
- Exhibit D Comments received;
- Exhibit E Citizens Planning Advisory Committee Minutes, August 25, 2009; and
- Exhibit F Planning Commission Minutes, September 10, 2009.

CITY COUNCIL AGENDA: NOVEMBER 5, 2009

PROPOSED NEW SECTION**10.486 Stormwater Quality and Detention Facilities, Public Streets.**

A. Purpose. It is the City's policy to maintain the natural hydrology and preserve water quality by mitigating the direct impacts of new development and preserving the environmental benefits of natural water bodies.

B. Applicability. Stormwater quality and detention facilities for developments containing publicly maintained streets shall provide stormwater detention in accordance with the following:

1. Stormwater detention facilities shall be required when constructing streets and associated surfaces containing 5,000 square feet or more of impervious surface.
2. Stormwater detention facilities shall be required when widening or improvement of existing streets involves reconstructing the existing street section. Widening that involves adding only additional width to meet City standards shall not require stormwater detention facilities

C. Construction and Maintenance Standards.

1. Stormwater quality and detention facilities shall be constructed in conformance with Section 10.481, Improvement Standards Adopted.
2. Stormwater detention facilities that receive stormwater runoff from a publicly maintained street shall be a publicly maintained facility.
3. Stormwater detention facilities that do not receive stormwater runoff from a publicly maintained street shall:
 - a. Be privately maintained; and
 - b. Be constructed on private property; and
 - c. Have an *Operation and Maintenance Plan* approved by the City prior to construction of the facility.
4. Stormwater quality and detention facilities for single-family residential subdivisions, PUDs, and other residential land divisions which have publicly maintained streets shall combine the drainage from the public streets and the private lots in a combined system. The combined system shall be publicly maintained; however, this system may be privately maintained provided a *Declaration of Covenants for the Operation and Maintenance of Stormwater Facilities* and an *Operation and Maintenance Agreement*, in a form acceptable to the Public Works Department and the City Attorney, is signed and recorded by the responsible parties.
5. For commercial, multiple-family, and industrial developments, each lot or parcel shall provide a separate, private stormwater quality and detention facility at the time of building permit. The detention for drainage from the public right-of-way in these developments shall be in a separate facility, shall be constructed at the time of the street construction, and shall be maintained by the public.
6. Developments greater than five (5) acres in size shall set aside a minimum of two percent (2%) of the gross area as open space to be developed as open ponds or other similar stormwater treatment facilities, which shall be landscaped in conformance with Appendix A of the current adopted version of the *Rogue Valley Stormwater Quality Design Manual*.

ITY OF REPORT
CHART # A
e# PCA-09-066

7. Water quality and detention facilities for developments less than five (5) acres in size are encouraged to be developed as open ponds or other similar stormwater detention facilities, but may utilize underground treatment and detention.

PROPOSED NEW SECTION

10.729 Stormwater Quality and Detention Facilities, Private Property.

- A. Purpose. It is the City's policy to maintain the natural hydrology and preserve water quality by mitigating the direct impacts of new development and preserving the environmental benefits of natural water bodies.
- B. Applicability. Stormwater quality and detention facilities shall be required for development and building permits, with the exception of single-family residences and duplexes, which meet any one (1) of the following conditions:
 1. Building permits for development that creates 5,000 square feet or more impervious surface; or
 2. Building permits for development that adds or reconstructs 1,000 square feet or more of impervious surface, if that construction activity is part of a larger common plan of development that contains, or will contain, 5,000 square feet or more of impervious surface. A "common plan of development" means the overall plan for development of land, including any pre-existing development and approved plans for future development; or
 3. Building permits for development that existed prior to adoption of City regulations requiring stormwater detention facilities that add or reconstruct 1,000 square feet or more of impervious surface. These shall provide stormwater detention for only the added or reconstructed portion; or
 4. Subdivisions, partitions, or PUDs which will contain new private streets, Minimum Access Easements, or other easements creating 5,000 square feet or more of impervious surface.
- C. Location. Stormwater detention facilities for development that does not include public rights-of-way, as per Section 10.486, shall be constructed on private property.
- D. Construction and Maintenance Standards.
 1. Stormwater detention facilities shall be constructed in conformance with Section 10.481, Improvement Standards Adopted.
 2. Stormwater detention facilities for development that does not include public rights-of-way shall be privately maintained and shall have an *Operation and Maintenance Plan* approved by the City prior to construction of the facility. An approved form of the *Operation and Maintenance Plan* is located in Appendix of the current adopted version of the *Rogue Valley Stormwater Quality Design Manual*.
 3. When the property owner will not be responsible for maintenance of the private stormwater detention facility or when there will be multiple responsible parties, an *Operation and Maintenance Agreement*, in a form acceptable to the Public Works Department and the City Attorney, shall be required, in addition to the *Operation and Maintenance Plan*.

RELATED SECTIONS

ARTICLE IV – PUBLIC IMPROVEMENT STANDARDS AND CRITERIA

10.481 Improvement Standards Adopted.

Except as otherwise set forth in this chapter the Standard Specifications for public works construction by Oregon Chapter, American Public Works Association, City of Medford standards, the **Rogue Valley Stormwater Quality Design Manual**, and the Medford Water Commission Standards for Design and Constructing Water Facilities, all of which standards are hereby incorporated herein by reference, are hereby adopted as minimum design and improvement standards for all streets, sidewalks, driveways, storm drain facilities, street lighting, water facilities, and other development improvements in the city of Medford. In the event that there be any conflict between the standards and specifications set forth in said above referenced pamphlets and any of the standards or specifications specifically contained elsewhere in this code, the latter shall prevail.

10.482 Public Improvement Plan Requirements.

- A. ~~Prior to the issuance of a development permit and prior to commencement of improvement work, The developer shall cause plans and specifications for all public improvements to shall be prepared by an professional engineer registered in the State of Oregon in accordance with the design and improvement standards of this Ceode, which plans and specificationsand shall be submitted to and approved in writing reviewed by the City Engineer, except water system plans, which shall be submitted to and approved reviewed by the Medford Water Commission, prior to the commeneement of improvement work and prior to issuance of a development permit.~~
- B. All **public** improvements shall be constructed and completed under the inspection of and to with the approval of the City Engineer.
- C. Without limiting the foregoing, and using Ceity data, ~~said~~**public improvement** plans shall include typical cross sections and proposed finished grades of all streets, together with a profile showing the relationship between finished grade and existing ground elevations, and the lengths, sizes, grades, and typc of all pipes, culverts, and other structures.
- D. ~~The~~**Public improvement** plans and specifications shall also contain performance data certified reviewed by the developer's engineer demonstrating compliance with all design requirements of this chapterCode. All City and Water Commission personnel who check and/or approve **public improvement** plans and specifications are authorized to accept such performance data at face value without independently verifying the accuracy thereof.

10.485 Storm Drainage Requirements Water and Sewage.

- A. Subterranean storm drains shall be designed and installed by the developer to adequately and safely drain all storm-waters of ~~said~~a development, and all surface waters reaching, or reasonably calculated to reach, said development from areas outside of its boundaries, and to ultimately drain the same to an approved watercourse.
- B. Drainage to a watercourse shall be either by the direct discharge into the same, or by connection with adjacent existing storm drains already discharging into a water-course and of a capacity sufficient, in the opinion of the City Engineer, to adequately and safely carry all of such additional drainage.

- C. 3. When a proposed development may adversely impact a storm drainage system, the City Engineer may recommend to the approving authority (Planning Commission or Site Plan and Architectural Commission) that the developer have prepared, by a registered engineer, a Storm Drainage Plan for review and approval prior to final action on the plan authorization.
- D. The storm drain system shall consist of mains of not less than twelve (12) inches in diameter, together with such manholes, catch basins, laterals, water quality and flow control facilities, and other structures, and, at such grades, as required by the City Engineer to conform to good drainage requirements for the area and for the topography of the development to prevent standing waters or flooding waters—within and outside of its boundaries.

SECTION 10.012, DEFINITIONS

Detention: The temporary storage of stormwater runoff from development, which is normally released at a slower rate than it is collected.

Impervious surface. Impervious surfaces are those surface areas, which do not absorb water either prevent or retard saturation of water into the land surface, and/or cause water to run off the land surface in greater quantities or at an increased rate of flow from that present under conditions pre-existent to development. They consist of all buildings, parking areas, driveways, roads, sidewalks, and any other areas of concrete or asphalt. Common impervious surfaces include but are not limited to rooftops, concrete or asphalt streets, sidewalks, walkways, patio areas, driveways, parking lots or storage areas and graveled, oiled, macadam or other surfaces which similarly impact the natural saturation or runoff patterns which existed prior to development.

Stormwater: That portion of precipitation that does not percolate into the ground or evaporate, but flows via overland flow, interflow, pipes and other features of a stormwater drainage system into a defined surface water body, or a constructed storm drain facility.

Stormwater Detention Facility: An above or below ground facility, such as a pond or tank, that temporarily stores stormwater runoff and subsequently releases it at a slower rate than it is collected by the drainage facility system. There is little or no infiltration of stored Stormwater.

Stormwater Facility: Constructed or natural features which function together as a system to collect, convey, channel, hold, inhibit, retain, detain, divert, treat or filter stormwater.

PRELIMINARY PUD PLAN APPLICATION

10.235 Preliminary PUD Plan - Application Procedures.

A. Application for a Preliminary PUD Plan: An application for Preliminary PUD Plan shall be on forms supplied by the City. A complete application shall include the materials and information listed in this Subsection. However, the Planning Director, in his/her discretion, may waive the submittal of any of the materials or information that are deemed to be excessive,

repetitive or unnecessary based upon the size and nature of the PUD. If an application for a PUD is accepted by the City as complete under ORS 227.178 but the application does not contain all of the items listed below, the missing items shall be deemed to have been waived by the Planning Director. Unless waived by the Planning Director, the following items shall be required to constitute a complete application for a Preliminary PUD Plan:

1. Current assessor map with the boundaries of the proposed PUD identified.
2. Preliminary PUD Plan (16 copies) and supplemental materials conforming to the Site Plan and Architectural Review application requirements in Section 10.287. Additionally, such plans shall include preliminary plans for providing public water and sanitary sewer service. The Preliminary PUD Plan shall indicate boundaries within the property which distinguish areas devoted to different land uses pursuant to Subsections 10.235(A)(3)(f), 10.230(D)(7) and 10.230(D)(8). Where different land uses are separated by streets, railroad rights-of-way, drainage channels or other water courses, the centerlines of such features shall be their boundaries. One copy of the Preliminary PUD Plan shall be a reduced size suitable for photocopy. If a tentative plat for a land division is submitted concurrently with a Preliminary PUD Plan, the Preliminary PUD Plan and tentative plat shall be on separate sheets. It is further provided that:
 - a. Unless otherwise required in this Code, architectural plans for single family detached dwellings and landscaping plans for lots occupied by single family detached dwellings are not subject to review or approval as part of a PUD. However, nothing shall prevent an applicant from supplying architectural or landscaping plans for single family detached housing as a means to comply with one or more approval criteria.
 - b. If private or non-city standard street lighting is proposed, a street lighting plan shall be provided which provides a detail of the proposed lighting fixture(s). The Preliminary PUD Plan shall indicate the location of proposed private or non-city-standard light fixtures.
 - c. An applicant may postpone the submission and approval of architectural plans for proposed buildings and to have such plans approved later as a separate matter under Subsection 10.235(F) after the Preliminary PUD Plan has been approved. When the approval of architectural plans has been postponed, the Preliminary PUD Plan shall show a conceptual footprint for each planned building and each building footprint shall be separately enclosed by a dashed line which shall be called and labeled a building envelope. Building envelopes shall reasonably anticipate and define the maximum extent of the footprint for each building in the PUD.
3. A narrative description of the PUD which shall cover:
 - a. The rationale for planning this development as a PUD.
 - b. The nature, planned use, future ownership and method of perpetual maintenance of land to be left in natural or developed open space or which will be held in common ownership.
 - c. A listing of all modified applications of the Code that are proposed, followed by a brief explanation which covers the nature of, extent of, and reason for each modification.
 - d. If one or more signs are intended to vary from the provisions of this Code, then a detailed plan for all signs which require a sign permit shall be submitted. The sign plan shall specify the size, number, type, height and location of all signs which require a sign permit and shall clearly indicate all proposed modifications.

e. A proposed development schedule. If the PUD will be constructed in phases, the development schedule for each phase shall be keyed to a plan that indicates the boundaries of each phase.

f. The gross acreage devoted to the various proposed land uses and housing types.

4. Written findings of fact and conclusions of law which address the approval criteria in Subsection 10.235(C).

5. The names and mailing addresses of the owners of land located within 200 feet of the exterior boundary of the whole PUD. The names and mailing addresses shall be typed on mailing labels and shall include the assessor map and tax lot numbers for each property.

6. **A conceptual stormwater facility plan with associated landscape plan, if applicable as per Section 10.729(B).**

CONDITIONAL USE PERMIT APPLICATION

10.247 Application Form.

An application for a conditional use permit shall contain the following:

(1) Vicinity map drawn at a scale of 1" = 1,000' identifying the location of the proposed site.

(2) Assessor's map with subject site identified.

(3) Site plan drawn to scale on an eighteen inch by twenty-four inch (18" x 24") sheet. Site plan shall identify all existing and proposed buildings, parking, drives, vegetation or landscaping, adjacent development.

(4) A conceptual stormwater facility plan with associated landscape plan, if applicable as per Section 10.729(B).

(5) Property owner's (and agent's) names, addresses, and map and tax lot numbers within 200 feet of the subject site, typed on mailing labels.

(6) Findings prepared by the applicant or his/her representative addressing the criteria set forth in Section 10.248, Conditional Use Permit Criteria.

LAND DIVISION APPLICATION

10.267 Form of Tentative Plat and Accompanying Data.

All tentative plats shall be clearly and legibly drawn on tracing paper of good quality and prepared by a civil engineer or land surveyor registered in the State of Oregon. It shall have a dimension of not less than eighteen (18) inches by twenty-four (24) inches, and the scale shall be as follows: One (1) inch shall be equal to fifty (50) feet for twenty (20) acres or less, and one (1) inch shall be equal to one hundred (100) feet for all divisions of land over twenty (20) acres in area. The tentative plat shall contain the following data:

(1) Proposed land division name (if a subdivision), date, north arrow, scale, total acreage, and sufficient legal information to define the boundaries of the proposed development.

(2) A key map located in the upper right hand corner identifying the location of the development relative to section and township lines and to adjacent property and major physical features such as streets, railroads, and waterways.

(3) Names of abutting property owners on all sides, names and widths of adjoining rights-of-way, topographic features and all public improvements on adjacent property located within 200 feet of the project boundary.

- (4) Name and address of the owner(s) of record, developer, and engineer or land surveyor registered in the State of Oregon who prepared the tentative plat.
- (5) Locations, names, widths, approximate intersection angle, centerline radii, center line slopes, and improvement section of all streets, highways and other ways in the proposed project.
- (6) Number of lots, dimensions of lots (to the nearest foot), including frontage, width, and area (to the nearest fifty [50] square feet).
- (7) Location and height of all existing structures to remain on property and distance from proposed property lines.
- (8) Location and character of all easements existing and proposed by the developer for drainage, sewage and public utilities.
- (9) Five (5) foot topographic contours describing the area. Where the grade of any part of the proposed land division exceeds ten percent (10%), or where the development abuts existing developed lots, an overall conceptual grading plan shall be required showing features adjacent to the development within a reasonable distance therefrom which could affect said project. Where a conceptual grading plan is required it shall show how runoff of surface water from individual lots will be achieved and the ultimate disposal of all development surface waters. All topographic information shall be based on city data.
- (10) A conceptual stormwater facility plan with associated landscape plan, if applicable as per Section 10.729(B).
- (11) Location of all creeks, streams and other watercourses, showing top of existing bank and areas subject to inundation as shown on the latest Federal Flood Rate Insurance Maps.
- (12) Existing wells and irrigation canals, active or abandoned, and proposed disposition.
- (13) Public or common area proposed, if any.
- (14) The approximate distance to, and location of, the nearest sanitary sewer main.
- (15) Name of the irrigation district, if any, within which the project is located and whether it is currently being assessed.
- (16) Name of the school district within which the project is located.

SITE PLAN AND ARCHITECTURAL COMMISSION APPLICATION

10.287 Application Form.

The application for Site Plan and Architectural Commission review shall contain the following information:

Landscape Plan: Three (3) copies of the landscape plan scaled 1" = 10' or 1" = 20' and a reduced copy on an 8-1/2 x 11 inch sheet, that are legible, indicating the following:

- (1) Existing natural features on site including location and species of all existing trees, with a trunk six (6) inches in diameter or greater at four (4) feet in height above the ground,
- (2) Landscaping required by this code, (e.g. frontage landscaping, parking area planter bays and bufferyards),
- (3) Type of covering for all ground surfaces, (e.g. bark mulch, gravel, paving, native grasses),
- (4) Proposed tree, shrub, and living ground cover:
 - a. Locations and number.
 - b. Common and scientific names including genus, species and cultivar. An alternate tree species list, by location, to allow flexibility during installation.
- (5) Type of automatic irrigation system to be installed,

- (6) Manufacturer, model and location of the backflow prevention device which shall be selected from the Medford Water Commission's list of approved devices.

Rewrites to the landscape plan during installation may be allowed to accommodate the artistic nature of the plan or to allow replacement of plants that are unavailable. Replacement species shall be taken only from the alternate plant species identified on the plan approved by the Site Plan and Architectural Commission. The overall character of the landscape plan shall be maintained. The quantity of shrubs may be adjusted in response to planting size or species type, but shall not be reduced in number by more than ten percent (10%). In no case shall the quantity of shrubs be reduced below the minimum number required by the code or less than is necessary to cover eighty-five percent (85%) of the planter area within eight (8) years as specified in Section 10.780(1).

Applicants are encouraged to develop their landscape plans consistent with the *City of Medford Landscape Guidelines*.

Building Construction: Seventeen (17) copies of a site plan and three (3) sets of the architectural plans clearly and legibly drawn to scale, with directional labels and indicating with full dimensions the following information:

(1) Site Plan:

- (a) Lot dimensions.
- (b) All proposed and existing buildings and structures: location, size, height, proposed use.
- (c) Public and private yards and open space between buildings.
- (d) Walls and fences: location, height and material.
- (e) Existing and proposed off-street parking: location, number, type and dimensions of spaces, parking area, internal circulation pattern.
- (f) Access: pedestrian, vehicular, service, points of ingress and egress.
- (g) Loading: location, dimension, number of spaces, type of space (A or B), internal circulation.
- (h) Lighting: location and general nature, hooding devices.
- (i) Street dedication and improvements.
- (j) Drainage plan.
- (k) Location of existing public improvements including streets, curbs, sidewalks, street trees, utility poles, light fixtures, traffic signs and signals, and such other data as may be required to permit the Site Plan and Architectural Commission to make the required findings.
- (l) Location and screening of mechanical equipment.
- (m) Location and screening of outdoor trash bins.

(2) Architectural Plans:

- (a) Roof plan.
- (b) Floor plan.
- (c) Architectural elevations.
- (d) Materials and Colors.

(3) A conceptual stormwater facility plan with associated landscape plan, if applicable as per Section 10.729(B).

RESIDENTIAL DENSITY CALCULATION

10.708 Residential Density.

The minimum and maximum number of dwelling units permitted shall be determined by multiplying the project's gross acreage, less non-development areas (NDAs), by the zoning district minimum and maximum density factor, consistent with A, B, and C below.

A. Definitions.

When used in this Chapter in reference to the residential density calculations, the following terms shall have the meaning as herein ascribed:

- (1) **Dwelling Unit (DU).** The number of dwelling units permitted. Minimum density is rounded to the nearest whole number (up for numbers 0.5 and greater, and down for numbers less than 0.5). Maximum density is rounded down to the nearest whole number.
- (2) **Gross Area (GA).** The total area of all lots within a project's boundaries. If the project is adjacent to an existing public street, the boundaries of the project shall be extended to the centerline of the right-of-way, and that area within the right-of-way included in the gross area, as illustrated in §10.012.
- (3) **Non-Development Areas (NDAs).** Those areas that may be removed from the density calculation, at the discretion of the developer.
 - (a) **Reserve acreage.** That portion of the project site which is not intended to be part of the development, and can be separately developed at a later time.
 - (b) **Natural Unbuildable Areas.** Those natural areas unsuitable for building [i.e., wetlands, slopes over 30 percent, and creeks (from top-of-bank to top-of-bank)]. Does not include man-made non-buildable areas such as setbacks.
 - (c) **Oversize Residential Lots.** Lots with an existing house and yard, that exceed the maximum lot area as allowed in §10.702(3)(a).
 - (d) **Stormwater Detention and Treatment Facilities, including access to the facility.**
- (4) **Minimum Density Factor (min. df).** Minimum number of dwelling units per gross acre allowed for the zoning district, as defined in §10.710-10.714.
- (5) **Maximum Density Factor (max. df).** Maximum number of dwelling units per gross acre allowed for the zoning district, as defined in §10.710-10.714.

B. Calculations.

The minimum and maximum number of dwelling units permitted shall be determined by multiplying the project's gross area, less NDAs (at the option of the developer), by the zoning district minimum and maximum density factor.

(I) Examples:

- (a) **Minimum Density Calculation.** The project site lies within the SFR-4 district and contains six gross acres. The developer intends to retain two acres of reserved acreage. The minimum number of dwelling units and/or lots permitted is calculated as follows:

Minimum Density
Minimum # of Permitted DU = $(6 - 2) \times 2.5$
Minimum # of Permitted DU = 10

(b) Maximum Density Calculation. The project site contains six gross acres of land within the SFR-4 district. The developer intends to retain two acres of reserved acreage. The maximum number of dwelling units permitted is calculated as follows:

Maximum Density
Maximum # of Permitted DU = $(6 - 2) \times 4$
Maximum # of Permitted DU = 16

C General Exceptions to Residential Density Calculations.

- (1) Multiple-Family Dwelling Units in Commercial Zoning Districts, Except Neighborhood Commercial (C-N). The minimum and maximum density factor shall be the same as the MFR-30 zoning district, found in §10.710-10.713.
- (2) Mixed-Use Buildings. For mixed-use buildings, as defined herein, in commercial zoning districts (save for C-N), there shall be no minimum or maximum number of dwelling units required. In the Neighborhood Commercial (C-N) zoning district, dwelling units must be located in a mixed-use building and conform to 10.837.
- (3) Congregate Living Facilities. For units in a congregate living facility that do not contain full kitchen or cooking facilities, each unit may be counted as 0.7 of a dwelling unit for purposes of calculating density. The living unit shall be counted as a full dwelling unit for purposes of calculating the parking requirement.
- (4) Parcels Under One (1) Gross Acre. For parcels under one gross acre in size, the minimum density may be reduced by one unit without applying for an Exception.



CITY OF MEDFORD

PLANNING DEPARTMENT

EXHIBIT B

DCA-09-066

August 27, 2009

Approval Criteria: Medford Land Development Code Section 10.182

Section 10.182 of the *Land Development Code* requires findings that address the following:

- (1) Identification of all applicable Statewide Planning Goals
- (2) Identification and explanation of the goals and policies of the Comprehensive Plan considered relevant to the decision.
- (3) Statement of the facts relied upon in rendering the decision, if any.
- (4) Explanation of the justification of the decision based on the criteria, standards, and facts.

10.182
B
DCA-09-066

DCA-09-066

August 27, 2009

BEFORE THE PLANNING COMMISSION
AND CITY COUNCIL
FOR THE CITY OF MEDFORD
JACKSON COUNTY, OREGON

IN THE MATTER OF AMENDING)
SECTIONS 10.012, 10.235, 10.247, 10.267,)
10.287, 10.485, 10.486, 10.487, 10.708, 10.727,)
10.728, and 10.729 OF THE MEDFORD)
LAND DEVELOPMENT CODE, RELATING)
TO STORMWATER)

FINDINGS OF FACT
CONCLUSIONS OF LAW
File No. DCA-09-066
Exhibit C
August 27, 2009

City of Medford, Applicant

PROCEDURAL BACKGROUND

This is a request to amend the *Medford Land Development Code (MLDC)*. It is classified as a Class 'A' legislative action in *MLDC 10.150 General Procedural Requirements*. *MLDC* Sections 10.180 through 10.184 provide the process and standards for such amendments.

RELEVANT APPROVAL CRITERIA

For Class 'A' Major Amendments, *Medford Land Development Code* Section 10.182 *Application Form* requires the City to prepare an application with the following information:

- (1) Identification of all applicable Statewide Goals.
- (2) Identification and explanation of the goals and policies of the *Comprehensive Plan* considered relevant to the decision.
- (3) Statement of the facts relied upon in rendering the decision, if any.
- (4) Explanation of the justification for the decision based on the criteria, standards, and facts.

COMPLIANCE WITH STATEWIDE PLANNING GOALS

GOAL NO. 1: Citizen Involvement
GOAL NO. 2: Land Use Planning
GOAL NO. 5: Natural Resources, Scenic and Historic Areas, and Open Spaces
GOAL NO. 6: Air, Water and Land Resource Quality
GOAL NO. 7: Areas Subject to Natural Disasters and Hazards
GOAL NO. 11: Public Facilities and Services

Upon investigation, it has been determined that Statewide Planning Goals 3, 4, 5, 8, 9, 10, 12, 13, and 14 are not applicable to this action. Goals 15, 16, 17, 18, and 19 are not applicable in Medford as these pertain to the Willamette River Greenway and ocean-related resources.

C
DCA-09-066

STATEWIDE PLANNING GOAL 1: CITIZEN INVOLVEMENT - To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

FINDINGS OF FACT

Goal 1 requires the City to have a citizen involvement program that sets the procedures by which a cross-section of citizens will be involved in the land use planning process, including participation in identifying public goals, developing policy guidelines, and evaluating alternatives in the revision of the *Comprehensive Plan*, and in the inventorying, mapping, and analysis necessary to develop the plan content and implementation strategies. They must also be given the opportunity to participate in the development, adoption, and application of legislation to carry out a comprehensive plan. Goal 1 requires providing an opportunity to review proposed amendments prior to the public hearing, and any recommendations must be retained and receive a response from policy-makers. The rationale used to reach land use policy decisions must be available in the written record.

The City of Medford has an established citizen involvement program consistent with Goal 1 that includes review of proposed legislative *Land Development Code* amendments by the Citizens Planning Advisory Committee, the Planning Commission, and the City Council in study sessions, regular meetings, and public hearings. Affected agencies and interested persons are also invited to review and comment on such proposals, and meeting and hearing notices are published on the city's website and in the local newspaper. As detailed below, this process has been followed in the development of the proposed amendment.

Citizens from the private sector participated in development of the proposed ordinance (DCA-03-010) as members the Technical Advisory Committee who met with staff to prepare the draft. This revised 2009 version was placed on the City's website, and sent to Referral Agencies and developers for a 30-day Comment Period in June 2009. All comments received during that period are included as Exhibit C. The main variation from 2003 to 2009 is maintenance responsibility: now, if the source of runoff is public right-of-way, the detention facility is publicly maintained.

The Citizens' Planning Advisory Committee (CPAC) considered the Stormwater Quality and Detention Facilities at their August 25, 2009 meeting. Concerns included: long term maintenance of detention systems, and costs associated thereto.

Planning Commission held study sessions on stormwater detention in 2002 and more recently on April 13, 2009. City Council discussed stormwater detention at study sessions in 2003. A public hearing before Planning Commission on September 10, 2009, and City Council is scheduled for November 5, 2009.

CONCLUSIONS OF LAW

In accordance with Statewide Planning Goal 1, the City of Medford has an established citizen involvement program and followed it to provide opportunities for citizens to be involved in the development of the proposed ordinance. The general public, the development community, affected agencies; the Citizens Planning Advisory Committee, the Planning Commission and

City Council were all involved in the development of this proposal, as per that program. The City followed the process in Medford's acknowledged *Comprehensive Plan* and *Medford Land Development Code*. In conclusion, the process being followed for this proposal is consistent with Statewide Planning Goal 1.

STATEWIDE PLANNING GOAL 2: LAND USE PLANNING - To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

FINDINGS OF FACT

Goal 2 and its implementing *Oregon Administrative Rules* (OAR) and *Oregon Revised Statutes* (ORS) require City land use actions to be consistent with the adopted *Comprehensive Plan*. The *Comprehensive Plan* must include identification of issues and problems, inventories, and other factual information for each applicable Statewide Planning Goal, and evaluation of alternative courses of action and ultimate policy choices, taking into consideration social, economic, energy and environmental needs. Comprehensive plans must state how the Statewide Planning Goals are to be achieved. The plan must contain specific implementation strategies that are consistent with and adequate to carry out the plan, and which are coordinated with the plans of other affected governmental units. Implementation strategies can be management strategies such as ordinances, regulations and project plans, and/or site or area-specific strategies such as construction permits, public facility construction, or provision of services. Comprehensive plans and implementation ordinances must be reviewed and revised on a periodic cycle to take into account changing public policies and circumstances. "Major" (legislative) revisions occur when changes are proposed that affect a large area, many different ownerships, or the entire City. Goal 2 calls for "*an adequate factual base for such decisions and actions*" made within the context of the land use planning process.

Per *MLDC 10.102 Plan Authorization*, proposals to amend the *Medford Land Development Code* undergo the planning and development review process specified for Class 'A' legislative actions. This proposal to amend the code will affect a large area with many different ownerships; thus, the procedural requirements for a Class 'A' action are being followed, consistent with the *Medford Land Development Code* and the *Comprehensive Plan*.

This proposal implements existing *Comprehensive Plan* policies and Implementation Strategies related to controlling erosion, preserving water quality. The proposal requires stormwater facilities for new streets and any development adding 5,000 square feet or more of impervious surface, save for single family homes. A conceptual detention facility plan is required at the time of submittal of all Class "C" applications, excepting zone changes. In this way, property owners understand constraints before designing facilities, and plan accordingly. Decision makers can consider information on site design and functionality as part of the approval process.

CONCLUSIONS OF LAW

The City's efforts in this proposed legislative amendment will assure that the planning and authorization of stormwater quality and detention facilities are based on adequate technical information identifying hydrologic and geologic concerns. This proposal will support an effective, fact-based land use planning and decision process. This proposal will also assure that

Land Development Code provisions properly implement the adopted Goals and Policies of the acknowledged *Medford Comprehensive Plan* and the Statewide Planning Goals. In conclusion, this proposal complies with Statewide Planning Goal No. 2.

STATEWIDE PLANNING GOAL 5: Natural Resources, Scenic and Historical Areas, and Open Spaces - To protect natural resources and conserve scenic and historic areas and open spaces.

FINDINGS OF FACT

Goal 5 require local governments to inventory and evaluate certain resources, and develop land use programs that conserve and protect the “significant” ones. Those resources that can be affected by stormwater management include: riparian corridors, including water and riparian areas and fish habitats; wetlands; wildlife habitat; and groundwater resources. Goal 5 requirements are met when the local government has adopted clear and objective standards that define the degree of protection for each resource.

The role of the City in stormwater management is to reduce the risk of negative impacts to people; to residential, commercial, industrial, and institutional structures; to infrastructure, such as roads; and to the environment. The Stormwater Quality and Detention Facilities ordinance proposal focuses on standards to do just this. The standards aim to improve water quality, sustain wildlife habitat, and provide open space. The proposal contains measures for on-site stormwater detention which is a preferred practice because it alters peak flows by making them small but over a longer period. It can also decrease the amount of runoff through infiltration. This proposal protects stormwater quality by regulating construction practices, and by requiring a conceptual detention facility plan at the time of submission of a development application. Managing stormwater is an essential part of preserving the natural state of local rivers and streams.

CONCLUSIONS OF LAW

The preservation of water and land resources is targeted by Statewide Planning Goal 5. A main purpose of this proposal is to manage stormwater such that the natural state of Medford’s local streams and rivers are preserved. By regulating stormwater quality and detention facilities, this proposal sets standards that respect the carrying capacity of waterways that ultimately channel stormwater to the Rogue River, a major source of City drinking water during summer months. In conclusion, this proposal complies with Statewide Planning Goal 5.

STATEWIDE PLANNING GOAL 6: Air, Water and Land Resources Quality - To maintain and improve the quality of air, water and land resources of the state.

FINDINGS OF FACT

Goal 6 provides that jurisdictions control waste and process discharges to ensure that they will not violate state or federal environmental quality statutes, rules and standards. It emphasizes the importance of: not exceeding the carrying capacity of air, water and land resources in the long range; not degrading natural resources; and, not threatening their availability. Plans should separate or buffer uses whose requirements conflict with those resources. Plans should target the maintenance and improvement of air, land and water resources. Development actions should not exceed the carrying capacity of such resources.

The proposed ordinance focuses on preserving water quality and the stormwater drainage system. The proposal has measures to control the erosion that lowers water quality by producing sediment in water. The proposal protects water quality by regulating construction practices, requiring detention facilities for new streets and development greater than 5,000 square feet, and by requiring a conceptual detention facilities plan at time of submittal of an application.

CONCLUSIONS OF LAW

The preservation of water and land resources is targeted by Statewide Planning Goal 6. A main purpose of this proposal is to control the erosion which can destabilize land resources and lower water quality. This proposal sets standards that respect the special nature of erosion that ultimately channels to the Rogue River, a major source of City drinking water during summer months. In conclusion, this proposal complies with Statewide Planning Goal 6.

STATEWIDE PLANNING GOAL 7: AREAS SUBJECT TO NATURAL DISASTERS AND HAZARDS - To protect life and property from natural disasters and hazards.

FINDINGS OF FACT

Goal 7 requires jurisdictions to inventory areas prone to natural disasters or hazards and provide safeguards for development that occurs on or near those areas. Natural disasters are events that can result in death and/or endanger the built environment. Flooding, erosion, landslides, earthquakes and weak soils are types of natural disasters and hazards. Cities are to evaluate the degree of risk associated with each hazard and limit or regulate development on or near those hazards according to that risk. The goal states that the density or intensity of development should be limited by the degree of the natural hazard. The goal also states that if natural hazards could result from the impact of new development, e.g. runoff, soil slippage, etc., then those effects should be evaluated and addressed.

The City's efforts in the proposed Stormwater Ordinance are based, in part, on the inventory of natural hazards conducted during development of the City's Pre-Disaster Mitigation Plan which was accepted by the Federal Emergency Management Administration (FEMA) in 2004. As part of that plan, the City identified a number of mitigation measures it could take to proactively deal with natural disasters and hazards. One identified mitigation measure was to develop an ordinance for post-construction control. The proposed Ordinance represents a part of that mitigation. It specifies the detention facility requirements and the operations and maintenance requirements. It also proposes that new streets and any development creating 5,000 square feet or more of impervious surface provide stormwater facilities.

The purpose of the City of Medford's stormwater management program is to reduce the risk of negative impacts from stormwater to people, to residential, commercial, industrial, and institutional structures, to infrastructure, such as roads, and to the environment. The City employs a constantly evolving program of stormwater management practices and improvements designed to systematically reduce the risk. These methods may include improvements to stormwater conveyances, use of detention facilities, preservation of wetlands, and regulation of new construction in flood plains. The Public Works Department is responsible for the City's stormwater management program, including evaluating and mitigating the system-wide effects of proposed development. Historically, the primary focus of the program was to control

stormwater in terms of quantity. New regulations are requiring that the City also focus on quality.

The City maintains a storm water management plan for all basins within the Urban Growth Boundary and implements it through upgrading existing facilities and providing new facilities through public and private development. The *Medford Land Development Code* contains provisions relating to development, which require the identification and documentation of an array of site characteristics, including: proximity to wetlands; drainage characteristics; flood-prone areas; and designated flood plains. Post-development runoff control is a requirement of the National Pollutant Discharge Elimination System (NPDES), Phase II rules. This proposal is one requirement the City must meet as part of the NPDES, Phase II permit. Section 6 of the City's permit addresses the City's Post-Construction Stormwater Management Program. The City must develop a stormwater post-construction control (stormwater detention) ordinance. The City is developing ordinances to require that developers provide storm water detention facilities in new developments, including land divisions and Planned Unit Developments.

CONCLUSIONS OF LAW

As demonstrated above, this proposal responds directly to the requirements of Goal 7 by addressing the natural hazards of water quality, erosion, and flooding. It regulates development to provide for public safety. This proposal implements a mitigation measure identified in the City's Pre-Disaster Mitigation Plan, namely, the establishment of stormwater quality requirements to prevent flooding. In conclusion, this proposal is consistent with Statewide Planning Goal 7.

STATEWIDE PLANNING GOAL 11: PUBLIC FACILITIES AND SERVICES - To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

FINDINGS OF FACT

According to Goal 11, urban public facilities should be designed such that the appropriate type and level needed by urban areas are delivered. Plans should ensure the type, location and delivery of public facilities and services in a way that supports the existing and proposed land uses. Urban facilities and services include, among others, police, stormwater drainage facilities, planning, and others. Plans providing for those facilities and services should see the carrying capacity of the air, land and water resources as a significant decisive factor. Development should not be allowed to exceed the carrying capacity of those resources.

Several measures in the proposed Ordinance will mitigate the effect of development on stormwater drainage facilities by better controlling erosion and regulating practices which result in increased runoff. Some examples are: requiring stormwater facilities for new streets and development creating over 5,000 square feet of impervious surface; and by limiting post-construction discharge to that of the pre-development rate of flow from the 10 year storm event or less.

CONCLUSIONS OF LAW

The proposed Ordinance is consistent with Goal 11 because it will manage the runoff from streets and impervious surfaces, thereby supporting the proper functioning of the stormwater drainage system. Improper collection and treatment of stormwater could have a deleterious effect on that system. The proposal will ensure appropriate post-construction stormwater management is employed. In conclusion, the proposal is consistent with Goal 11.

COMPLIANCE WITH THE CITY OF MEDFORD *COMPREHENSIVE PLAN*

This proposal is in compliance with the *Medford Comprehensive Plan*, as described below. The Environmental Element and the Public Facilities Element of the *Comprehensive Plan* contain Goals, Policies and Implementations that identify the need for measures contained in the proposed ordinance.

The Environmental Element: Natural Resources – Water Quality

Goal 5: *To achieve and maintain water quality in Medford's waterways.*

Policy 5-A: The City of Medford shall implement regulations that pertain to discharges into the Rogue River, Bear Creek, and their tributaries, such as the federal *Clean Water Act*.

Policy 5-B: The City of Medford shall implement measures to reduce polluted surface water runoff into the storm drainage system.

Implementation 5-B(1): Implement the recommendations of the 1996 *Comprehensive Medford Area Drainage Master Plan*, or any updates, regarding surface water runoff quality.

Implementation 5-B(2): Develop and impose design standards for filtering and slowing runoff from paved areas using such methods as vegetated swales, on-site detention ponds, or other technologies as they become feasible, to cleanse the water before entering primary waterways.

Implementation 5-B(3): Require the use of natural waterways for storm drainage whenever possible, to decrease flow speed and increase filtering prior to the runoff entering a primary waterway.

FINDINGS OF FACT

Goal 5 of the Environmental Element identifies water quality of Medford's waterways as a priority in the process of development. Policy 5-A specifies that the City shall regulate discharge into the Rogue River and Bear Creek. Policy 5-B states that the City shall make efforts to reduce runoff. Implementation 5-B(1) requires the City implement the recommendations of the *Comprehensive Medford Area Drainage Master Plan*. Implementation 5-B(2) calls for the cleansing of water before entrance into waterways. Implementation 5-B(3) calls for the use of natural waterways to slow flow and increase filtering. The Stormwater Ordinance responds directly to these items. Its purpose is to provide principals and techniques that mimic the natural

hydrology process and meet water quality goals. The ordinance facilitates achievement of these goals by establishing water quality standards, identifying best management practices that meet water quality standards, and establishing review procedures for stormwater management plans.

CONCLUSIONS OF LAW

This proposal establishes a set of development standards minimize erosion and protect water quality. With this proposal, the City will be better equipped to implement adopted Goals and Policies of the acknowledged *Medford Comprehensive Plan* and the Statewide Planning Goals with the *Land Development Code*. The proposed amendment complies with these Comprehensive Plan Goals, Policies and Implementations.

Goal 6: To recognize Medford's waterways and wetlands as essential components of the urban landscape that improve water quality, sustain wildlife habitat, and provide open space.

Policy 6-A: The City of Medford shall regulate land use activities and public improvements that could adversely impact waterways in the interest of preserving and enhancing such natural features to improve water quality and fish and wildlife habitat.

FINDINGS OF FACT

Goal 6 of the Environmental Element identifies waterways and wetlands as essential to the improvement of water quality. Policy 6-A specifies that the City shall regulate public improvements in order to preserve and enhance waterways and water quality. The Stormwater Ordinance responds directly to these items. Its purpose is to decrease flow, increase filtering, and manage stormwater runoff before entering Medford's waterways.

CONCLUSIONS OF LAW

This proposal establishes a set of development standards that will facilitate water quality, reduce pollution, provide erosion and sediment control, and flow control. With this proposal, the City will be better equipped to implement adopted Goals and Policies of the acknowledged *Medford Comprehensive Plan* and the Statewide Planning Goals with the *Land Development Code*. The proposed amendment complies with these Comprehensive Plan Goals, Policies and Implementations.

Goal 7: To preserve and protect plants and wildlife habitat in Medford.

Policy 7-B: The City of Medford shall strive to maintain, rehabilitate, and enhance Medford's waterways, using features such as gently sloped banks, natural riparian vegetation, and meandering alignment.

Implementation 7-B(2): Ensure that improvements, such as multi-use paths and storm drainage facilities sited in or near riparian corridors, waterways, wetlands, or other fish and wildlife habitat, include protective buffers, preserve natural vegetation, and comply with the requirements of Oregon Administrative Rules 660-23.

FINDINGS OF FACT

Goal 7 of the Environmental Element identifies preservation and protection of plants and wildlife habitat in Medford. Policy 7-B specifies that the City shall maintain and enhance Medford's waterways using best management practices. Implementation 7-B(2) requires the City ensure improvements in waterways include buffers, vegetation, and comply with State Law. The Stormwater Ordinance responds directly to these items. Its purpose is to address post-construction runoff. The ordinance references the *Rogue Valley Stormwater Quality Design Manual*. This manual includes construction sit erosion and sediment controls as well as design guidelines for post-construction water quality, best management practices (BMPs), and runoff quantity control.

CONCLUSIONS OF LAW

This proposal establishes a set of development standards that will facilitate pollution reduction, thereby reducing the amount of pollutants to local waters. These pollution reduction standards are essential for stormwater management. With this proposal, the City will be better equipped to implement adopted Goals and Policies of the acknowledged *Medford Comprehensive Plan* and the Statewide Planning Goals with the *Land Development Code*. The proposed amendment complies with these Comprehensive Plan Goals, Policies and Implementations.

Goal 8: *To minimize erosion and hazards relating to slope and soil characteristics by assuring that urban land use activities in Medford are planned, located, and conducted consistently with prevailing soil limitations.*

Policy 8-B: The City of Medford shall implement measures to minimize erosion and its resulting water pollution.

FINDINGS OF FACT

Goal 8 of the Environmental Element identifies erosion, slope-related hazards and soil characteristics as constraints to be factored into the planning, locating and practical process of development. Policy 8-B specifies that the City shall minimize erosion and the resulting water pollution it creates. The Stormwater Ordinance proposal responds directly to these items. Its purpose is to decrease site erosion implement sediment controls and design guidelines for post-construction water quality and runoff quantity control. Per the proposal, Class 'C' applications would be required to submit a conceptual stormwater detention facility plan for review and approval of the approving authority. The ordinance references the *Rogue Valley Stormwater Design Manual*. The manual includes pollution reduction requirements. The purpose of pollution reduction standards is to minimize the amount of all pollution that enters a water body, from a particular development.

CONCLUSIONS OF LAW

Erosion rates increase significantly when ground cover is removed. This proposal establishes a set of development standards that will mitigate the natural hazards associated with development, minimize erosion and protect water quality. With this proposal, the City will be better equipped to implement adopted Goals and Policies of the acknowledged *Medford Comprehensive Plan* and the Statewide Planning Goals with the *Land Development Code*. The proposed amendment complies with these Comprehensive Plan Goals, Policies and Implementations.

Goal 12: To protect the citizens of Medford from the potential damage caused by hazards such as flooding, earthquakes, noise, wildfires, and airport hazards.

Policy 12-B: The City of Medford shall ensure that the potential impacts of flooding are adequately analyzed when considering development projects.

Implementation 12-B(2): Adhere to the policies outlined in the *Medford Comprehensive Drainage Master Plan* to minimize flood losses through development controls.

FINDINGS OF FACT

Goal 12 of the Environmental Element identifies the need to protect the citizens of Medford from potential damage caused by flooding. Policy 12-B specifies that the City shall ensure that impacts from flooding are analyzed when considering development projects. Implementation 12-B(2) calls for adherence to the policies of the *Medford Comprehensive Drainage Master Plan*. The Stormwater Ordinance proposal responds directly to these items. Its purpose is to decrease soil erosion and safeguard public safety by requiring post-construction runoff control. Per the proposal, Class 'C' applications would be required to submit a conceptual stormwater detention facility plan for review and approval of the approving authority.

CONCLUSIONS OF LAW

This proposal establishes a set of development standards that will mitigate the natural hazards associated with development, minimize erosion and protect water quality. Flow control standards are intended to prevent an increase in the peak flow of runoff from a particular property. The purpose of maintaining the peak flow is to preserve the capacity in downstream storm drains and prevent flash flooding and erosion. With this proposal, the City will be better equipped to implement adopted Goals and Policies of the acknowledged *Medford Comprehensive Plan* and the Statewide Planning Goals with the *Land Development Code*. The proposed amendment complies with these Comprehensive Plan Goals, Policies and Implementations.

The Public Facilities Element: Stormwater Management

Goal 1: To protect the citizen's of Medford from the potential damage caused by flooding.

Policy 1-A(4): Through the development review process, require development and stormwater system improvements to comply with the standards in the current stormwater management plan.

Implementation 1-A(5): Through the development review process, secure real property or easement dedication prior to or at the time of development adequate for flood protection, conveyance of stormwater, channel access, and maintenance along waterways needed for public conveyance of stormwater.

Policy 1-C: The City of Medford shall assure that stormwater is managed (infiltrated, detained, and treated) on, or as close as practicable to development sites in order to reduce the impact of new development on the stormwater management system and natural streams.

Implementation 1-C(1): Require stormwater to be infiltrated onsite to the greatest extent possible through a combination of provisions, such as site design standards, that reduce imperious surfaces and protect natural areas.

Implementation 1-C(3): Require stormwater detention and treatment facilities for new development, and pursue the development of area-wide stormwater detention and treatment facilities in existing developed areas, to decrease peak downstream flows and reduce the need for extensive changes to main stems of streams.

FINDINGS OF FACT

Goal 1 of the Public Facilities Element identifies the need to protect citizens from damage caused by flooding. Policy 1-A(4) specifies that the development review process shall be the tool for reviewing compliance with standards of the stormwater management plan. Implementation 1-A(5) requires, in part, the City to secure real property or easements for flood protection, conveyance of stormwater, channel access, and maintenance of waterways. Policy 1-C specifies that the City shall assure that stormwater is managed. Implementation 1-C(1) requires stormwater be infiltrated onsite. Implementation 1-C(3) requires detention and treatment to decrease peak downstream flows, thereby reducing the need for changes to main stems of streams. The Stormwater Ordinance responds directly to these items. The ordinance is one of the requirements the City must meet as part of the NPDES, Phase II permit. Its purpose is to address stormwater post-construction control.

CONCLUSIONS OF LAW

This proposal establishes a set of development standards that will mitigate the natural hazards associated with development, minimize erosion and protect water quality. Flow control standards are intended to prevent an increase in the peak flow of runoff from a particular property. The purpose of maintaining the peak flow is to preserve the capacity in downstream storm drains and prevent flash flooding and erosion. This proposal establishes a set of development standards that will mitigate the natural hazards associated with development, minimize erosion and protect water quality. With this proposal, the City will be better equipped to implement adopted Goals and Policies of the acknowledged *Medford Comprehensive Plan* and the Statewide Planning Goals with the *Land Development Code*. The proposed amendment complies with these Comprehensive Plan Goals, Policies and Implementations.

Goal 2: To achieve and maintain a high level of water quality in Medford's waterways and groundwater.

Policy 2-A: The City of Medford shall protect surface and groundwater resources, including current and potential wellhead areas, from pollution through a variety of regulatory measures relating to land use, transportation, and hazardous substance management.

Implementation 2-A(3): Develop and require the use of best management practices (BMPs) to prevent water pollution from activities that are potential pollution sources.

Implementation 2-A(4): Require the quality of stormwater leaving a site after development to be equal to or better than that leaving the site before development.

Policy 2-B: The City of Medford shall strive to assure that both public and private development complies with applicable state and federal water quality regulations.

Implementation 2-B(1): Develop a program to comply with the National Pollutant Discharge Elimination System (NPDES) Phase II permit requirements in a timely fashion.

Policy 2-C: The City of Medford shall utilize stormwater management strategies that sustain natural streams and wetlands consistent with Environmental Element – Water Quality Section – Goal 6 and its policies and implementation strategies.

Implementation 2-C(4): Require buffering, setback requirements, maintenance of tree canopy and vegetative cover, and other best management practices (BMPs) as necessary to enhance water resource and protect their functions.

Policy 2-D: The City of Medford shall strive to eliminate sediment entering waterways consistent with Environmental Element - Soils Section - Goal 8 and its policies and implementation strategies.

Implementation 2-D (1): Require stormwater control facilities to be designed so that the rate of discharge is equivalent to a site's pre-development stormwater discharge for a determined storm frequency or multiple frequencies.

Implementation 2-D(5): Require water quality control facilities to remove a specified portion of sediments (Total Suspended Solids) from the flow.

FINDINGS OF FACT

Goal 2 of the Stormwater Management section of the Public Facilities Element, as well as it's associated Policy 2-A, 2-B, 2-C, and 2-D referenced Implementations address concerns about the detrimental effect of sediment on water quality in Medford. Policy 2-A states that the City shall protect surface and groundwater resources. Implementation 2-A(3) requires the use of best management practices. Implementation 2-A(4) requires stormwater quality leaving a site after development to be equal or better than that leaving the site before development. Policy 2-B states that the City shall assure that development complies with state and federal regulations. Implementation 2-B(1) requires the City develop a program to comply with the NPDES Phase II permit requirements. Policy 2-C states that the City shall eliminate sediment entering waterways. Implementation 2-C(4) requires best management practices, such as buffering and vegetative cover, to enhance water resources. Policy 2-D states that the City shall strive to eliminate sediment entering the waterways. Sediment is produced by water (runoff) moving over soil and collecting particles which eventually enter the waterways and are deposited. Implementation 2-D(1) calls for the rate of stormwater discharge of post-development to be equivalent to a site's pre-development. Implementation 2-D(5) calls for removal of specified portions of sediments from flow. The Stormwater Ordinance directly responds to these items. The *Medford Land Development Code* contains provisions relating to development, which require the identification and documentation of an array of site characteristics, including: proximity to wetlands; drainage

characteristics; flood-prone areas; and designated flood plains. Post-development runoff control is a requirement of the National Pollutant Discharge Elimination System (NPDES), Phase II rules. This proposal is one requirement the City must meet as part of the NPDES, Phase II permit. Section 6 of the City's permit addresses the City's Post-Construction Stormwater Management Program. The Stormwater Ordinance develops the stormwater post-construction control (stormwater detention) requirements. Erosion and sediment controls (ESC) are necessary during the construction phase of developments. All construction activities that affect more than one acre of land are required to obtain an NPDES 1200-C permit that addresses ESC performance standards.

CONCLUSIONS OF LAW

A main purpose of the proposal is to control stormwater quality and detention facilities. Lack of said facilities would produce erosion which then produces sediment in waterways. This proposal responds directly to the Stormwater Management Goal, Policy and Implementations cited above which concern water quality, sedimentation and saving trees and vegetation. As such it is consistent with the *Comprehensive Plan*.

STATEMENT OF FACTS RELIED UPON IN RENDERING THE DECISION, IF ANY.

FINDINGS OF FACT

The facts relied upon in rendering the decision are contained in the Staff Report dated August 27, 2009, particularly under the Background section and Major Provisions of the Ordinance section. Facts are also provided in the above responses to Criteria 1 and 2. Lastly, facts contained in Exhibit "D," August 11, 2009 letter from Larry Beskow to Leslie Adams.

CONCLUSIONS OF LAW

As demonstrated above, the facts relied upon in rendering the decision are found in the staff report, findings of fact, and letter dated August 11, 2009 from Larry Beskow to Leslie Adams. The ordinance regulates development to provide for public safety. This proposal implements a mitigation measure identified in the City's Pre-Disaster Mitigation Plan, namely, the establishment of stormwater quality requirements to prevent flooding.

EXPLANATION OF THE JUSTIFICATION OF THE DECISION BASED ON THE CRITERIA, STANDARDS, AND FACTS.

FINDINGS OF FACT

The decision to adopt the ordinance is justified because: criteria 1, 2, and 3 have been satisfied; the ordinance establishes reasonable standards necessary to decrease soil erosion, flooding, and pollution related to new development; and the standards in the ordinance are based on Best Management Practices (BMPs) to decrease soil erosion, flooding, and pollutants.

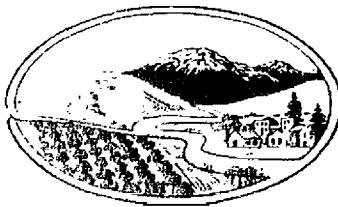
CONCLUSIONS OF LAW

As demonstrated above, the justification of the decision is based on satisfaction of criteria 1, 2, and 3, reasonable standards to decrease erosion, flooding, and pollution, and standards based on Best Management Practices. This proposal regulates development to provide for public safety. This proposal implements a mitigation measure identified in the City's Pre-Disaster Mitigation Plan, namely, the establishment of stormwater quality requirements to prevent flooding.

SUMMARY

As demonstrated in the findings above, the City's proposed Stormwater Quality and Detention Facilities Ordinance is consistent with pertinent Statewide Planning Goals 1, 2, 6, 7, 10, and 11. The provisions of the proposed draft ordinance have also been shown to be in compliance with the above-noted *Comprehensive Plan* Goals, Policies, and Implementation Strategies.

The proposed *Land Development Code* amendment implements policies and strategies adopted into the *Comprehensive Plan* that aim to protect water quality, minimize natural hazards to the public, and preserve natural resources. It does so, in part, by ensuring that stormwater management is compatible with its natural setting and does not occur to the detriment of that setting, its natural constraints and functional characteristics. The proposal is intended to ensure that the review of stormwater management occurs in an objective manner and with the benefit of technical standards specially suited to water quality.



BEAR CREEK Watershed Council

City of Medford, Planning Department
Lausmann Annex, Room 240
200 S. Ivy St.
Medford, OR 97501

7/20/2009

RECEIVED
JUL 22 2009

PLANNING DEPT.

Dear Planning Department,

The mission of the Bear Creek Watershed Council is to protect, restore, and enhance the Bear Creek watershed. Protecting water quality is a priority to the Council and it is with this goal in mind that these comments to DCA-09-066, Stormwater Detention Ordinance, Proposed New Sections 10.486 and 10.729, are submitted.

10.486 B. Applicability – There is a need to define and clarify “Stormwater Quality” which is not mentioned in Item 1 and 2. Will stormwater quality be improved as it leaves the facility?

10.486 C. Construction and Maintenance Standards

Item 1 – The Rogue Valley Stormwater Quality Design Manual uses a 25 year storm for detention facilities. Since the City of Medford is responsible of ensuring the safety of its residents this seems to be inadequate. FEMA insurance requires a 100 year storm level nationwide.

Item 5 – Consider adding an option of a system that includes stormwater quality and detentions for these developments.

Item 6 – The wording seems to exclude the use of a vendor supplied stormwater quality structures – needs clarification.

10.729 – The paragraph title includes stormwater quality but the remaining paragraphs only refer to stormwater detention facilities. Private property development should also be required to have stormwater quality features.

If you would like any clarification on my comments, please feel free to contact me at (541) 324-1441.

Sincerely,

Maynard Flohaug
Maynard Flohaug
Chair
Bear Creek Watershed Council

NY 14th Flg
D 1/6
DCA-09-066

RECEIVED
JUL 24 2009
PLANNING DEPT.



July 23, 2009

City of Medford Planning Department
City Hall Lausmann Annex
200 South Ivy Street
Medford, OR 97501
Email: planning@ci.medford.or.us

RE: DCA-09-066, Stormwater Detention Ordinance

Dear Medford Planning Department,

Thank you for accepting these comments from Rogue Riverkeeper/Klamath-Siskiyou Wildlands Center. The Klamath-Siskiyou Wildlands Center (KS Wild) is a non-profit organization whose mission is to advocate for the forests, waters and wildlife of the Rogue and Klamath River Basins of southwest Oregon and northwest California. We have more than 1,800 members. The Rogue Riverkeeper program of KS Wild works to protect and restore water quality and native fish populations in the Rogue Basin and other coastal watersheds. KS Wild and its members use and enjoy the Rogue River and its tributaries.

Thank you for proposing changes to Medford's Land Development Code (LDC) that would require stormwater detention facilities for development sites and streets in order to mitigate impacts to water quality. I believe it is a good step forward in the right direction. However, I believe that it does not go far enough to protect water quality, native fish, and the beneficial uses of our public waters in the Rogue Basin. I offer these comments in support of proposed measures, and encourage the City to improve upon them and take further action to address this serious and literally growing threat.

Stormwater run-off is among the top sources of water contamination in the country today. Our drinking water supplies, fishing waters and swimming opportunities are fouled by uncontrolled pollution when rainwater washes over city streets, parking lots, and suburban lawns and picks up toxic chemicals, disease-causing organisms, and dirt and trash. Studies have found that urban stormwater rivals and in some cases exceeds sewage plants and large factories as a source of damaging pollutants.¹

¹ U.S. EPA. 1983. *Results of the Nationwide Urban Runoff Program, Volume 1-Final Report*. Office of Water. Washington, D.C.

NYC REC'D 7/24/09
D 216
DCA-09-066

Studies reveal that the level of imperviousness in an area strongly correlates with the quality of the nearby receiving waters. For example, a study in the Puget Sound lowland ecoregion found that when the level of basin development exceeded 5 percent of the total impervious area, the biological integrity and physical habitat conditions that are necessary to support natural biological diversity and complexity declined precipitously.²

Research conducted in numerous geographical areas has revealed a similar conclusion: stream degradation occurs at relatively low levels of imperviousness, such as 10 to 20 percent (even as low as 5 to 10 percent according to the findings of the Washington study referenced above).³

I am unaware of any assessment that quantifies the percentage of impervious surface in the subwatersheds of the Bear Creek basin, such as Whetstone, Upton, Lone Pine, Mingus and Jackson, among others that are the subject of high development. I do know that Bear Creek is listed as water-quality impaired for several parameters under the Clean Water Act and does not meet the state's water quality standards.

Since the Rogue Valley is one of the fastest growing regions in the state,⁴ it is vitally important that we act decisively and quickly to protect our public waters from stormwater pollution. Human communities, rivers and native salmon deserve it.

Holistically addressing stormwater

As human activity increases in a given area, the amount of waste material deposited on the land and in drainage systems increases. Harmful pollution occurs when stormwater carries away a wide variety of contaminants as it runs across rooftops, roads, parking lots, baseball diamonds, construction sites, golf courses, lawns, and other surfaces in our cities and suburbs. The oily sheen on rainwater in roadside gutters is but one common example of urban runoff pollution, but other urbanized stormwater contaminants include metals, organic chemicals (pesticides, oil, etc.), pathogens, nutrients, biochemical oxygen demand (grass clippings, animal waste, etc.), sediment and salts.

² May, C.W., E.B. Welch, R.R. Horner, J.R. Karr, and B.W. May. 1997. *Quality Indices for Urbanization Effects in Puget Sound Lowland Streams*, Technical Report No. 154. University of Washington Water Resources Series.

³ Schueler, T.R. 1994. "The Importance of Imperviousness." *Watershed Protection Techniques* 1(3); May, C., R.R. Horner, J.R. Karr, B.W. Mar, and E.B. Welch. 1997. "Effects Of Urbanization On Small Streams In The Puget Sound Lowland Ecoregion." *Watershed Protection Techniques* 2(4); Yoder, C.O., R.J. Miltner, and D. White. 1999. "Assessing the Status of Aquatic Life Designated Uses in Urban and Suburban Watersheds." In *Proceedings: National Conference on Retrofits Opportunities in Urban Environments*. EPA 625-R-99-002, Washington, DC; Yoder, C.O and R.J. Miltner. 1999. "Assessing Biological Quality and Limitations to Biological Potential in Urban and Suburban Watersheds in Ohio." In *Comprehensive Stormwater & Aquatic Ecosystem Management Conference Papers*, Auckland, New Zealand.

⁴ U.S. Census 2000.

Stormwater runoff from lands modified by human activities can harm surface water resources and, in turn, cause or contribute to an exceedance of water quality standards by changing natural hydrologic patterns, accelerating stream flows, destroying aquatic habitat, and elevating pollutant concentrations and loadings.⁵

Detention facilities are designed to hold stormwater and release it at a slower rate, which helps to address some aspects of stormwater pollution (volume and velocity of surface runoff), but it does not address the quality of the stormwater (concentration of pollutants in the runoff). While the proposed LDC amendments are important steps to treat stormwater, the City should go further to protect the beneficial uses of public waters by implementing ordinance changes regarding Low Impact Development (LID) as a mechanism to reduce stormwater pollution.

Low Impact Development

LID is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls. LID works with nature to manage stormwater as close to its source as possible. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Techniques are based on the premise that stormwater management should not be seen as stormwater disposal.

Instead of conveying and managing/treating stormwater in large, costly end-of-pipe facilities located at the bottom of drainage areas, LID addresses stormwater through small, cost-effective landscape features located at the lot level. These landscape features, known as Integrated Management Practices, are the building blocks of LID. Almost all components of the urban environment have the potential to serve as an IMP. This includes not only open space, but also rooftops, streetscapes, parking lots, sidewalks, and medians. LID is a versatile approach that can be applied equally well to new development, urban retrofits, and redevelopment/revitalization projects.⁶

Applicability - 10.486

The purpose of this amendment as stated in 10.486 A is to, "maintain the natural hydrology and preserve water quality by mitigating direct impacts of new development and preserving the environmental benefits of natural water bodies." A commendable purpose, but the applicability only addresses detention facilities and no mechanisms to treat stormwater to improve the *quality* by minimizing the pollutants.

10.486.B.1.

⁵ U.S. EPA. 1992. *Environmental Impacts of Storm Water Discharges: A National Profile*. EPA 841-R-92-001. Office of Water. Washington, DC

⁶ www.lowimpactdevelopment.org; www.epa.gov/nps/lid

Why are detention facilities only required for development projects that contain 5,000 square feet or more of impervious surface? Is there a scientific basis for the designation of 5,000 acres as the threshold for such facilities? Increases in impervious surfaces leads to increased volume, increased peak flow and duration, increased stream temperature and changes in sediment loading, which can lead to flooding, habitat loss, erosion, channel widening and streambed alteration.⁷ I would like to know what the City plans to do to mitigate the effects of development on stormwater from sites that create less than 5,000 acres of impervious surface.

10.486.B.2.

Why are detention facilities required for street widening projects that only involve adding additional width to meet City standards? This seems like an appropriate time to retrofit these areas to treat stormwater run-off.

10.486.C.6.

What is the justification for creating the requirement for developments of five acres or greater to set aside a minimum of two percent of the gross area as open space for ponds, etc.? Is there scientific justification that indicates two percent of open space in a given development adequately addresses stormwater pollution?

Medford MS4 II Permit

I understand that Medford holds a Clean Water Act MS4 II permit for stormwater. Due to DEQ's backlog, I have not been able to review Medford's annual reports to determine the City's compliance and progress with this permit. DEQ is currently reviewing the annual reports and I look forward to reviewing them this summer.

In the meantime, I do note that the MS4 II regulations (40 CFR Parts 9, 122, 123, and 124) dated December 8, 1999 encourage the consideration of smart growth approaches in order to fulfill the municipality's obligations under the MS4 II program.

I encourage the City to consider additional amendments to its LDC that require proactive stormwater treatment via Low Impact Development methods, rather than just detention facilities, in order to protect the beneficial uses of public waters in the Rogue Basin.

Thank you and I look forward to your response.

/s/ Lesley Adams

Lesley Adams, Rogue Riverkeeper

⁷ *Urbanization of Streams: Studies of Hydrologic Impacts*, EPA 841-R-97-009, 1997

Klamath-Siskiyou Wildlands Center
PO Box 102
Ashland, Oregon 97520
541.488.5789
Lesley@kswild.org



CITY OF MEDFORD

PUBLIC WORKS DEPARTMENT
ENGINEERING & DEVELOPMENT DIVISION

411 WEST 8TH STREET
MEDFORD, OREGON 97501
www.ci.medford.or.us

TELEPHONE (541) 774-2100
FAX (541) 774-2552

August 11, 2009

Lesley Adams, Rogue Riverkeeper
Klamath-Siskiyou Wildlands Center
P.O. Box 102
Ashland, OR 97520

Subject: DCA-09-066, Stormwater Detention Ordinance

Thank you very much for your letter dated July 23, 2009 to the Medford Planning Department relative to the subject proposed ordinance. Your insights are appreciated and your concerns are very similar to those of the City of Medford. Your assessment is correct in that this proposed ordinance is a good first step. Both Planning and Public Works will be bringing a number of additional ordinances forward in the future to meet the conditions of our NPDES, Phase 2 permit and our almost completed TMDL Implementation plan. These types of ordinances tend to be very technical in nature; therefore, the process of getting an ordinance through all the review is smoother if we proceed in smaller steps.

You posed several questions, which I will attempt to answer below:

Applicability – 10.486

The City has created this section of the Code to deal with all stormwater management for development. We will be adding water quality regulations to this section in the future. At this time, we are trying to get requirements for stormwater detention in our code. Currently, even though the City does not have water quality requirements in the Code, we are beginning to condition these requirements on developments anyway. This helps us sort out what is effective, or not, before proceeding with a code amendment.

10.486.B.1

5,000 square feet was selected as the threshold for several reasons:

1. The orifice size required to restrict the flow of stormwater from a site with 5,000 square feet of impervious area to pre-developed levels is approximately one-inch in diameter. Orifices which are smaller, plug very easily, are extremely high maintenance, and if plugged, potentially create flooding. This is the smallest size we are willing to require.
2. The City of Medford does not plan to require stormwater detention for single family residences (SFR). This threshold keeps us generally out of the realm of SFR's. Although the City is requiring stormwater detention as part of the development for SFR subdivisions.
3. Most Medford soils are not suitable to infiltrate roof drainage; therefore, all water typically goes offsite through detention (the City may try to adapt some LID strategies in the future to encourage leaving as much water as possible on site through construction of reservoirs).

D 316
DCA-09-066

10.486.C.6

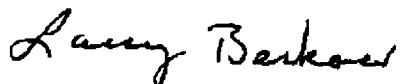
There are two parts to the answer for this question:

1. The area needed to provide stormwater facilities for detention, water quality, and access were calculated for a typical single family subdivision. It was determined, generally, that 2% would provide adequate area to construct and maintain these facilities. Two percent of 5 acres is approximately 4,400 square feet, which is a very small pond. It is anticipated that the City will maintain most of these ponds. So, in trying to require ponds for smaller developments, the City would be required to maintain a very large number of very small ponds, which would not be as effective for treating stormwater. Low impact development (LID) concepts would be more effective in managing stormwater on smaller developments. The City will be developing standards for LID's in the future.
2. Smaller developments typically face significant challenges in trying to fit their development on the site, as well as meeting density requirements. Allowing these smaller developments the flexibility of placing detention underground seems appropriate.

The City of Medford's Public Works Department is currently partnered with the Bear Creek Watershed Council in seeking and planning ways to improve the health of the watershed we all live in. We would also welcome partnering and participating in activities with the Klamath-Siskiyou Wildlands Center as we work toward this goal.

Please do not hesitate to contact the City of Medford with questions, concerns, or opportunities we can share in.

Sincerely,



Larry Beskow, P.E.
City Engineer
City of Medford

From: Larry J. Beskow
Sent: Tuesday, June 30, 2009 10:31 PM
To: Carly A. Meske; Brad Wright (bwright@hea-inc.com)
Cc: Suzanne K. Myers; Roger E. Thom
Subject: RE: Land Development Code Amendment (DCA-09-066)

Attachments: image001.jpg; image003.jpg

Brad:

I don't believe the definition of "Impervious surface" in any way inhibits a developer from using porous pavers, or grasscrete. Utilizing porous pavers is a better solution for runoff, than dense AC or concrete, but not as good as a well vegetated natural surface. More often than not, the rock section supporting the pavers acts as a reservoir for the detention needed. The rock section would need to be designed to provide adequate capacity, based on the amount of rain or runoff getting to the parking lot, and the soils' permeability. Other variables would be the amount of other elements of the development draining to it, and so on.

The real question, as I see it, is the City going to call it impervious when we perform our impervious area study when the building permit comes in? This will affect the SDC's charged and the monthly fee. I think the City will need to make some changes to our SD Utility Codes to better accommodate pavers and the like. Currently, we could easily define pavers as a "Special User Unit", which is half the fee, but we need to have more discussion on this. Storm drain fees also pay for NPDES and TMDL implementation, so every development will need to pay something to administer these efforts. My goal is to modify the City's storm drain fees to reward those who minimize impacts to water quality and quantity.

Good question.

Thanks,
Larry B.

Please see below:

Carly Meske
Land Use Planner
City of Medford, Planning Department
200 S. Ivy Street
Lausmann Annex, Room 240
Medford, OR 97501
541-774-2380
carly.meske@cityofmedford.org

From: Brad Wright [mailto:BWright@hea-inc.com]
Sent: Tuesday, June 30, 2009 10:27 AM
To: Carly A. Meske
Subject: RE: Land Development Code Amendment (DCA-09-066)

Carly –

After thinking about this myself and re-reading the definition several times, I don't believe that the definition itself needs to be changed. Perhaps a definition for "Pervious Surfaces" needs to be added that indicates surfaces where detention will not be required.

Or you could add a section for acceptable "Stormwater Treatment" methods as a "Stormwater Detention Facility" simply holds the stormwater but does not actually take many of the impurities out of the rainwater prior to releasing it into the public system and streams/rivers. The Rogue Valley Stormwater Quality Design Manual has included some of these things, but the only references to conforming to this manual are with regards to Stormwater Detention Facilities and not to Stormwater Treatment.

I hope this helps.

D 4/6
B&C-09-066

Thank you.

Brad Wright, PE
Project Engineer

 PO Box 1625; 2870 Nansen Drive
Medford, Oregon 97501
Ph: (541) 772-6880; www.hei-inc.com
Email: bwright@hei-inc.com

From: Carly A. Meske [mailto:Carly.Meske@cityofmedford.org]
Sent: Tuesday, June 30, 2009 9:12 AM
To: Brad Wright
Subject: RE: Land Development Code Amendment (DCA-09-066)

Brad:
Thank you for your comments regarding the stormwater quality and detention ordinance (DCA-09-066). You state that the definition of "impervious surface" eliminates any advantage to developers. Do you have suggestions on improvements to the definition of "impervious surface" that would benefit developers?

Respectfully,

Carly Meske
Land Use Planner
City of Medford, Planning Department
200 S. Ivy Street
Lausmann Annex, Room 240
Medford, OR 97501
541-774-2380
carly.meske@cityofmedford.org

From: Debbie L. Strigle
Sent: Monday, June 29, 2009 4:50 PM
To: Carly A. Meske; Suzanne K. Myers
Subject: FW: Land Development Code Amendment (DCA-09-066)

From: Brad Wright [mailto:BWright@hei-inc.com]
Posted At: Monday, June 29, 2009 3:57 PM
Posted To: Department Email
Conversation: Land Development Code Amendment (DCA-09-066)
Subject: Land Development Code Amendment (DCA-09-066)

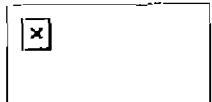
Thank you for allowing the Engineers and Developers of the Rogue Valley the opportunity to share any comments to the LCD Amendment relating to Stormwater Facilities.

In Section 10.012, *Definitions*, it provides the description for what would be classified as an impervious surface. Using this definition, there is no advantage for a developer who is interested in water quality to install features such as grass pavers, porous pavements or other surface treatments. These areas would still have to be accounted in determination in the overall detention volume. These types of surfaces generally limit the amount of stormwater runoff that is actually entering the public storm drain system. As these systems generally cost more than simply placing asphalt, if there is no benefit to the Developer, what reason would they have for trying to implement something like this? This is just something to consider.

Thank you.

Brad Wright, PE

Project Engineer



PO Box 1025; 2870 Nansen Drive
Medford, Oregon 97501
Ph: (541) 772-6880; www.heainc.com
Email: [bright@heainc.com](mailto:bwright@heainc.com)

From: PYLES David [David.PYLES@odot.state.or.us]
Sent: Tuesday, August 11, 2009 9:38 AM
To: Carly A. Meske
Cc: STALLSWORTH Adam O; ALLEMAND Roger B; SHEADEL Brian R; STEPHENS Shawn A
Subject: FW: DCA-09-066: ODOT Development Review comments

Carly:

I submit the following ODOT Development Review Team comments below, regarding the City's proposed code amendments for Stormwater Quality and Detention Facilities, as related to Oregon Department of Transportation drainage facilities. Please include these ODOT interests and comments in the City's record for file no. DCA-09-066. We recommend the city address and incorporate State drainage facility issues and interests, into the City's proposed code amendments, as necessary and appropriate.

Please copy me on the City's final Staff Report, Final Order and decision for #DCA-09-066. Thank you.

Please contact me if you have any comments, questions or require additional information regarding this correspondence. Thank you.

Kind regards,

David J. Pyles | Development Review Planner III
The ODOT Region 3 / District 8 | 100 Antelope Rd. | White City, OR 97503
☎: (541) 774.6399 | 📧: (541) 774.6349 | 📩: David.Pyles@odot.state.or.us

From: STALLSWORTH Adam O
Sent: Friday, August 07, 2009 4:02 PM
To: PYLES David
Cc: STEPHENS Shawn A; ALLEMAND Roger B; MARMON Jerry
Subject: DCA-09-066

ODOT has the follow comments on the cities amendment to their Land Development Code.

ODOT would like to include that any storm water from outside sources to our system shall follow the guidelines outlined in the information included below.

Stormwater & Water Quality Drainage Requirements

STORMWATER & WATER QUALITY RESOURCES for DEVELOPERS:

- 1) General Storm Water Management Information:

<http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/hydraulics1.shtml>

http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/hyd_manual_info.shtml

D 5/6
DCA-09-066

- 2) Specifically for development of water quality and detention facilities:

ftp://ftp.odot.state.or.us/techserv/GeoEnvironmental/Hydraulics/Hydraulics%20Manual/Chapter_04/Chapter_04_Appendix_C/CHAPTER_04_appendix_C.pdf

- 3) Detention basin and water quality design documentation for developers and Non-ODOT projects within Chapter 4, Appendix C of the ODOT Hydraulics Manual:

http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/hyd_manual_info.shtml

- 4) Technical Bulletin for stormwater quality mitigation:

ftp://ftp.odot.state.or.us/techserv/Geo-Environmental/Hydraulics/Technical%20Bulletins/Strm_Wtr_Qual.pdf

Adam O. Stallsworth
Oregon Department of Transportation
Region 3 District 8
White City, Oregon.

From: Larry J. Beskow
Sent: Tuesday, June 30, 2009 9:33 PM
To: Mark Dew
Cc: Carly A. Meske
Subject: RE: DCA 09-066 comments

Mark:

The proposed ordinance was setup to easily add water quality standards. This ordinance contains references to water quality all the way through it. The City will also be adopting the RV Water Quality Design Manual with this ordinance. The Manual currently contains water quality design standards. What the City needs to do is establish thresholds for its application.

The City of Medford is starting its third year, of a 5-year permit from DEQ, to implement all the conditions within the City's NPDES permit. In the third year, the City is scheduled to adopt water quality standards, which we'll be starting on this year. We (Engineering) are considering placing water quality conditions on some developments, say the ones draining directly to streams. Before we can consider that, we need to at least get the detention portion in place.

Thanks for the question.

Larry B.

Larry,

I am reviewing DCA 09-066 and have a question on 10.486, B which reads as follows:

B. Stormwater quality and detention facilities for developments containing publicly maintained streets shall provide stormwater detention in accordance with the following:

Subsections 1 & 2 below talk only about detention.

I guess "B" is confusing to me in that starts by talking about quality and quantity but then only says detention shall be provided. Subsections 1 & 2 seem to reinforce that. I would conclude that stormwater treatment (quality) not required for public streets, is this correct? If so, should the words, "quality and" be deleted from B?

Let me know if you have any questions (it's probably easier to discuss via phone)

Mark R. Dew, P.E.
Dew Engineering, Inc.
815 Bennett Avenue
Medford, Oregon 97504

541.772.1399 (voice)
541.772.1436 (fax)
markdew@mind.net

D 616
DCA-09-066

1st and 4th Tuesday of each month, or the 2nd and 4th Tuesday of each month, 6:30PM – 8:30PM. Carly to check with Planning Department to ensure no conflicts with resources or other city meetings. Carly to bring to next meeting findings on requested meeting change. Gerald asked for meeting minutes as soon as possible, within two days of the meeting. Carly reminded group that meetings are sent to members one week prior to next meeting. David McFadden explained the land use process (120 days, appeals, etc). Chair Folsom reminded CPAC the scope of projects they want to see (Class "A," land divisions greater than 5 acres, exception requests, PUDs, and all projects within the SE Plan area). David McFadden asked if meeting time makes a difference, explains that the Planning Commission used to meet at 7:00PM, and now they meet at 5:30PM, which, he stated, "is easier for staff." Chair Folsom tabled this item until CPAC receives feedback from staff and from more members. Chair Folsom asked staff to add this discussion to the September 8, 2009 agenda as "Old Business."

3.2 Neighborhood Associations: Continued Discussion

Chair Folsom confirmed that CPAC's letter on PUD neighborhood meetings was included in the August 27, 2009 study session materials for City Council. Carly confirmed yes.

Group discussed benefits of neighborhood associations: preventing future appeals when have an opportunity to review land use applications; phone trees; meeting neighbors; and safety. General consensus was that a formal process with required meetings, minutes, and liability insurance was keeping neighborhoods from becoming recognized by the city. Gerald Anderson emailed staff a letter to Louise Dix regarding thoughts on Neighborhood Associations, Gerald asked staff to email said letter to all CPAC members. Gerald Anderson suggested each neighborhood association have the following: a city staff member to coordinate meetings; appointed positions; an action plan; and research on what other cities are doing. CPAC consensus was that neighborhood associations need: (1) the support from Council; (2) assistance from the city in terms of meeting places and other resources; and (3) privacy, no requirements from the city (ie: mandatory meetings).

4. NEW BUSINESS

4.1 Discussions

None.

4.2 Applications and Referrals

DCA-09-066: *Stormwater Quality and Detention Facilities*.

Chair Folsom asked about responsibility. Carly pointed out that systems that collect runoff from public rights-of-way shall be publicly maintained; while systems that collect runoff from private development shall be privately maintained. David McFadden explained that this ordinance will codify applicability and maintenance of detention facilities. Bruce Spence suggested a deed restriction on all properties responsible for maintenance so all owners, present and future, know of this requirement. Carly pointed out requirement for an "Operations and Maintenance Agreement" that would be recorded and follow the land – not the owners. Chair Folsom suggested setting up a "local utility district" so that owners pay into a fund each month, and the fund is used to

maintain the facilities. Gerald Anderson suggested that staff update their comment referral forms to include the *purpose* of the amendments. Joel Marks stated he is not in favor of the proposal because he feels it will raise taxes.

ZC-09-061: White, et. al Zone Change:

Chair Folsom identified that SFR-00 is a "holding" zone. Staff recommends approval. CPAC found no issues with proposal.

5. GENERAL DISCUSSION

5.1 Other

Joel Marks commented, "Great meeting!"

No other discussion.

6. ADJOURNMENT

The meeting was adjourned at 8:35 PM.

Respectfully submitted,
Carly Meske, Planner II

MINUTES - Planning Commission Meeting

September 10, 2009

Roll Call Vote: Motion passed, 7 – 0

- 50.5 DCA-09-066 Consideration of amendment to the Medford *Land Development Code* Sections 10.012, 10.235, 10.247, 10.267, 10.287, 10.485, 10.486, 10.487, 10.708, 10.727, 10.728, and 10.729, to include requirements for Stormwater Quality and Detention Facilities for development of private property and public rights-of-way. The proposal also includes new definitions, and a new submittal requirement for some Class C applications (PUDs, CUPs, Land Divisions, and SPAC applications).

Carly Meske, Planner II, read the criteria and gave a Staff Report. Staff recommends approval.

Commissioner Nelson asked Mr. Beskow about the code amendment. Mr. Beskow responded that it codifies almost everything they have been doing for the last 10 years. He noted that the City is under an NPDES phase 2 permit and this ordinance will help meet one of the six measures required by the permit. He noted that this ordinance does not address water quality, but they will be adding more to it. He indicated that the ordinance also helps developers meet density requirements.

Motion: Forward a favorable recommendation to the City Council for DCA-09-066 as per the Staff Report dated August 27, 2009, including Exhibits A through E.

Moved by: Commissioner Nelson Seconded by: Commissioner Tull

Roll Call Vote: Motion passed, 7 - 0

60. **Report of Citizens Planning Advisory Committee.**
60.1 Commissioner McFadden reported that the committee discussed forming neighborhood associations and upcoming public hearings. The meeting time has been changed to 5:30 p.m., the 2nd & 4th Tuesday of the month.
70. **Report of the Site Plan and Architectural Commission.**
70.1 Commissioner Entenmann noted that no SPAC Awards were given out. She reported that at the last meeting, the hearing for a food pantry was continued, and the Commission approved a change to the fencing for Rogue Federal Credit Union.
80. **Report of the Joint Transportation Subcommittee.** None
90. **Report of the Boundary Advisory Committee.**
90.1 Commissioner Locke reported that at the last meeting, they discussed objective criteria for what land might be included in the Urban Growth Boundary.
100. **Report of the Planning Department.**
100.1 Ms. Akin reported that the next Study Session will be held Monday, September 14, 2009. The agenda items include an update on the West Main Circulation Plan and the mobile food vendor amendment.
- 100.2 Kelly Akin, Senior Planner, reported that the next Planning Commission Meeting would be held in the City Council Chambers. She thanked Jackson County for their hospitality.



7007 0710 0001 0567 0483

City Of Medford
Planning Department
200 South Ivy Street
Medford, OR 97501

000-42550703
\$07.340
11/12/2008
Mailed From: 97501
US POSTAGE

Holiday



RETURN REQUEST
REQUEST

ATTN: Plan Amendment Specialist
Dept. of Land Conser. & Develop.
635 Capitol St. NE, Ste. 150
Salem, Or 97301-2540