NOTICE OF ADOPTED AMENDMENT

December 26, 2006

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

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: City of Tigard Plan Amendment

DLCD File Number 004-06

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: January 9, 2007

This amendment was submitted to DLCD for review 45 days 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 THAN IT WAS MAILED TO DLCD. AS A RESULT YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE DATE SPECIFIED.

Cc: Gloria Gardiner, DLCD Urban Planning Specialist
    Stacy Humphrey, DLCD Regional Representative
    Amanda Punton, DLCD Natural Resource Specialist
    Ron Bunch, City of Tigard

<paa> ya/
## 2 Notice of Adoption

**DEPT OF**

**DEC 2 0 2006**

**LAND CONSERVATION AND DEVELOPMENT**

For DLCD Use Only

<table>
<thead>
<tr>
<th>Jurisdiction: City of Tigard</th>
<th>Local file number: CPA2006-00001/DCA2006-00004</th>
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<tbody>
<tr>
<td>Date of Adoption: December 12, 2006</td>
<td>Date Mailed: December 18, 2006</td>
</tr>
<tr>
<td>Date original Notice of Proposed Amendment was mailed to DLCD: September 1, 2006</td>
<td></td>
</tr>
</tbody>
</table>

- [ ] Comprehensive Plan Text Amendment
- [X] Comprehensive Plan Map Amendment
- [X] 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”.

*Amendments will be made to Tigard’s Comprehensive Plan (Volume I) and Development Code (Sections 18.360, 18.370, 18.705, 18.715, 18.765, 18.775 & 18.810) to adopt the Significant Habitat Areas Map and to implement the recommendations of the Tualatin Basin Fish & Wildlife Habitat Program. Amendments will remove barriers to, and provide flexibility in development standards for, development that incorporates habitat-friendly techniques.*

Describe how the adopted amendment differs from the proposed amendment. If it is the same, write “SAME”. If you did not give Notice for the Proposed Amendment, write “N/A”.

*The adopted amendments include three minor changes as follows: The City Council did not adopt a density transfer provision Tigard Community Development Code (TCDC) Section 18.774.140(A); Council did not adopt provisions that would exempt “Clean Water Services” projects from the city’s Natural Resources Protection Standards (TCDC 18.775; and Council adopted a simplified map verification process per Metro Code (3.07.1330.6.2.).*

<table>
<thead>
<tr>
<th>Plan Map Changed from:</th>
<th>to:</th>
<th>Exhibit A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone Map Changed from:</td>
<td>N/A</td>
<td>to: N/A</td>
</tr>
<tr>
<td>Location: Citywide</td>
<td></td>
<td>Acres Involved: N/A</td>
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<tr>
<td>Specify Density: Previous:</td>
<td>N/A</td>
<td>New: N/A</td>
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<tr>
<td>Applicable Statewide Planning Goals:</td>
<td>1, 2, 5 &amp; 6</td>
<td></td>
</tr>
<tr>
<td>Was and Exception Adopted?</td>
<td>[ ] YES</td>
<td>[X] NO</td>
</tr>
<tr>
<td>DLCD File No.:</td>
<td>004-06 (15513)</td>
<td></td>
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</table>
Did the Department of Land Conservation and Development receive a Notice of Proposed Amendment......

Forty-five (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

Affected State or Federal Agencies, Local Governments or Special Districts:

<table>
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<tr>
<th>City of Tigard</th>
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</table>

| Local Contact: Ron Bunch, Planning Manager | Phone: (503) 718-2427 |
| Address: 13125 SW Hall Boulevard | City: Tigard, Oregon |
| Zip Code + 4: 97223-8189 | Email Address: ron@tigard-or.gov |

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.

COPIES TO:

- Metro Land Use & Planning  
  600 NE Grand Avenue  
  Portland, OR 97232-2736  
- ODOT - Region 1, District 2-A  
  Sam Honsldi, Assistant District Manager  
  6000 SW Raab Road  
  Portland, OR 97221

1. Send this Form and TWO (2) Copies 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. Submit TWO (2) copies the adopted material, if copies are bounded please submit TWO (2) complete copies of documents and maps.

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 maybe 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 copy this form on 8-1/2x11 green paper only or call the DLCD Office at (503) 373-0050; or Fax your request to (503) 378-5518; or Email your request to mara.ulloa@state.or.us - ATTENTION: PLAN AMENDMENT SPECIALIST.

WHEREAS, the Portland Metropolitan Service District (Metro) decided, with participation of regional jurisdictions, to prepare a regional program to protect and restore riparian corridors and wildlife habitat; and

WHEREAS, Metro’s Nature in Neighborhoods Program was adopted by Metro Council as Title 13 of the Regional Urban Growth Management Functional Plan, and Metro area jurisdictions are required to comply with Functional Plan requirements; and

WHEREAS, Title 13 of Metro’s Functional Plan has been acknowledged by the Oregon Land Conservation and Development Commission (LCDC) as complying with statewide planning goals and administrative rules; and

WHEREAS, Tigard and other jurisdictions and various service districts in Washington County entered into an intergovernmental agreement to jointly prepare and coordinate a natural resources protection program based on conditions and circumstances unique to the Tualatin Basin; and

WHEREAS, the Tualatin Basin Fish and Wildlife Habitat Protection Program was approved by Metro Council as an alternative means to implement Metro’s Nature in Neighborhoods Program; and

WHEREAS, on October 16, 2006, the Tigard Planning Commission held a public hearing and voted unanimously to recommend, with minor amendments, that Council adopt CPA 2006-00001 and DCA 2006-00004; and

WHEREAS, on December 12, 2006, the City Council held a public hearing to consider the Commission’s recommendation on CPA 2006-00001 and DCA 2006-00004, hear public testimony and apply applicable decision-making criteria.

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1: The Tigard Comprehensive Plan is amended to include the Tigard Significant Habitat Areas Map (“EXHIBIT A”).

ORDINANCE No. 06-20
Page 1
SECTION 2: The Tigard Municipal Code, Title 18 (Community Development Code) is amended per "EXHIBIT B" to include habitat-friendly development provisions.


SECTION 4: This ordinance shall be effective 30 days after its passage by the Council, signature by the Mayor, and posting by the City Recorder.

PASSED: By unanimous vote of all Council members present after being read by number and title only, this 12th day of December, 2006.

Carol A. Krager, Deputy City Recorder

APPROVED: By Tigard City Council this 12th day of December, 2006.

Nick Wilson, Council President

Approved as to form:

Date 12/12/06

Ordinance No. 06-20
Page 2
Exhibit A

Proposed Significant Habitat Areas
City of Tigard
Oregon
Chapter 18.360
SITE DEVELOPMENT REVIEW

Sections:

18.360.010 Purpose
18.360.030 Approval Process
18.360.040 Bonding and Assurances
18.360.050 Major Modification(s) to Approved Plans or Existing Development
18.360.060 Minor Modification(s) to Approved Plans or Existing Development
18.360.070 Submission Requirements
18.360.080 Exceptions to Standards
18.360.090 Approval Criteria

18.360.010 Purpose

A. **Promote general welfare.** The purpose and intent of site development review is to promote the general welfare by directing attention to site planning, and giving regard to the natural environment and the elements of creative design to assist in conserving and enhancing the appearance of the City.

B. **General purposes.** It is in the public interest and necessary for the promotion of the health, safety and welfare, convenience, comfort and prosperity of the citizens of the City of Tigard:

1. To implement the City of Tigard's Comprehensive Plan and other approval standards in this title;
2. To preserve and enhance the natural beauties of the land and of the man-made environment, and enjoyment thereof;
3. To maintain and improve the qualities of and relationships between individual buildings, structures and the physical developments which best contribute to the amenities and attractiveness of an area or neighborhood;
4. To protect and ensure the adequacy and usefulness of public and private developments as they relate to each other and to the neighborhood or area; and
5. To ensure that each individual development provides for a quality environment for the citizens utilizing that development as well as the community as a whole.

C. **Environmental enhancement.** To prevent the erosion of natural beauty, the lessening of environmental amenities, the dissipation of both usefulness and function, and to encourage additional landscaping, it is necessary:

1. To stimulate harmonious design for individual buildings, groups of buildings and structures, and other physical developments;
2. To encourage the innovative use of materials, methods and techniques and flexibility in building placement; and

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*Site Development Review 18.360-1 Code Update: 10/02*
3. To integrate the function, appearance and location of buildings and improvements so as to best achieve a balance between private prerogatives and preferences, and the public interest and welfare.


A. Applicability and exemptions. Site development review shall be applicable to all new developments and major modification of existing developments, as provided in Section 18.360.050, except it shall not apply to:

1. Single-family detached dwellings;
2. Manufactured homes on individual lots;
3. A duplex, which is not being reviewed as part of any other development;
4. Minor modifications as provided in Section 18.360.030B;
5. Any proposed development which has a valid conditional use approved through the conditional use permit application process;
6. Mobile home parks and mobile home subdivisions;
7. Family day care;
8. Home occupation;
9. Temporary use; or
10. Accessory structures.

18.360.030 Approval Process

A. New developments and major modifications. Site development review for a new development or major modification of an approved plan or existing development, as defined in Section 18.360.030A, shall be processed by means of a Type II procedure, as governed by Section 18.390.040, using approval criteria contained in Section 18.360.090.

B. Minor modifications. Minor modifications of an approved plan or existing developments, as defined in Section 18.360.060, shall be processed as a Type I procedure, as governed by Section 18.390.030, using approval criteria contained in Section 18.360.060.

C. Approval period. Site development review approval by the Director shall be effective for a period of 1-1/2 years from the date of approval. The site development review approval by the Director shall lapse if:

1. Substantial construction of the approved plan has not begun within a one-and-one-half years period; or
2. Construction on the site is a departure from the approved plan.
D. **Extension.** The Director shall, upon written request by the applicant and payment of the required fee, grant an extension of the approval period not to exceed one year; provided that:

1. No changes are made on the original site development review plan as approved by the Director;
2. The applicant can show intent of initiating construction on the site within the one year extension period; and
3. There have been no changes to the applicable Comprehensive Plan policies and ordinance provisions on which the approval was based.

E. **Phased development.**

1. The Director shall approve a time schedule for developing a site in phases over a period of time of one year, but in no case shall the total time period for all phases be greater than three years without reapplying for site development review.
2. The criteria for approving a phased site development review proposal is that all of the following are satisfied:
   a. The public facilities are constructed in conjunction with or prior to each phase;
   b. The development and occupancy of any phase is not dependent on the use of temporary public facilities. A temporary public facility is any facility not constructed to the applicable City or district standard;
   c. The phased development shall not result in requiring the City or other property owners to construct public facilities that were required as part of the approved development proposal; and
   d. The Director's decision may be appealed as provided by Section 18.390.040.G. No notice need be given of the Director's decision.
3. The Director may waive or modify the approval period for projects within the Washington Square Regional Center in accordance with Section 18.630.020.C.

18.360.040 **Bonding and Assurances**

A. **Performance bonds for public improvements.** On all projects where public improvements are required the Director shall require a bond in an amount not greater than 100% or other adequate assurances as a condition of approval of the site development plan in order to ensure the completed project is in conformance with the approved plan; and

B. **Release of performance bonds.** The bond shall be released when the Director finds the completed project conforms to the approved site development plan and all conditions of approval are satisfied.

C. **Completion of landscape installation.** Landscaping shall be installed prior to issuance of occupancy permits, unless security equal to the cost of the landscaping as determined by the Director is filed with the City Recorder assuring such installation within six months after occupancy:
1. Security may consist of a faithful performance bond payable to the City, cash, certified check or such other assurance of completion approved by the City Attorney; and

2. If the installation of the landscaping is not completed within the six-month period, the security may be used by the City to complete the installation.

D. Business tax filing. The applicant shall ensure that all occupants of the completed project, whether permanent or temporary, shall apply for and receive a City of Tigard business tax prior to initiating business.

18.360.050 Major Modification(s) to Approved Plans or Existing Development

A. Determination request. An applicant may request approval of a modification to an approved plan or existing development by:

1. Providing the Director with three copies of the proposed modified site development plan; and

2. A narrative which indicates the rationale for the proposed modification addressing the changes listed in subsection B below.

B. Evaluation criteria. The Director shall determine that a major modification(s) will result if one or more of the following changes are proposed. There will be:

1. An increase in dwelling unit density, or lot coverage for residential development;

2. A change in the ratio or number of different types of dwelling units;

3. A change that requires additional on-site parking in accordance with Chapter 18.765;

4. A change in the type of commercial or industrial structures as defined by the Uniform Building Code;

5. An increase in the height of the building(s) by more than 20%;

6. A change in the type and location of accessways and parking areas where off-site traffic would be affected;

7. An increase in vehicular traffic to and from the site and the increase can be expected to exceed 100 vehicles per day;

8. An increase in the floor area proposed for a nonresidential use by more than 10% excluding expansions under 5,000 square feet;

9. A reduction in the area reserved for common open space and/or usable open space which reduces the open space area below the minimum required by this code or reduces the open space area by more than 10%;

10. A reduction of project amenities below the minimum established by this code or by more than 10% where specified in the site plan:

   a. Recreational facilities;
b. Screening; and/or

c. Landscaping provisions.

11. A modification to the conditions imposed at the time of site development review approval which are not the subject of B1 through 10 above of this subsection.

C. When the determination is made. Upon determining that the proposed modification to the site development plan is a major modification, the applicant shall submit a new application in accordance with Sections 18.360.030 and 18.360.070 for site development review prior to any issuance of building permits.

18.360.060 Minor Modification(s) to Approved Plans or Existing Development

A. Minor modification defined. Any modification which is not within the description of a major modification as provided in Section 18.360.050 shall be considered a minor modification.

B. Process. An applicant may request approval of a minor modification in accordance with Section 18.360.030B and as follows:

1. Providing the Director with three copies of the proposed modified site development plan; and

2. A narrative which indicates the rationale for the proposed modification addressing the changes listed in Section 18.360.050B.

C. Approval criteria. A minor modification shall be approved, approved with conditions or denied following the Director's review based on the finding that:

1. The proposed development is in compliance with all applicable requirements of this title; and

2. The modification is not a major modification.

18.360.070 Submission Requirements

A. General submission requirements. The applicant shall submit an application containing all of the general information required for a Type II procedure, as governed by Section 18.390.040.

B. Additional information. In addition to the submission requirements required in Chapter 18.390, Decision-Making Procedures, an application for the conceptual development plan must include the following additional information in graphic, tabular and/or narrative form. The Director shall provide a list of the specific information to be included in each of the following:

1. An existing site conditions analysis;

2. A site plan;

3. A grading plan;

4. A landscape plan;
5. Architectural elevations of all structures; and
6. A copy of all existing and proposed restrictions or covenants.

18.360.080 Exceptions to Standards

A. Exceptions to setback requirements. The Director may grant an exception to the yard setback requirements in the applicable zone based on findings that the approval will result in the following:

1. An exception which is not greater than 20% of the required setback;
2. No adverse effect to adjoining properties in terms of light, noise levels and fire hazard;
3. Safe vehicular and pedestrian access to the site and on-site;
4. A more efficient use of the site which would result in more landscaping; and
5. The preservation of natural features which have been incorporated into the overall design of the project.

B. Exceptions to parking requirements. The Director may grant an exception or deduction to the off-street parking dimensional and minimum number of space requirements in the applicable zoning district based on the following findings:

1. The application is for a use designed for a specific purpose which is intended to be permanent in nature, e.g., senior citizen housing, and which has a demonstrated low demand for off-street parking;
2. There is an opportunity for shared parking and there is written evidence that the property owners have entered into a binding agreement to share parking; or
3. There is community interest in the preservation of particular natural feature(s) on the site, public transportation is available to the site, and reducing the standards will not adversely affect adjoining uses, therefore the public interest is not adversely affected by the granting of the exception.

C. Exceptions for private or shared outdoor area. The Director may grant an exception or deduction to the private outdoor area and shared outdoor recreation areas requirements, provided the application is for a use designed for a specific purpose which is intended to be permanent in nature (for example, senior citizen housing) and which can demonstrate a reduced demand for a private outdoor recreational area based on any one or more of the following findings:

1. There is direct access by a pedestrian path, not exceeding 1/4 mile, from the proposed development to public open space or recreation areas which may be used by residents of the development;
2. The development operates a motor vehicle which is available on a regular basis to transport residents of the development to public open space or recreation areas; or
3. The required square footage of either the private outdoor area or the shared outdoor recreation area may be reduced if together the two areas equal or exceed the combined standard for both.
D. Exceptions to landscaping requirements. The Director shall grant an exception to the landscaping requirements of this code, Section 18.120.150, upon finding that the overall landscape plan provides for at least 20 of the gross site to be landscaped.

18.360.090 Approval Criteria

A. Approval criteria. The Director shall make a finding with respect to each of the following criteria when approving, approving with conditions, or denying an application:

1. Compliance with all of the applicable requirements of this title including Chapter 18.810, Street and Utility Standards;

2. Relationship to the natural and physical environment:
   a. Buildings shall be:
      (1) Located to preserve existing trees, topography and natural drainage where possible based upon existing site conditions;
      (2) Located in areas not subject to ground slumping or sliding;
      (3) Located to provide adequate distance between adjoining buildings for adequate light, air circulation, and fire-fighting; and
      (4) Oriented with consideration for sun and wind.
   b. Trees shall be preserved to the extent possible. Replacement of trees is subject to the requirements of Chapter 18.790, Tree Removal.
   c. Innovative methods and techniques to reduce impacts to site hydrology and fish and wildlife habitat shall be considered based on surface water drainage patterns, identified per Section 18.810.100.A.3. and the City of Tigard “Significant Habitat Areas Map”. Methods and techniques for consideration may include, but are not limited to, the following:
      (1) Water quality facilities (for infiltration, retention, detention and/or treatment)
      (2) Pervious pavement
      (3) Soil amendment
      (4) Roof runoff controls
      (5) Fencing to guide animals toward safe passageways
      (6) Re-directed outdoor lighting to reduce spill-off into habitat areas
      (7) Preservation of existing vegetative and canopy cover

3. Exterior elevations:
a. Along the vertical face of single-family attached and multiple-family structures, offsets shall occur at a minimum of every 30 feet by providing any two of the following:
   (1) Recesses, e.g., decks, patios, entrances, floor area, of a minimum depth of eight feet;
   (2) Extensions, e.g., decks, patios, entrances, floor area, of a minimum depth of eight feet, a maximum length of an overhang shall be 25 feet; and
   (3) Offsets or breaks in roof elevations of three or more feet in height.

4. Buffering, screening and compatibility between adjoining uses:
   a. Buffering shall be provided between different types of land uses, for example, between single-family and multiple-family residential, and residential and commercial uses, and the following factors shall be considered in determining the adequacy of the type and extent of the buffer:
      (1) The purpose of the buffer, for example to decrease noise levels, absorb air pollution, filter dust, or to provide a visual barrier;
      (2) The size of the buffer required to achieve the purpose in terms of width and height;
      (3) The direction(s) from which buffering is needed;
      (4) The required density of the buffering; and
      (5) Whether the viewer is stationary or mobile.
   b. On site screening from view from adjoining properties of such things as service areas, storage areas, parking lots, and mechanical devices on roof tops, i.e., air cooling and heating systems, shall be provided and the following factors will be considered in determining the adequacy of the type and extent of the screening:
      (1) What needs to be screened;
      (2) The direction from which it is needed;
      (3) How dense the screen needs to be;
      (4) Whether the viewer is stationary or mobile; and
      (5) Whether the screening needs to be year around.

5. Privacy and noise: multi-family or group living uses:
   a. Structures which include residential dwelling units shall provide private outdoor areas for each ground floor unit which is screened from view by adjoining units as provided in Subsection 6.a below;
   b. The buildings shall be oriented in a manner which protects private spaces on adjoining properties from view and noise;
c. On-site uses which create noise, light, or glare shall be buffered from adjoining residential uses; and

d. Buffers shall be placed on the site as necessary to mitigate noise, light or glare from off-site sources.

6. Private outdoor area: multi-family use:

   a. Private open space such as a patio or balcony shall be provided and shall be designed for the exclusive use of individual units and shall be at least 48 square feet in size with a minimum width dimension of four feet; and

      (1) Balconies used for entrances or exits shall not be considered as open space except where such exits or entrances are for the sole use of the unit; and

      (2) Required open space may include roofed or enclosed structures such as a recreation center or covered picnic area.

   b. Wherever possible, private outdoor open spaces should be oriented toward the sun; and

   c. Private outdoor spaces shall be screened or designed to provide privacy for the users of the space.

7. Shared outdoor recreation areas: multi-family use:

   a. In addition to the requirements of subsections 5 and 6 above, usable outdoor recreation space shall be provided in residential developments for the shared or common use of all the residents in the following amounts:

      (1) Studio up to and including two-bedroom units, 200 square feet per unit; and

      (2) Three or more bedroom units, 300 square feet per unit.

   b. The required recreation space may be provided as follows:

      (1) It may be all outdoor space; or

      (2) It may be part outdoor space and part indoor space; for example, an outdoor tennis court, and indoor recreation room; or

      (3) It may be all public or common space; or

      (4) It may be part common space and part private; for example, it could be an outdoor tennis court, indoor recreation room and balconies on each unit; and

      (5) Where balconies are added to units, the balconies shall not be less than 48 square feet.

   c. Shared outdoor recreation space shall be readily observable to promote crime prevention and safety;
8. Where landfill and/or development is allowed within and adjacent to the 100-year floodplain, the City shall require consideration of the dedication of sufficient open land area for greenway adjoining and within the floodplain. This area shall include portions at a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian/bicycle plan.

9. Demarcation of public, semi-public and private spaces for crime prevention:
   a. The structures and site improvements shall be designed so that public areas such as streets or public gathering places, semi-public areas and private outdoor areas are clearly defined to establish persons having a right to be in the space, to provide for crime prevention and to establish maintenance responsibility; and
   b. These areas may be defined by, but not limited to:
      (1) A deck, patio, low wall, hedge, or draping vine;
      (2) A trellis or arbor;
      (3) A change in elevation or grade;
      (4) A change in the texture of the path material;
      (5) Sign; or
      (6) Landscaping.

10. Crime prevention and safety:
    a. Windows shall be located so that areas vulnerable to crime can be surveyed by the occupants;
    b. Interior laundry and service areas shall be located in a way that they can be observed by others;
    c. Mail boxes shall be located in lighted areas having vehicular or pedestrian traffic;
    d. The exterior lighting levels shall be selected and the angles shall be oriented towards areas vulnerable to crime; and
    e. Light fixtures shall be provided in areas having heavy pedestrian or vehicular traffic and in potentially dangerous areas such as parking lots, stairs, ramps and abrupt grade changes. Fixtures shall be placed at a height so that light patterns overlap at a height of seven feet which is sufficient to illuminate a person.

11. Public transit:
    a. Provisions within the plan shall be included for providing for transit if the development proposal is adjacent to or within 500 feet of existing or proposed transit route;
    b. The requirements for transit facilities shall be based on:
1. The location of other transit facilities in the area; and
2. The size and type of the proposal.

3. The following facilities may be required after City and Tri-Met review:
   (1) Bus stop shelters;
   (2) Turnouts for buses; and
   (3) Connecting paths to the shelters.

12. Landscaping:
   a. All landscaping shall be designed in accordance with the requirements set forth in Chapter 18.745;
   b. In addition to the open space and recreation area requirements of subsections 5 and 6 above, a minimum of 20 percent of the gross area including parking, loading and service areas shall be landscaped; and
   c. A minimum of 15 percent of the gross site area shall be landscaped.

13. Drainage: All drainage plans shall be designed in accordance with the criteria in the adopted 1981 master drainage plan;

14. Provision for the disabled: All facilities for the disabled shall be designed in accordance with the requirements set forth in ORS Chapter 447; and

15. All of the provisions and regulations of the underlying zone shall apply unless modified by other sections or this title, e.g., Planned Developments, Chapter 18.350; or a variance or adjustment granted under Chapter 18.370.1 (Ord. 02-33)
Chapter 18.370
VARIANCES AND ADJUSTMENTS

Sections:

18.370.010 Variances
18.370.020 Adjustments

18.370.010 Variances

A. Purpose. The purpose of this section is to provide standards for the granting of variances from the applicable zoning requirements of this title where it can be shown that, owing to special and unusual circumstances related to a specific property, the literal interpretation of the provisions of the applicable zone would cause an undue or unnecessary hardship, except that no use variances shall be granted.

B. Applicability of provisions.

1. The variance standards are intended to apply to individual platted and recorded lots only.

2. An applicant who is proposing to vary a specification standard for lots yet to be created through a subdivision process may not utilize the variance procedure unless otherwise specified in Section 18.730.030, Zero Lot Line Setback Standards, or Chapter 18.430, Subdivisions.

C. Approval process and standards.

1. Variances shall be processed by means of a Type II procedure, as governed by Section 18.390.040, using standards of approval contained in Subsection 2 below.

2. The Director shall approve, approve with conditions, or deny an application for a variance based on finding that the following criteria are satisfied:

   a. The proposed variance will not be materially detrimental to the purposes of this title, to any other applicable policies and standards, and to other properties in the same zoning district or vicinity;

   b. There are special circumstances that exist which are peculiar to the lot size or shape, topography or other circumstances over which the applicant has no control, and which are not applicable to other properties in the same zoning district;

   c. The use proposed will be the same as permitted under this title and City standards will be maintained to the greatest extent that is reasonably possible while permitting reasonable economic use of the land;

   d. Existing physical and natural systems, such as but not limited to traffic, drainage, dramatic land forms or parks will not be adversely affected any more than would occur if the development were developed as specified in the title; and

   e. The hardship is not self-imposed and the variance requested is the minimum variance which would alleviate the hardship.
3. The Director shall approve, approve with modifications, or deny an application for a subdivision variance subject to the criteria set forth in Section 18.370.010.C.

18.370.020 Adjustments

A. Purpose. The purpose of this section is to establish two classes of special variances:

1. “Development adjustments” which allow modest variation from required development standards within proscribed limits. Because such adjustments are granted using “clear and objective standards,” these can be granted by means of a Type I procedure, as opposed to the more stringent standards of approval and procedure for variances.

2. “Special adjustments” which are variances from development standards which have their own approval criteria as opposed to the standard approval criteria for variances contained in Section 18.370.020.C.

B. Development adjustments.

1. The following development adjustments will be granted by means of a Type I procedure, as governed by Section 18.390.030, using approval criteria contained in Subsection B2 below:

   a. Front yard setbacks. Up to a 25% reduction of the dimensional standards for the front yard setback required in the base zone. Setback of garages may not be reduced by this provision.

   b. Interior setbacks. Up to a 20% reduction of the dimensional standards for the side and rear yard setbacks required in the base zone.

   c. Lot coverage. Up to 5% increase of the maximum lot coverage required in the base zone.

2. Approval criteria. A development adjustment shall be granted if there is a demonstration of compliance with all of the applicable standards:

   a. A demonstration that the adjustment requested is the least required to achieve the desired effect;

   b. The adjustment will result in the preservation of trees, if trees are present in the development area;

   c. The adjustment will not impede adequate emergency access to the site;

   d. There is not a reasonable alternative to the adjustment which achieves the desired effect.
C. Special adjustments.

1. Adjustments to development standards within subdivisions (Chapter 18.430). The Director shall consider the application for adjustment at the same time he/she considers the preliminary plat. An adjustment may be approved, approved with conditions, or denied provided the Director finds:

   a. There are special circumstances or conditions affecting the property which are unusual and peculiar to the land as compared to other lands similarly situated;
   
   b. The adjustment is necessary for the proper design or function of the subdivision;
   
   c. The granting of the adjustment will not be detrimental to the public health, safety, and welfare or injurious to the rights of other owners of property; and
   
   d. The adjustment is necessary for the preservation and enjoyment of a substantial property right because of an extraordinary hardship which would result from strict compliance with the regulations of this title.

2. Adjustment to minimum residential density requirements (Chapter 18.510). The Director is authorized to grant an adjustment to the minimum residential density requirements in Section 18.510.040, by means of a Type I procedure, as governed by Section 18.390.030 as follows:

   a. For development on an infill site as follows:
      
      (1) In the R-25 zone, sites of .75 acre or smaller.
      
      (2) In the R-40 zone, sites of .75 acre or smaller.
      
   b. For development on sites larger than those contained in 1 above, if the applicant can demonstrate by means of detailed site plan that the site is so constrained that the proportional share of the required minimum density cannot be provided and still meet all of the development standards in the underlying zone.
      
   c. To be granted an adjustment in either Subsections a or b above, the applicant must demonstrate that the maximum number of residential units are being provided while complying with all applicable development standards in the underlying zone. There is nothing in this section which precludes an applicant for applying to a variance to these standards, as governed by Section 18.370.010.

3. For adjustments to density requirements in Washington Square Regional Center, the standards of Section 18.630.020.F apply.

4. For Modifications to dimensional and minimum density requirements for developments within the Washington Square Regional Center that include or abut designated Water Resource overlay areas, the standards of Section 18.630.020.F apply.
5. Adjustment to access and egress standards (Chapter 18.705).

a. In all zoning districts where access and egress drives cannot be readily designed to conform to Code standards within a particular parcel, access with an adjoining property shall be considered. If access in conjunction with another parcel cannot reasonably be achieved, the Director may grant an adjustment to the access requirements of Chapter 18.705 through a Type II procedure, as governed in Section 18.390.030, using approval criteria contained in Subsection 2b below.

b. The Director may approve, approve with conditions, or deny a request for an adjustment from the access requirements contained in Chapter 18.705, based on the following criteria:

   (1) It is not possible to share access;
   (2) There are no other alternative access points on the street in question or from another street;
   (3) The access separation requirements cannot be met;
   (4) The request is the minimum adjustment required to provide adequate access;
   (5) The approved access or access approved with conditions will result in a safe access; and
   (6) The visual clearance requirements of Chapter 18.795 will be met.

6. Adjustments to landscaping requirements (Chapter 18.745).

a. Adjustment to use of existing trees as street trees. By means of a Type I procedure, as governed by Section 18.390.030, the Director shall approve, approve with conditions, or deny a request for the use of existing trees to meet the street tree requirements in Section 18.745.030 providing there has been no cutting and filling around the tree during construction which may lead to its loss, unless the following can be demonstrated:

   (1) The ground within the drip-line is altered merely for drainage purposes; and
   (2) It can be shown that the cut or fill will not damage the roots and will not cause the tree to die.

b. Adjustment for street tree requirements. By means of a Type I procedure, as governed by Section 18.390.030, the Director shall approve, approve with conditions, or deny a request for the adjustments to the street tree requirements in Section 18.745.030, based on the following approval criteria:

   (1) If the location of a proposed tree would cause potential problems with existing utility lines;
   (2) If the tree would cause visual clearance problems; or
   (3) If there is not adequate space in which to plant street trees.

7. Adjustments to parking standards (Chapter 18.765).
a. Reduction from minimum parking requirements. By means of a Type II procedure, as governed by Section 18.390.040, the Director may authorize up to a 20% reduction in the total minimum vehicle parking spaces required in Section 18.765.070.H when an applicant for a development permit can demonstrate in a parking study prepared by a traffic consultant or in parking data from comparable sites that:

(1) Use of transit, demand management programs, and/or special characteristics of the customer, client employee or resident population will reduce expected vehicle use and parking space demand for this development, as compared to standards Institute of Transportation Engineers (ITE) vehicle trip generation rates and minimum city parking requirements, and

(2) A reduction in parking will not have an adverse impact on adjacent uses.

b. Reductions in minimum parking requirements in new developments for transit improvements. The Director may authorize up to a 20% reduction in the total minimum vehicle parking spaces required in Section 18.765.070.H by means of a Type II procedure, as governed by Section 18.390.040, when the applicant:

(1) Incorporates transit-related facilities such as bus stops and pull-outs, bus shelters, transit-oriented developments and other transit-related development; and

(2) Documents operational characteristics indicating the number of transit users, or number of non-auto users for a particular facility.

c. Reductions in minimum parking requirements in existing developments for transit improvements. The Director may authorize up to a 10% reduction in the total minimum vehicle parking spaces required in Section 18.765.070.H at a conversion ratio of one space per 100 square feet of transit facility by means of a Type I procedure as governed by Section 18.390.030, when the applicant:

(1) Incorporates transit-related facilities such as bus stops and pull-outs, bus shelters, transit-oriented developments and other transit-related development; and

(2) Meets the following requirements:

(a) A transit facility must be located adjacent to a street with transit service. The facility should be located between the building and front property line, within 20 feet of an existing transit stop, or the facility may include a new transit stop if approved by TriMet.

(b) A transit facility shall include a covered waiting or sitting area.

d. Increases in the maximum parking requirements. The Director may approve off-street parking in excess of the maximum allowed parking spaces in Section 18.765.070G by means of a Type II procedure, as governed by Section 18.390.040, when the applicant can demonstrate that all of the following criteria are met:

(1) The individual characteristics of the use at that location requires more parking than is generally required for a use of this type and intensity;
(2) The need for additional parking cannot be reasonably met through provision of on-street parking or shared parking with adjacent or nearby uses; and

(3) The site plan shall indicate how the additional parking can be redeveloped to more intensive transit-supportive use in the future.

e. Reduction in required bicycle parking. The Director may approve a reduction of required bicycle parking per Section 18.765.050.E by means of Type II procedure, as governed by Section 18.390.040, if the applicant can demonstrate that the proposed use by its nature would be reasonably anticipated to generate a lesser need for bicycle parking.

f. Use of alternative parking garage layout. By means of a Type II procedure, as governed by Section 18.390.040, the Director may approve an alternative design of parking garage which differs from the dimensional standards contained in Figure 18.765.2 when it can be shown that 1) the proposed structure meets design guidelines of the Urban Land Institute's (ULI) Dimension of Parking, Current Edition; or 2) a similar structure functions efficiently using proposed modified layout, circulation and dimensions.

g. Reduction in length of stacking lane. By means of a Type I procedure, as governed by 18.390.030, the Director may allow a reduction in the amount of vehicle stacking area required in Section 18.765.040.D.2 if such a reduction is deemed appropriate after analysis of the size and location of the development, limited services available and other pertinent factors.

8. Adjustments to sign code (Chapter 18.780).

a. By means of a Type II procedure, as governed by Section 18.390.040, the Director shall approve, approve with conditions, or deny a request for an adjustment to the sign code based on findings that at least one of the following criteria are satisfied:

(1) The proposed adjustment to the height limits in the sign code is necessary to make the sign visible from the street because of the topography of the site, and/or a conforming building or sign on an adjacent property would limit the view of a sign erected on the site in conformance with Chapter 18.780, Signs;

(2) A second freestanding sign is necessary to adequately identify a second entrance to a business or premises that is oriented towards a different street frontage;

(3) Up to an additional 25% of sign area or height may be permitted when it is determined that the increase will not deter from the purpose of Chapter 18.780, Signs. This increase should be judged according to specific needs and circumstances which necessitate additional area to make the sign sufficiently legible. The increase(s) shall not conflict with any other non-dimensional standards or restrictions of this chapter;

(4) The proposed sign is consistent with the criteria set forth in Section 18.780.130.G;

(5) The proposed exception for a second freestanding sign on an interior lot which is zoned commercial or industrial is appropriate because all of the following apply:
(a) The combined height of both signs shall not exceed 150% of the sign height normally allowed for one freestanding sign in the same zoning district; however, neither shall exceed the height normally allowed in the same zoning district;

(b) Neither sign will pose a vision clearance problem or will project into the public right-of-way; and

(c) Total combined sign area for both signs shall not exceed 150% of what is normally allowed for one freestanding sign in the same zoning district; however, neither shall exceed the height normally allowed in the same zoning district.

b. In addition to the criteria in Subsection a above, the Director shall review all of the existing or proposed signage for the development and its relationship to the intent and purpose of Chapter 18.780, Signs. As a condition of approval of the adjustment, the Director may require:

(1) Removal or alteration of nonconforming signs to achieve compliance with the standards contained in Chapter 18.780, Signs;

(2) Removal or alteration of conforming signs to establish a consistent sign design throughout the development; and

(3) Application for sign permits for signs erected without permits or removal of such illegal signs.

9. Adjustments to setbacks to reduce tree removal (Chapter 18.790). By means of a Type I procedure, as governed by Section 18.390.030, the Director may grant a modification from applicable setback requirements of this Code for the purpose of preserving a tree or trees on the site of proposed development. Such modification may reduce the required setback by up to 50%, but shall not be more than is necessary for the preservation of trees on the site. The setback modification described in this section shall supersede any special setback requirements or exceptions set out elsewhere in this title, including but not limited to Chapter 18.730, except Section 18.730.040.

10. Adjustments to wireless communication facilities (Chapter 18.798).

a. By means of a Type II procedure, as governed by Section 18.390.040, the Director shall approve, approve with conditions, or deny a request for an adjustment to the requirement that a wireless communication tower be set back at least the height of the tower from any off-site residence based on findings that at the following criteria are satisfied:

(1) The proposed location of the tower complies with the setback requirements for the underlying zone in which the property is located;

(2) A structural engineer certifies that the tower is designed to collapse within itself;

(3) Because of topography, vegetation, building orientation and/or other factor, a site closer to an off-site residence will equally or better reduce the visual impacts associated with the tower upon the off-site residence.
b. By means of a Type I procedure, as governed by Section 18.390.030, the Director shall approve, approve with conditions, or deny a request for an adjustment to the requirement that a wireless communication tower be located 2,000 feet from another tower in a residential zone or 500 feet from another tower in a non-residential zone based on findings that the following criteria are satisfied:

(1) The applicant has fully complied with the collocation protocol as provided in Section 18.798.080; and

(2) A registered radio engineer certifies that a more distant location is not technically feasible and/or sites at a more appropriate location are not available; or

(3) A location closer than the required separation will reduce visual or other impacts on surrounding uses better than sites beyond the required separation.

11. Adjustments for street improvement requirements (Chapter 18.810). By means of a Type II procedure, as governed by Section 18.390.040, the Director shall approve, approve with conditions, or deny a request for an adjustment to the street improvement requirements, based on findings that the following criterion is satisfied: Strict application of the standards will result in an unacceptably adverse impact on existing development, on the proposed development, or on natural features such as wetlands, bodies of water, significant habitat areas, steep slopes or existing mature trees. In approving an adjustment to the standards, the Director shall determine that the potential adverse impacts exceed the public benefits of strict application of the standards.
Chapter 18.705
ACCESS, EGRESS, AND CIRCULATION

Sections:

18.705.010 Purpose
18.705.020 Applicability of Provisions
18.705.030 General Provisions

18.705.010 Purpose

A. Purpose. The purpose of this chapter is to establish standards and regulations for safe and efficient vehicle access and egress on a site and for general circulation within the site.

18.705.020 Applicability of Provisions

A. When provisions apply. The provisions of this chapter shall apply to all development including the construction of new structures, the remodeling of existing structures (see Section 18.360.050), and to a change of use which increases the on-site parking or loading requirements or which changes the access requirements.

B. Change or enlargement of use. Should the owner or occupant of a lot or building change or enlarge the use to which the lot or building is put, thereby increasing access and egress requirements, it is unlawful and is a violation of this title to begin or maintain such altered use until the provisions of this chapter have been met if required or until the appropriate approval authority has approved the change.

C. When site design review is not required. Where the provisions of Chapter 18.360, Site Development Review, do not apply, the Director shall approve, approve with conditions, or deny an access plan submitted under the provisions of this chapter in conjunction with another permit or land use action.

D. Conflict with subdivision requirements. The requirements and standards of this chapter shall not apply where they conflict with the subdivision rules and standards of this title.

18.705.030 General Provisions

A. Continuing obligation of property owner. The provisions and maintenance of access and egress stipulated in this title are continuing requirements for the use of any structure or parcel of real property in the City.

B. Access plan requirements. No building or other permit shall be issued until scaled plans are presented and approved as provided by this chapter that show how access, egress and circulation requirements are to be fulfilled. The applicant shall submit a site plan. The Director shall provide the applicant with detailed information about this submission requirement.

C. Joint access. Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same access and egress when the combined access and egress of both uses, structures, or parcels of land satisfies the combined requirements as designated in this title, provided:

Access, Egress, and Circulation 18.705-1 Code Update:10/02
1. Satisfactory legal evidence shall be presented in the form of deeds, easements, leases or contracts to establish the joint use; and

2. Copies of the deeds, easements, leases or contracts are placed on permanent file with the City.

D. Public street access. All vehicular access and egress as required in Sections 18.705.030H and 18.705.030I shall connect directly with a public or private street approved by the City for public use and shall be maintained at the required standards on a continuous basis.

E. Curb cuts. Curb cuts shall be in accordance with Section 18.810.030N.

F. Required walkway location. On-site pedestrian walkways shall comply with the following standards:

1. Walkways shall extend from the ground floor entrances or from the ground floor landing of stairs, ramps, or elevators of all commercial, institutional, and industrial uses, to the streets which provide the required access and egress. Walkways shall provide convenient connections between buildings in multi-building commercial, institutional, and industrial complexes. Unless impractical, walkways shall be constructed between new and existing developments and neighboring developments;

2. Within all attached housing (except two-family dwellings) and multi-family developments, each residential dwelling shall be connected by walkway to the vehicular parking area, and common open space and recreation facilities;

3. Wherever required walkways cross vehicle access driveways or parking lots, such crossings shall be designed and located for pedestrian safety. Required walkways shall be physically separated from motor vehicle traffic and parking by either a minimum 6-inch vertical separation (curbed) or a minimum 3-foot horizontal separation, except that pedestrian crossings of traffic aisles are permitted for distances no greater than 36 feet if appropriate landscaping, pavement markings, or contrasting pavement materials are used. Walkways shall be a minimum of four feet in width, exclusive of vehicle overhangs and obstructions such as mailboxes, benches, bicycle racks, and sign posts, and shall be in compliance with ADA standards;

4. Required walkways shall be paved with hard surfaced materials such as concrete, asphalt, stone, brick, other pervious paving surfaces, etc. Any pervious paving surface must be designed and maintained to remain well-drained. Walkways may be required to be lighted and/or signed as needed for safety purposes. Soft-surfaced public use pathways may be provided only if such pathways are provided in addition to required pathways.

G. Inadequate or hazardous access.

1. Applications for building permits shall be referred to the Commission for review when, in the opinion of the Director, the access proposed:

   a. Would cause or increase existing hazardous traffic conditions; or
b. Would provide inadequate access for emergency vehicles; or

c. Would in any other way cause hazardous conditions to exist which would constitute a clear and present danger to the public health, safety, and general welfare.

2. Direct individual access to arterial or collector streets from single-family dwellings and duplex lots shall be discouraged. Direct access to collector or arterial streets shall be considered only if there is no practical alternative way to access the site. If direct access is permitted by the City, the applicant will be required to mitigate for any safety or neighborhood traffic management (NTM) impacts deemed applicable by the City Engineer. This may include, but will not be limited to, the construction of a vehicle turnaround on the site to eliminate the need for a vehicle to back out onto the roadway.

3. In no case shall the design of the service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street, other than an alley. Single-family and duplex dwellings are exempt from this requirement.

H. Access Management

1. An access report shall be submitted with all new development proposals which verifies design of driveways and streets are safe by meeting adequate stacking needs, sight distance and deceleration standards as set by ODOT, Washington County, the City and AASHTO (depending on jurisdiction of facility.)

2. Driveways shall not be permitted to be placed in the influence area of collector or arterial street intersections. Influence area of intersections is that area where queues of traffic commonly form on approach to an intersection. The minimum driveway setback from a collector or arterial street intersection shall be 150 feet, measured from the right-of-way line of the intersecting street to the throat of the proposed driveway. The setback may be greater depending upon the influence area, as determined from City Engineer review of a traffic impact report submitted by the applicant’s traffic engineer. In a case where a project has less than 150 feet of street frontage, the applicant must explore any option for shared access with the adjacent parcel. If shared access is not possible or practical, the driveway shall be placed as far from the intersection as possible.

3. The minimum spacing of driveways and streets along a collector shall be 200 feet. The minimum spacing of driveways and streets along an arterial shall be 600 feet.

4. The minimum spacing of local streets along a local street shall be 125 feet.

I. Minimum access requirements for residential use.

1. Vehicular access and egress for single-family, duplex or attached single-family dwelling units on individual lots and multi-family residential uses shall not be less than as provided in Table 18.705.1 and Table 18.705.2;
### TABLE 18.705.1
VEHICULAR ACCESS/EGRESS REQUIREMENTS: RESIDENTIAL USE (6 OR FEWER UNITS)

<table>
<thead>
<tr>
<th>Number Dwelling Unit/Lot</th>
<th>Minimum Number of Driveways Required</th>
<th>Minimum Access Width</th>
<th>Minimum Pavement Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 or 2</td>
<td>1</td>
<td>15'</td>
<td>10'</td>
</tr>
<tr>
<td>3-6</td>
<td>1</td>
<td>20'</td>
<td>20'</td>
</tr>
</tbody>
</table>

### TABLE 18.705.2
VEHICULAR ACCESS/EGRESS REQUIREMENTS: MULTI-FAMILY RESIDENTIAL USE

<table>
<thead>
<tr>
<th>Dwelling Units</th>
<th>Minimum Number of Driveways Required</th>
<th>Minimum Access Required</th>
<th>Minimum Pavement Sidewalks, Etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>1</td>
<td>15'</td>
<td>10'</td>
</tr>
<tr>
<td>3-19</td>
<td>1</td>
<td>30'</td>
<td>24' if two-way, 15' if one-way: Curbs and 5' walkway required</td>
</tr>
<tr>
<td>20-49</td>
<td>1 or 2</td>
<td>30'</td>
<td>24' if two-way</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30'</td>
<td>15' if one-way: Curbs and 5' walkway required</td>
</tr>
<tr>
<td>50-100</td>
<td>2</td>
<td>30'</td>
<td>24' Curbs and 5' walkway required</td>
</tr>
</tbody>
</table>

2. Vehicular access to multi-family structures shall be brought to within 50 feet of the ground floor entrance or the ground floor landing of a stairway, ramp, or elevator leading to the dwelling units;

3. Private residential access drives shall be provided and maintained in accordance with the provisions of the Uniform Fire Code;

4. Access drives in excess of 150 feet in length shall be provided with approved provisions for the turning around of fire apparatus by one of the following:
   a. A circular, paved surface having a minimum turn radius measured from center point to outside edge of 35 feet;
   b. A hammerhead-configured, paved surface with each leg of the hammerhead having a minimum depth of 40 feet and a minimum width of 20 feet;
   c. The maximum cross slope of a required turnaround is 5%.

5. Vehicle turnouts, (providing a minimum total driveway width of 24 feet for a distance of at least 30 feet), may be required so as to reduce the need for excessive vehicular backing motions in situations where two vehicles traveling in opposite directions meet on driveways in excess of 200 feet in length;

6. Where permitted, minimum width for driveway approaches to arterials or collector streets shall be no less than 20 feet so as to avoid traffic turning from the street having to wait for traffic exiting the site.

J. Minimum access requirements for commercial and industrial use.
1. Vehicle access, egress and circulation for commercial and industrial use shall not be less than 21 as provided in Table 18.705.3;

**TABLE 18.705.3**  
**VEHICULAR ACCESS/EGRESS REQUIREMENTS:**  
**COMMERCIAL AND INDUSTRIAL USES**

<table>
<thead>
<tr>
<th>Required Parking Spaces</th>
<th>Minimum Number of Driveways Required</th>
<th>Minimum Access Width</th>
<th>Minimum Pavement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-99</td>
<td>1</td>
<td>30'</td>
<td>24&quot; curbs required</td>
</tr>
<tr>
<td>100+</td>
<td>2</td>
<td>30'</td>
<td>24&quot; curbs required</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
<td>40&quot; curbs required</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>50'</td>
<td></td>
</tr>
</tbody>
</table>
2. Vehicular access shall be provided to commercial or industrial uses, and shall be located to within 50 feet of the primary ground floor entrances;

3. Additional requirements for truck traffic may be placed as conditions of site development review.

K. One-way vehicular access points. Where a proposed parking facility indicates only one-way traffic flow on the site, it shall be accommodated by a specific driveway serving the facility; the entrance drive shall be situated closest to oncoming traffic and the exit drive shall be situated farthest from oncoming traffic.

L. Director's authority to restrict access. The Director has the authority to restrict access when the need to do so is dictated by one or more of the following conditions:

1. To provide for increased traffic movement on congested streets and to eliminate turning movement problems, the Director may restrict the location of driveways on streets and require the location of driveways be placed on adjacent streets, upon the finding that the proposed access would:
   a. Cause or increase existing hazardous traffic conditions; or
   b. Provide inadequate access for emergency vehicles; or
   c. Cause hazardous conditions to exist which would constitute a clear and present danger to the public health, safety, and general welfare.

2. To eliminate the need to use public streets for movements between commercial or industrial properties, parking areas shall be designed to connect with parking areas on adjacent properties unless not feasible. The Director shall require access easements between properties where necessary to provide for parking area connections;

3. To facilitate pedestrian and bicycle traffic, access and parking area plans shall provide efficient sidewalk and/or pathway connections, as feasible, between neighboring developments or land uses;

4. A decision by the Director per 18.705.030 K.1.-3. above may be appealed by means of a Type II procedure, as regulated by Section 18.390.040, using criteria contained in Section 18.370.020 C3. (Ord. 02-33)
Chapter 18.715
DENSITY COMPUTATIONS

Sections:

18.715.010  Purpose
18.715.020  Density Calculation
18.715.030  Residential Density Transfer

18.715.010  Purpose
A. Purpose. The purpose of this chapter is to implement the comprehensive plan by establishing the criteria for determining the number of dwelling units permitted.

18.715.020  Density Calculation
A. Definition of net development area. Net development area, in acres, shall be determined by subtracting the following land area(s) from the gross acres, which is all of the land included in the legal description of the property to be developed:

1. All sensitive land areas:
   a. Land within the 100-year floodplain;
   b. Land or slopes exceeding 25%;
   c. Drainage ways; and
   d. Wetlands.
   e. Optional: Significant habitat areas, as designated on the City of Tigard “Significant Habitat Areas Map”.
2. All land dedicated to the public for park purposes;
3. All land dedicated for public rights-of-way. When actual information is not available, the following formulas may be used:
   a. Single-family development: allocate 20% of gross acreage;
   b. Multi-family development: allocate 15% of gross acreage.
4. All land proposed for private streets; and
5. A lot of at least the size required by the applicable base zoning district, if an existing dwelling is to remain on the site.

B. Calculating maximum number of residential units. To calculate the maximum number of residential units per net acre, divide the number of square feet in the net acres by the minimum number of square feet required for each lot in the applicable zoning district.
C. Calculating minimum number of residential units. As required by Section 18.510.040, the minimum number of residential units per net acre shall be calculated by multiplying the maximum number of units determined in Subsection B above by 80% (0.8).

18.715.030 Residential Density Transfer

A. Rules governing residential density transfer.

1. The units per acre calculated by subtracting land areas listed in Section 18.715.020 A. la – c, from the gross acres may be transferred to the remaining buildable land areas subject to the following limitations:

a. The number of units which can be transferred is limited to the number of units which would have been allowed on 25 percent of the unbuildable area if not for these regulations; and

b. The total number of units per site does not exceed 125 percent of the maximum number of units per gross acre permitted for the applicable comprehensive plan designation.

2. Additional rules governing residential density transfer Wetlands. Units per acre calculated by subtracting land areas listed in Section 18.715.0320 A. Id. from the gross acres may be transferred to the remaining buildable land areas on land zoned R-12, R-25, and R-40 subject to the following limitations:

a. The number of units which can be transferred is limited to the number of units which would have been allowed on the wetland area, if not for these regulations;

b. The total number of units per site does not exceed the maximum number of units per gross acre permitted for the applicable comprehensive plan designation.

B. Underlying development standards. All density transfer development proposals shall comply with the development standards of the applicable underlying zoning district unless developed under the provisions of Chapter 18.440, Planned Development.
18.765.010 Purpose

A. Insure adequate vehicle parking. These parking requirements are intended to provide sufficient vehicle parking in close proximity to the various uses for residents, customers and employees, and to establish standards which will maintain the traffic carrying-capacity of nearby streets.

B. Adequate capacity. These regulations are also intended to establish vehicle parking areas which have adequate capacity and which are appropriately located and designed to minimize any hazardous conditions on the site and at access points.


A. New construction. At the time of the erection of a new structure within any zoning district, off-street vehicle parking will be provided in accordance with Section 18.765.070.

B. Expansion of existing use. At the time of an enlargement of a structure which increases the on-site vehicle parking requirements, off-street vehicle parking will be provided in accordance with Section 18.765.070 subject to the following:

1. On the date of adoption of this title, the number of vehicle parking and loading spaces required shall be based only on floor area or capacity of such enlargement;

2. If the minimum vehicle parking spaces required for the enlargement added to the existing on-site space exceed the maximum number of vehicle parking spaces allowed for the whole project per the maximum parking ratios established in 18.765.070, the applicant may reduce the additional number of spaces provided so that the total spaces on the site do not exceed the maximum spaces allowed.

C. Change of use. When an existing structure is changed from one use to another use as listed in Section 18.765.070, the following provisions shall apply:

1. If the parking requirements for each use are the same, no additional vehicle parking shall be required;

2. Where a change results in an intensification of use in terms of the number of vehicle parking spaces required, additional vehicle parking spaces shall be provided in an amount equal to the
difference between the number of spaces required for the existing use and the number of spaces required for the more intensive use;

3. Where the change results in a decrease in intensity of use, the applicant may eliminate excess vehicle parking spaces in an amount equal to the difference between the number of spaces required for the existing use and the number of spaces required for the less intensive use.

D. **When site design review is not required.** Where the provisions of Chapter 18.360, Site Development Review, do not apply, the Director shall approve, approve with conditions, or deny a plan submitted under the provisions of this chapter by means of a Type I review, as governed by Section 18.390.030.

E. **Building permit conditions.** The provision and maintenance of off-street vehicle parking and loading spaces are the continuing obligation of the property owner:

1. No building or other permit shall be issued until plans are presented to the Director to show that property is and will remain available for exclusive use as off-street vehicle parking and loading space; and

2. The subsequent use of property for which the building permit is issued shall be conditional upon the unqualified continuance and availability of the amount of vehicle parking and loading space required by this title;

3. Required vehicle parking shall:
   a. Be available for the parking of operable passenger vehicles of residents, patron and employees only;
   b. Not be used for storage of vehicles or materials or for the parking of trucks used in conduct of the business or use; and
   c. Not be rented, leased or assigned to any other person or organization.

18.765.030 **General Provisions**

A. **Vehicle parking plan requirements.** No building or other permit shall be issued until scaled plans are presented and approved as provided by this chapter that show how access, egress and circulation requirements are to be fulfilled. The applicant shall submit a site plan. The Director shall provide the applicant with detailed information about this submission requirement.

B. **Location of vehicle parking.** The location of off-street parking will be as follows:

1. Off-street parking spaces for single-family and duplex dwellings and single-family attached dwellings shall be located on the same lot with the dwelling(s);

2. Off-street parking lots for uses not listed above shall be located not further than 500 feet from the property line that they are required to serve, measured along the most direct, publicly accessible pedestrian route from the property line with the following exceptions:
a. Commercial and industrial uses which require more than 40 parking spaces may provide for the spaces in excess of the required first 40 spaces up to a distance of 500 feet from the primary site;

b. The 40 parking spaces which remain on the primary site must be available for users in the following order of priority:
   1) Disabled-accessible spaces;
   2) Short-term spaces;
   3) Long-term preferential carpool and vanpool spaces;
   4) Long-term spaces.

C. Joint parking. Owners of two or more uses, structures or parcels of land may agree to utilize jointly the same parking and loading spaces when the peak hours of operation do not overlay, subject to the following:
   1. The size of the joint parking facility shall be at least as large as the number of vehicle parking spaces required by the larger(est) use per Section 18.765.070;
   2. Satisfactory legal evidence shall be presented to the Director in the form of deeds, leases or contracts to establish the joint use;
   3. If a joint use arrangement is subsequently terminated, or if the uses change, the requirements of this title thereafter apply to each separately.

D. Parking in mixed-use projects. In mixed-use projects, the required minimum vehicle parking shall be determined using the following formula.
   1. Primary use, i.e., that with the largest proportion of total floor area within the development, at 100% of the minimum vehicle parking required for that use in Section 18.765.060;
   2. Secondary use, i.e., that with the second largest percentage of total floor area within the development, at 90% of the vehicle parking required for that use in Section 18.765.060;
   3. Subsequent use or uses, at 80% of the vehicle parking required for that use(s) in Section 18.765.060;
   4. The maximum parking allowance shall be 150% of the total minimum parking as calculated in D.1.-3. above.

E. Visitor parking in multi-family residential developments. Multi-dwelling units with more than 10 required parking spaces shall provide an additional 15% of vehicle parking spaces above the minimum required for the use of guests of residents of the complex. These spaces shall be centrally located or distributed throughout the development. Required bicycle parking facilities shall also be centrally located within or evenly distributed throughout the development.

F. Preferential long-term carpool/vanpool parking. Parking lots providing in excess of 20 long-term parking spaces shall provide preferential long-term carpool and vanpool parking for employees,
students and other regular visitors to the site. At least 5% of total long-term parking spaces shall be reserved for carpool/vanpool use. Preferential parking for carpools/vanpools shall be closer to the main entrances of the building than any other employee or student parking except parking spaces designated for use by the disabled. Preferential carpool/vanpool spaces shall be full-sized per requirements in Section 18.765.040.N and shall be clearly designated for use only by carpools and vanpools between 7:00 AM and 5:30 PM Monday through Friday.

G. Disabled-accessible parking. All parking areas shall be provided with the required number of parking spaces for disabled persons as specified by the State of Oregon Uniform Building Code and federal standards. Such parking spaces shall be sized, signed and marked as required by these regulations.

H. DEQ indirect source construction permit. All parking lots containing 250 spaces or parking structures containing two or more levels shall require review by the Oregon Department of Environmental Quality (DEQ) to:
   1. Acquire an Indirect Source Construction Permit;
   2. Investigate the feasibility of installing oil and grease separators. (Ord. 02-13)

18.765.040 General Design Standards

A. Maintenance of parking areas. All parking lots shall be kept clean and in good repair at all times. Breaks in paved surfaces shall be repaired promptly and broken or splintered wheel stops shall be replaced so that their function will not be impaired.

B. Access drives. With regard to access to public streets from off-street parking:
   1. Access drives from the street to off-street parking or loading areas shall be designed and constructed to facilitate the flow of traffic and provide maximum safety for pedestrian and vehicular traffic on the site;
   2. The number and size of access drives shall be in accordance with the requirements of Chapter 18.705, Access, Egress and Circulation;
   3. Access drives shall be clearly and permanently marked and defined through use of rails, fences, walls or other barriers or markers on frontage not occupied by service drives;
   4. Access drives shall have a minimum vision clearance in accordance with Chapter 18.795, Visual Clearance;
   5. Access drives shall be improved with an asphalt, ep-concrete, or pervious paving surface. Any pervious paving surface must be designed and maintained to remain well-drained; and
   6. Excluding single-family and duplex residences, except as provided by Subsection 18.810.030P, groups of two or more parking spaces shall be served by a service drive so that no backing movements or other maneuvering within a street or other public right-of-way will be required.

C. Loading/unloading driveways. A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers shall be located on the site of any school or other meeting place which is designed to accommodate more than 25 people at one time.
D. On-site vehicle stacking for drive-in use.

1. All uses providing drive-in services as defined by this title shall provide on the same site a stacking lane for inbound vehicles as noted in Table 18.765.1.

<table>
<thead>
<tr>
<th>Use</th>
<th>Reservoir Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive-in banks</td>
<td>150 feet/service terminal</td>
</tr>
<tr>
<td>Automated teller</td>
<td>50 feet/service terminal machines</td>
</tr>
<tr>
<td>Drive-up telephones</td>
<td>50 feet</td>
</tr>
<tr>
<td>Drive-in cleaners, repair services</td>
<td>50 feet</td>
</tr>
<tr>
<td>Drive-in restaurants</td>
<td>200 feet</td>
</tr>
<tr>
<td>Drive-in theaters</td>
<td>200 feet</td>
</tr>
<tr>
<td>Gasoline service</td>
<td>75 feet between curb cut and nearest pump</td>
</tr>
<tr>
<td>Mechanical car washes</td>
<td>75 feet/washing unit</td>
</tr>
<tr>
<td>Parking facilities:</td>
<td></td>
</tr>
<tr>
<td>- Free flow entry</td>
<td>25 feet/entry driveway</td>
</tr>
<tr>
<td>- Ticket dispense entry</td>
<td>50 feet/entry driveway</td>
</tr>
<tr>
<td>- Manual ticket dispensing</td>
<td>100 feet/entry driveway</td>
</tr>
<tr>
<td>- Attendant parking</td>
<td>100 feet</td>
</tr>
</tbody>
</table>

2. The Director may reduce the length of the inbound stacking lane by means of an adjustment to be reviewed through a Type I procedure, as governed by Section 18.320.300, using approval criteria contained in Section 18.370.020.C.5.g.

3. Stacking lanes must be designed so that they do not interfere with parking and vehicle, pedestrian and bicycle circulation. Stacking lanes for the purpose of selling food must provide at least one clearly marked parking space per service window for the use of vehicles waiting for an order to be filled.

E. Curb cuts. Curb cuts shall be in accordance with Section 18.810.030.N.

F. Pedestrian access. Pedestrian access through parking lots shall be provided in accordance with Section 18.705.030.F. Where a parking area or other vehicle area has a drop-off grade separation, the property owner shall install a wall, railing, or other barrier which will prevent a slow-moving vehicle or driverless vehicle from escaping such area and which will prevent pedestrians from walking over drop-off edges.

G. Parking lot landscaping. Parking lots shall be landscaped in accordance with the requirements of Chapter 18.745.
H. Parking space surfacing.

1. Except for single-family and duplex residences, and for temporary uses or fleet storage areas as authorized in 18.765.040.H.3 and 4 below, all areas used for the parking or storage or maneuvering of any vehicle, boat or trailer shall be improved with asphalt, or concrete, or pervious paving surfaces. Any pervious paving surface must be designed and maintained to remain well-drained.

2. Off-street parking spaces for single and two-family residences shall be improved with an asphalt or concrete, or pervious paving surface. Any pervious paving surface must be designed and maintained to remain well-drained.

3. Parking areas to be used primarily for the storage of fleet vehicles or construction equipment may be surfaced in gravel when authorized by the approval authority at the time the site development approval is given. The Director may require that the property owner enter into an agreement to pave the parking area: a) within a specified period of time after establishment of the parking area; or b) if there is a change in the types or weights of vehicles utilizing the parking area; or c) if there is evidence of adverse effects upon adjacent roadways, water courses, or properties. Such an agreement shall be executed as a condition of approval of the plan to establish the gravel parking area. Gravel-surfaced parking areas may only be permitted consistent with the following:
   a. Gravel parking areas shall not be permitted within 100 feet of any residentially-zoned or residentially-developed area;
   b. Gravel access and/or parking areas shall not be allowed within 100 feet of any water course;
   c. Gravel parking areas shall not be allowed within 100 feet of any public right-of-way; and
   d. A driveway which connects a gravel parking area with any public street shall be paved.

4. Parking areas to be used in conjunction with a temporary use may be surfaced in gravel when authorized by the approval authority at the time the permit is approved. The approval authority shall consider the following in determining whether or not the gravel-surfaced parking is warranted:
   a. The request for consideration to allow a parking area in conjunction with the temporary use shall be made in writing concurrently with the Temporary Use application per the requirements of Section 18.385.050;
   b. The applicant shall provide documentation that the type of temporary use requested will not be financially viable if the parking space surface area requirement is imposed; and
   c. Approval of the gravel-surfaced parking area will not create adverse conditions affecting safe ingress and egress when combined with other uses of the property.

I. Parking lot striping.
1. Except for single-family and duplex residences, any area intended to be used to meet the off-street parking requirements as contained in this chapter shall have all parking spaces clearly marked; and

2. All interior drives and access aisles shall be clearly marked and signed to show direction of flow and maintain vehicular and pedestrian safety.

J. Wheel stops. Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least four inches high located three feet back from the front of the parking stall. The front three feet of the parking stall may be concrete, asphalt or low lying landscape material that does not exceed the height of the wheel stop. This area cannot be calculated to meet landscaping or sidewalk requirements.

K. Drainage. Off-street parking and loading areas shall be drained in accordance with specifications approved by the City Engineer to ensure that ponds do not occur except for single-family and duplex residences, off-street parking and loading facilities shall be drained to avoid flow of water across public sidewalks.

L. Lighting. A lights providing to illuminate any public or private parking area or vehicle sales area shall be arranged to direct the light away from any adjacent residential district.

M. Signs. Signs which are placed on parking lots shall be designed and installed in accordance with Chapter 18.780, Signs.
N. Space and aisle dimensions. (Figure 18.765.1)

**FIGURE 18.765.1**

**OFF-STREET SURFACE PARKING MATRIX**

Required Space and Aisle Dimensions in Feet

<table>
<thead>
<tr>
<th>Parking Angle</th>
<th>Stall Width</th>
<th>Stall Depth (no bumper overhang)</th>
<th>Aisle Width Between Stall Lines (5)</th>
<th>Stall Width Parallel to Aisle</th>
<th>Module Width (no bumper overhang)</th>
<th>Bumper Overhang</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
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<tr>
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<td>8.00</td>
<td>58.0</td>
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<td></td>
</tr>
</tbody>
</table>

Stall width dimensions may be distributed as follows: 50% standard spaces, 50% compact spaces. All compact spaces shall be labeled as such.
1. Except as modified for angled parking in Figures 18.765.1 and 18.765.2, the minimum dimensions for parking spaces are:
   a. 8.5' x 18.5' for a standard space;
   b. 7.5' x 16.5' for a compact space; and
   c. As required by applicable State of Oregon and federal standards for designated disabled person parking spaces;
   d. The width of each parking space includes a stripe which separates each space.

2. Aisles accommodating two direction traffic, or allowing access from both ends, shall be 24 feet in width;

3. Minimum standards for a standard parking stall's length and width, aisle width, and maneuvering space shall be determined as noted in Figure 18.765.2.
**FIGURE 18.765.2**

**PARKING STRUCTURE MATRIX**
Required Space and Aisle Dimensions in Feet

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<thead>
<tr>
<th></th>
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<tbody>
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</table>

**STANDARDS**

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<tr>
<th>Angle</th>
<th>Standards Interlock Reduction</th>
<th>Standards Overhang Projection</th>
<th>Standards Vehicle Projection</th>
<th>Standards Module Widths</th>
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<tbody>
<tr>
<td>45°</td>
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</tr>
<tr>
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<td>0.0</td>
<td>3.0</td>
<td>18.66</td>
<td>18.0</td>
</tr>
</tbody>
</table>

A Parking angle
B Interlock reduction
C Overhang clearance
D Projected vehicle length measured perpendicular to aisle
E Aisle width
F Parking module width (wall to wall), single loaded aisle
G Parking module width (wall to wall), double loaded aisle
H Parking module width (wall to interlock), double loaded aisle
I Parking module width (interlock to interlock), double loaded aisle
J Parking module width (curb to curb), double loaded aisle
SL Stall Length
SW Stall Width
WP Stall width parallel to aisle
18.765.050 Bicycle Parking Design Standards

A. Location and access. With regard to the location and access to bicycle parking:

1. Bicycle parking areas shall be provided at locations within 50 feet of primary entrances to structures;

2. Bicycle parking areas shall not be located within parking aisles, landscape areas or pedestrian ways;

3. Outdoor bicycle parking shall be visible from on-site buildings and/or the street. When the bicycle parking area is not visible from the street, directional signs shall be used to located the parking area;

4. Bicycle parking may be located inside a building on a floor which has an outdoor entrance open for use and floor location which does not require the bicyclist to use stairs to gain access to the space. Exceptions may be made to the latter requirement for parking on upper stories within a multi-story residential building.

B. Covered parking spaces.

1. When possible, bicycle parking facilities should be provided under cover.

2. Required bicycle parking for uses served by a parking structure must provide for covered bicycle parking unless the structure will be more than 100 feet from the primary entrance to the building, in which case, the uncovered bicycle parking may be provided closer to the building entrance.

C. Design requirements. The following design requirements apply to the installation of bicycle racks:

1. The racks required for required bicycle parking spaces shall ensure that bicycles may be securely locked to them without undue inconvenience. Provision of bicycle lockers for long-term (employee) parking is encouraged but not required;

2. Bicycle racks must be securely anchored to the ground, wall or other structure;

3. Bicycle parking spaces shall be at least 2½ feet by six feet long, and, when covered, with a vertical clearance of seven feet. An access aisle of at least five feet wide shall be provided and maintained beside or between each row of bicycle parking;

4. Each required bicycle parking space must be accessible without moving another bicycle;

5. Required bicycle parking spaces may not be rented or leased except where required motor vehicle parking is rented or leased. At-cost or deposit fees for bicycle parking are exempt from this requirement;

6. Areas set aside for required bicycle parking must be clearly reserved for bicycle parking only.
D. **Paving.** Outdoor bicycle parking facilities shall be surfaced with a hard surfaced material, i.e., pavers, asphalt, concrete, other pervious paving surfaces, or similar material. This surface must be designed and maintained to remain well-drained.

E. **Minimum bicycle parking requirements.** The total number of required bicycle parking spaces for each use is specified in Table 18.768.2 in Section 18.765.070.H. In no case shall there be less than two bicycle parking spaces. Single-family residences and duplexes are excluded from the bicycle parking requirements. The Director may reduce the number of required bicycle parking spaces by means of an adjustment to be reviewed through a Type II procedure, as governed by Section 18.390.040, using approval criteria contained in Section 18.370.020.C.5.e.

**18.765.060 Parking Structure Design Standards**

A. **Ground-floor windows/wall openings.** All parking structures shall provide ground floor windows or wall openings along the street frontages. Blank walls are prohibited. Any wall facing the street shall contain windows, doors or display areas equal to at least 20% of the ground floor wall area facing the street excluding those portions of the face(s) devoted to driveway entrances and exits, stairwells, elevators, and centralized payment booths. Required windows shall have a sill no more than four (4) feet above grade. Where the interior floor level prohibits such placement, the sill may be raised to allow it to be no more than two (2) feet above finished floor wall up to a maximum sill height of six (6) feet above grade.

B. **Exit warning bell.** A warning bell or other signal must be provided for exits from parking structures that cross public sidewalks where a standard vision clearance area cannot be provided.

C. **Other standards.** Parking structures must comply with all standards of the Uniform Building Code for the State of Oregon as it pertains to structural design, ventilation, lighting and fire/safety requirements and disabled accessibility.

D. **Parking layout and internal circulation.** The layout of parking within a parking structure shall be subject to the requirements contained in Figure 18.765.2. An applicant may request approval of an alternative layout and internal circulation by means of a Type II adjustment, as governed in Section 18.370.010, using the approval criteria in Section 18.370.020.C.5.f.

**18.765.070 Minimum and Maximum Off-Street Parking Requirements**

A. **Parking requirements for unlisted uses.**

1. The Director may rule that a use, not specifically listed in Section 18.765.070.H, is a use similar to a listed use and that the same parking standards shall apply. If the applicant requests that the Director’s decision be rendered in writing, it shall constitute a Director’s Interpretation, as governed by Section 18.340;

2. The Director shall maintain a list of approved unlisted use parking requirements which shall have the same effect as an amendment to this chapter.

B. **Choice of parking requirements.** When a building or use is planned or constructed in such a manner that a choice of parking requirements could be made, the use which requires the greater number of parking spaces shall govern.
C. **Measurements.** The following measurements shall be used in calculating the total minimum number of vehicle parking spaces required in Section 18.765.070.H:

1. **Fractions.** Fractional space requirements shall be counted as a whole space;

2. **Employees.** Where employees are specified for the purpose of determining the minimum vehicle parking spaces required, the employees counted are those who work on the premises during the largest shift at the peak season;

3. **Students.** When students are specified for the purpose of determining the minimum vehicle parking spaces required, the students counted are those who are on the campus during the peak period of the day during a typical school term;

4. **Space.** Unless otherwise specified, where square feet are specified, the area measured shall be gross floor area under the roof measured from the faces of the structure, excluding only space devoted to covered off-street parking or loading.

D. **Exclusions to minimum vehicle parking requirements.** The following shall not be counted towards the computation of the minimum parking spaces as required in Section 18.765.070.H:

1. **On-street parking.** Parking spaces in the public street or alley shall not be eligible as fulfilling any part of the parking requirement except; Religious Institutions may count on-street parking around the perimeter of the use provided that the following criteria have been satisfied:
   a. The on-street parking is on a street that is designed and physically improved to accommodate parking within the right-of-way;
   b. The street where on-street parking is proposed is not located on local residential streets.

2. **Fleet parking.** Required vehicle parking spaces may not be used for storage of fleet vehicles, except when a use can show that employee and fleet parking spaces are used interchangeably, e.g., the employee drives the fleet vehicle from home, or the spaces are used for fleet storage only at night and are available for employee use during the day. For the purposes of this title, space exclusively devoted to the storage of fleet vehicles will be considered as outdoor storage.

E. **Exceptions to maximum parking standards.** When calculating the maximum vehicle parking allowed as regulated by Section 18.765.080.H, the following exception shall apply:

1. The following types of parking shall not be included:
   a. Parking contained in a parking structure either incorporated into a building or free-standing;
   b. Market-rate paid parking;
   c. Designated carpool and/or vanpool spaces;
   d. Designated disabled-accessible parking spaces;
   e. Fleet parking.
2. If application of the maximum parking standard would result in less than six parking spaces for a development with less than 1,000 gross square feet of floor area, the development shall be allowed up to six parking spaces. If application of the maximum parking standard would result in less than 10 vehicle parking spaces for a development between 1,000 and 2,000 gross square feet, the development will be allowed up to 10 vehicle parking spaces.

F. Reductions in minimum required vehicle parking. Reductions in the required number of vehicle parking spaces may be permitted as follows:

1. The Director may reduce off-street vehicle parking spaces per Section 18.765.070.H by up to 20% in new developments for the incorporation of transit-related facilities such as bus stops and pull-outs, bus shelters, transit-oriented developments and other transit-related development through a Type II procedure, as governed by Section 18.390.040, using approval criteria contained in Section 18.370.020.C.5.b. Applicants who qualify for this adjustment may also apply for further parking reductions per 18.765.070.F.2. below;

2. The Director may reduce the total required off-street vehicle parking spaces per Section 18.765.070.H by up to a total of 20% by means of parking adjustment to be reviewed through a Type II procedure, as governed by Section 18.390.040, using approval criteria contained in Section 18.370.020.C.5.a.

3. The Director is authorized to reduce up to 10% of existing required parking spaces at a conversion ratio of one parking space for each 100 square feet of transit facility for developments which incorporate transit-related facilities such as bus stops and pull-outs, bus shelters, transit-oriented development or other transit-related facilities through a Type I procedure, as governed by Section 18.390.030, using approval criteria contained in Section 18.370.020.C.5.c.

G. Increases in maximum required vehicle parking. The Director may increase the total maximum number of vehicle spaces allowed in Section 18.765.070.H by means of a parking adjustment to be reviewed by means of a Type II procedure, as governed by Section 18.390.040, using approval criteria contained in section 18.370.020.C.5.d.

H. Specific requirements. (See Table 18.765.2) (Ord. 02-13)

18.765.080 Off-Street Loading Requirements

A. Off-street loading spaces. Commercial, industrial and institutional buildings or structures to be built or altered which receive and distribute material or merchandise by truck shall provide and maintain off-street loading and maneuvering space as follows:

1. A minimum of one loading space is required for buildings with 10,000 gross square feet or more;

2. A minimum of two loading spaces for buildings with 40,000 gross square feet or more.

B. Off-street loading dimensions.

1. Each loading berth shall be approved by the City Engineer as to design and location;
2. Each loading space shall have sufficient area for turning and maneuvering of vehicles on the site. At a minimum, the maneuvering length shall not be less than twice the overall length of the longest vehicle using the facility site;

3. Entrances and exits for the loading areas shall be provided at locations approved by the City Engineer in accordance with Chapter 18.710;

4. Screening for off-street loading facilities is required and shall be the same as screening for parking lots in accordance with Chapter 18.745.
### Table 18.765.2 Minimum and Maximum Required Off-street Vehicle and Bicycle Parking Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Residential</th>
<th>Civic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Living</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Units, Attached</td>
<td>See Multifamily (M)</td>
<td></td>
</tr>
<tr>
<td>Single Units, Detached</td>
<td>1.0/DU</td>
<td>none (M)</td>
</tr>
<tr>
<td>Accessory Units</td>
<td>1.0/DU</td>
<td>none</td>
</tr>
<tr>
<td>Duplexes</td>
<td></td>
<td>1.0/DU</td>
</tr>
<tr>
<td>Multifamily Units</td>
<td>DU&lt;500 sq ft: 1.0/DU (M)</td>
<td>none (M)</td>
</tr>
<tr>
<td></td>
<td>1 bedroom: 1.25/DU (M)</td>
<td>none (M)</td>
</tr>
<tr>
<td></td>
<td>2 bedroom: 1.5/DU (M)</td>
<td>none (M)</td>
</tr>
<tr>
<td></td>
<td>3 bedroom: 1.75/DU (M)</td>
<td>none (M)</td>
</tr>
<tr>
<td>Manufactured Units</td>
<td>1.0/DU (M)</td>
<td>none (M)</td>
</tr>
<tr>
<td>Mobile Home Parks</td>
<td>1.0/DU (M)</td>
<td>none (M)</td>
</tr>
<tr>
<td>Group Living</td>
<td>1.0/room</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td>1.0/2.5 beds</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td>2.7/1,000(M)</td>
<td>1.0/5 beds</td>
</tr>
<tr>
<td>Transitional Housing</td>
<td>1.0/2.5 beds</td>
<td>none</td>
</tr>
<tr>
<td>Home Occupation</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>CIVIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Utilities</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Colleges</td>
<td>1.0/5 students/staff (M)</td>
<td>1.0/3.3 students/staff (M)</td>
</tr>
<tr>
<td></td>
<td>2.0/1,000</td>
<td>2.5/1,000</td>
</tr>
<tr>
<td>Community Recreation</td>
<td>2.0/1,000</td>
<td>2.5/1,000</td>
</tr>
<tr>
<td></td>
<td>4.0/1,000</td>
<td>4.5/1,000</td>
</tr>
<tr>
<td>Cultural Institutions</td>
<td>2.5/1,000</td>
<td>3.5/1,000</td>
</tr>
<tr>
<td></td>
<td>4.5/1,000</td>
<td>5.0/1,000</td>
</tr>
<tr>
<td>Home Care</td>
<td>Home: none</td>
<td>none</td>
</tr>
<tr>
<td>Emergency Services</td>
<td>3.0/1,000</td>
<td>3.5/1,000</td>
</tr>
<tr>
<td></td>
<td>4.5/1,000</td>
<td>5.0/1,000</td>
</tr>
<tr>
<td>Medical Centers</td>
<td>2.0/1,000(M)</td>
<td>2.7/1,000(M)</td>
</tr>
<tr>
<td></td>
<td>3.2/1,000(M)</td>
<td>3.2/1,000(M)</td>
</tr>
</tbody>
</table>

**Notes:**
- **NA:** Not Addressed
- **DU:** Dwelling Unit
- **M:** Metro Requirement
- **(M):** Required bicycle parking shall be required per the ratios below except in no case shall there be fewer than two space provided.
- **(M):** Refers to 1,000 sq. ft. of floor area, unless otherwise noted.
- **(M):** Does not include outpatient clinics or medical offices; see Medical/Dental Offices.

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| Off-Street Parking and Loading Requirements | 18.765-16 | SE: 4/05 |

---
<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum Required</th>
<th>Maximum Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postal Services</td>
<td>2.5/1,000</td>
<td>3.0/1,000</td>
</tr>
<tr>
<td>Public Support Facilities</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Religious Institutions</td>
<td>1.0/3 seats</td>
<td>1.0/1.7 seats</td>
</tr>
<tr>
<td>Schools</td>
<td>Preschool: 5.0+</td>
<td>Preschool: 7.0+</td>
</tr>
<tr>
<td>Social/Fraternal Clubs/Lodges</td>
<td>10.0/1,000</td>
<td>12.0/1,000</td>
</tr>
<tr>
<td>Commercial</td>
<td>1.0/room</td>
<td>1.2/room</td>
</tr>
<tr>
<td>Eating and Drinking Establishments</td>
<td>12.4/1,000 (M)</td>
<td>14.9/1,000 (M)</td>
</tr>
<tr>
<td>Entertainment - Oriented</td>
<td>1.0/3 seats</td>
<td>1.0/2.5 seats</td>
</tr>
<tr>
<td>Outdoor Entertainment</td>
<td>4.0/1,000 (M)</td>
<td>4.5/1,000 (M)</td>
</tr>
<tr>
<td>Indoor Entertainment</td>
<td>4.3/1,000 (M)</td>
<td>5.4/1,000 (M)</td>
</tr>
<tr>
<td>Adult Entertainment</td>
<td>2.5/1,000</td>
<td>3.5/1,000</td>
</tr>
<tr>
<td>General Retail</td>
<td>3.7/1,000 (M)</td>
<td>5.1/1,000 (M)</td>
</tr>
<tr>
<td>Personal Services</td>
<td>2.5/1,000</td>
<td>3.0/1,000</td>
</tr>
<tr>
<td>Repair - Oriented</td>
<td>3.3/1,000</td>
<td>4.0/1,000</td>
</tr>
<tr>
<td>Bulk Sales</td>
<td>1.0/1,000</td>
<td>1.3/1,000</td>
</tr>
<tr>
<td>Outdoor Sales</td>
<td>1.0/1,000</td>
<td>1.3/1,000</td>
</tr>
<tr>
<td>Animal - Related</td>
<td>3.3/1,000</td>
<td>4.0/1,000</td>
</tr>
</tbody>
</table>

[1] Existing buildings directly abutting Main Street are not required to add additional off-street parking for a change of use except for entertainment uses. New buildings or existing buildings that undergo remodeling provided the original square footage of the buildings remain the same also are not required to add additional off-street parking. Entertainment uses and construction of new buildings abutting Main Street require parking according to the standards of Table 18.765.2.

[2] Religious Institutions may provide 1 space for every 4 seats on site in the main assembly area provided that they supply the city with a parking plan that demonstrates that the peak parking demand of 1 space for every 3 seats is met utilizing any combination of the alternatives mentioned in this chapter. Adjustments to the minimum parking of 1 space for every 3 seats may be granted per applicable provisions of the code, but shall not decrease the amount of required on-site parking to less than 1 space for every 4 seats (unless the cumulative value of all adjustments granted results in an adjusted requirement of less than 1 space for every 4 seats).
<table>
<thead>
<tr>
<th>Use</th>
<th>Minimum Required</th>
<th>Maximum Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motor Vehicle Related</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor Vehicle Sales/Rental</td>
<td>1.0/1,000 but no less than 4.0</td>
<td>1.3/1,000 but no less than 4.0</td>
</tr>
<tr>
<td>Motor Vehicle Servicing/Repair</td>
<td>2.0/1,000 but no less than 4.0</td>
<td>2.3/1,000 but no less than 4.0</td>
</tr>
<tr>
<td>Vehicle Fuel Sales</td>
<td>3.0+2.0/service bay</td>
<td>4.0+2.0/service bay</td>
</tr>
<tr>
<td>Office</td>
<td>2.7/1,000 (M)</td>
<td>3.4/1,000 (M)</td>
</tr>
<tr>
<td></td>
<td>3.9/1,000 (M)</td>
<td>4.9/1,000 (M)</td>
</tr>
<tr>
<td>Self-Servicing Storage</td>
<td>1.0/4 storage units</td>
<td>1.0/4 storage units</td>
</tr>
<tr>
<td>Non-Accessory Parking</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td><strong>INDUSTRIAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Services</td>
<td>0.8/1,000</td>
<td>1.2/1,000</td>
</tr>
<tr>
<td>Manufacturing and Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Industrial</td>
<td>1.6/1,000 (M)</td>
<td>none</td>
</tr>
<tr>
<td>General Industrial</td>
<td>1.6/1,000 (M)</td>
<td>none</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>1.6/1,000 (M)</td>
<td>none</td>
</tr>
<tr>
<td>Railroad Yards</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Research and Development</td>
<td>2.0/1,000</td>
<td>3.0/1,000</td>
</tr>
<tr>
<td>Warehouse/Freight Movement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤150,000 sq ft</td>
<td>0.8/1,000</td>
<td>1.2/1,000</td>
</tr>
<tr>
<td>&gt;150,000 sq ft</td>
<td>0.8/1,000</td>
<td>1.2/1,000</td>
</tr>
<tr>
<td>Waste-Related</td>
<td>5.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Wholesale Sales</td>
<td>0.8/1,000</td>
<td>1.2/1,000</td>
</tr>
</tbody>
</table>
Table 18.765.2 Minimum and Maximum Required Off-street Vehicle and Bicycle Parking Requirements (Cont.)

<table>
<thead>
<tr>
<th>OTHER</th>
<th>Minimum Requirement</th>
<th>Maximum Requirement</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/Horticulture</td>
<td>2.5/1,000 sales area but no less than 4.0</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>Exempt</td>
<td>Exempt</td>
<td>Exempt</td>
</tr>
<tr>
<td>Detention Facilities</td>
<td>1.0/2.5 beds</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Heliports</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Mining</td>
<td>&lt;5.0</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Wireless Communication Facilities</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Rail Lines/Utility Corridors</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

(Ord. 02-13)
Chapter 18.775
SENSITIVE LANDS

Sections:

18.775.010 Purpose
18.775.020 Applicability of Uses: Permitted, Prohibited, and Nonconforming
18.775.030 Administrative Provisions
18.775.040 General Provisions for Floodplain Areas
18.775.050 General Provisions for Wetlands
18.775.060 Expiration of Approval: Standards for Extension of Time
18.775.070 Sensitive Land Permits
18.775.080 Application Submission Requirements
18.775.090 Special Provisions for Development Along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek
18.775.100 Adjustments to Underlying Zone Setback Standards
18.775.110 Density Transfer
18.775.120 Variances to Section 18.775.090 Standards
18.775.130 Plan Amendment Option

18.775.010 Purpose

A. Maintain integrity of rivers, streams, and creeks. Sensitive land regulations contained in this chapter are intended to maintain the integrity of the rivers, streams, and creeks in Tigard by minimizing erosion, promoting bank stability, maintaining and enhancing water quality, and fish and wildlife habitats, and preserving scenic quality and recreation potential.

B. Implement comprehensive plan and floodplain management program. The regulations of this chapter are intended to implement the comprehensive plan and the city’s flood plain management program as required by the National Flood Insurance Program, and help to preserve natural sensitive land areas from encroaching use and to maintain the February 18, 2005, zero-foot rise floodway elevation.

C. Implement Clean Water Service (CWS) Design and Construction Standards. The regulations of this chapter are intended to protect the beneficial uses of water within the Tualatin River Basin in accordance with the CWS “Design and Construction Standards”, as adopted February 7, 2000.

D. Implement the Metro Urban Growth Management Functional Plan. The regulations of this chapter are intended to protect the beneficial water uses and functions and values of resources within water quality and flood management areas and to implement the performance standards of the Metro Urban Growth Management Functional Plan.

E. Implement Statewide Planning Goal 5 (Natural Resources). The regulations in this chapter are intended to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule pertaining to wetland and riparian corridors.

F. Protect public health, safety, and welfare. Sensitive land areas are designated as such to protect the public health, safety, and welfare of the community through the regulation of these sensitive land areas.
G. Location. Sensitive lands are lands potentially unsuitable for development because of their location within:

1. The 100-year floodplain or 1996 flood inundation line, whichever is greater;
2. Natural drainageways;
3. Wetland areas which are regulated by the other agencies including the U.S. Army Corps of Engineers and the Division of State Lands, or are designated as significant wetland on the City of Tigard “Wetland and Stream Corridors Map”; and
4. Steep slopes of 25% or greater and unstable ground. (Ord. 05-01); and
5. Significant fish and wildlife habitat areas designated on the City of Tigard “Significant Habitat Areas Map”. Precise boundaries may vary from those shown on the map; specific delineations shall be conducted in accordance with the methodology in Section 18.775.140.

18.775.020 Applicability of Uses: Permitted, Prohibited, and Nonconforming

A. CWS Stormwater Connection Permit. All proposed “development”, must obtain a Stormwater Connection Permit from CWS pursuant to its “Design and Construction Standards”. As used in this chapter, the meaning of the word “development” shall be as defined in the CWS “Design and Construction Standards”: All human-induced changes to improved or unimproved real property including:

1. Construction of structures requiring a building permit, if such structures are external to existing structures;
2. Land division;
3. Drilling;
4. Site alterations resulting from surface mining or dredging;
5. Grading;
6. Construction of earthen berms;
7. Paving;
8. Excavation; or
9. Clearing when it results in the removal of trees or vegetation which would require a permit from the local jurisdiction or an Oregon Department of Forestry tree removal permit.

10. The following activities are not included in the definition of development:

a. Farming activities when conducted in accordance with accepted farming practices as defined in ORS 30.930 and under a Senate Bill 1010 water quality management plan;
b. Construction, reconstruction, or modification of a single family residence on an existing lot of record within a subdivision that was approved by the City or County after September 9, 1995 (from ORS 92.040(2)); and

c. Any development activity for which land use approvals have been issued pursuant to a land use application submitted to the City or County on or before February 4, 2000, and deemed complete or before March 15, 2000.

B. Outright permitted uses with no permit required. Except as provided below and by Sections 18.775.020.D, 18.775.020.F, and 18.775.020.G, the following uses are outright permitted uses within the 100-year floodplain, drainage ways, slopes that are 25% or greater, and unstable ground when the use does not involve paving. For the purposes of this chapter, the word “structure” shall exclude: children’s play equipment, picnic tables, sand boxes, grills, basketball hoops and similar recreational equipment.

1. Accessory uses such as lawns, gardens, or play areas; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS “Design and Construction Standards”, or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.

2. Farm uses conducted without locating a structure within the sensitive land area; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in CWS “Design and Construction Standards”, or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.

3. Community recreation uses, excluding structures; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS “Design and Construction Standards”, or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.

4. Public and private conservation areas for water, soil, open space, forest, and wildlife resources.

5. Removal of poison oak, tansy ragwort, blackberry, English ivy, or other noxious vegetation.

6. Maintenance of floodway excluding re-channeling; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS “Design and Construction Standards”, or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.

7. Fences; except in (a) the floodway area, (b) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS “design and Construction Standards”, or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.

8. Accessory structures which are less than 120 square feet in size; except in (a) the floodway area, (b) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS “Design and Construction Standards”, or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.

9. Land form alterations involving up to 10 cubic yards of material; except in (a) the floodway area, (b) a Water Quality Sensitive Area or Vegetative Corridor, as defined in the CWS “Design and
Construction Standards", or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.775.090.

C. Exemptions. When performed under the direction of the City, or in coordination with the City to implement the Clean Water Services Healthy Streams Plan, and in compliance with the provisions of the City of Tigard Standards and Specifications for Riparian Area Management, on file in the Engineering Division, and Clean Water Services Design and Construction Standards, the following shall be exempt from the provisions of this section:

1. Responses to public emergencies, including emergency repairs to public facilities;
2. Stream and wetlands restoration and enhancement programs;
3. Non-native vegetation removal;
4. Planting of native plant species; and
5. Routine maintenance or replacement of existing public facilities projects.

D. Jurisdictional wetlands. Landform alterations or developments which are only within wetland areas that meet the jurisdictional requirements and permit criteria of the U.S. Army Corps of Engineers, Division of State Lands, CWS, and/or other federal, state, or regional agencies, and are not designated as significant wetlands on the City of Tigard "Wetland and Streams Corridors Map", do not require a sensitive lands permit. The City shall require that all necessary permits from other agencies are obtained. All other applicable City requirements must be satisfied, including sensitive land permits for areas within the 100-year floodplain, slopes of 25% or greater or unstable ground, drainageways, and wetlands which are not under state or federal jurisdiction.

E. Administrative sensitive lands review.

1. Administrative sensitive lands permits in the 100-year floodplain, drainageway, slopes that are 25% or greater, and unstable ground shall be obtained from the appropriate community development division for the following:
   a. The City Engineer shall review the installation of public support facilities such as underground utilities and construction of roadway improvements including sidewalks, curbs, streetlights, and driveway aprons by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;
   b. The City Engineer shall review minimal ground disturbance(s) or landform alterations involving 10 to 50 cubic yards of material, except in the floodway area, for land that is within public easements and rights-of-way by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;
   c. The Director shall review minimal ground disturbance(s) or landform alterations involving 10 to 50 cubic yards of material, except in the floodway area by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;
   d. The Director shall review the repair, reconstruction, or improvement of an exiting structure or utility, the cost of which is less than 50 percent of the market value of the structure prior
to the improvement or the damage requiring reconstruction provided no development occurs in the floodway by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;

e. The Building Official shall review building permits for accessory structures which are 120 to 528 square feet in size, except in the floodway area; and

f. The Director shall review applications for paving on private property, except in the floodway area by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter.

2. The responsible community development division shall approve, approve with conditions, or deny an application for a development permit, as described above, based on the standards set forth in Sections 18.775.050, 18.775.070, and 18.775.080.

F. Sensitive lands permits issued by the Director.

1. The Director shall have the authority to issue a sensitive lands permit in the following areas by means of a Type II procedure, as governed in Section 18.390.040, using approval criteria contained in Section 18.775.070:

   a. Drainageways;

   b. Slopes that are 25% or greater or unstable ground; and

   c. Wetland areas which are not regulated by other local, state, or federal agencies and are designated as significant wetlands on the City of Tigard “Wetland and Streams Corridors Map”.

2. Sensitive lands permits shall be required for the areas in Section 18.775.020.F.1 above when any of the following circumstances apply:

   a. Ground disturbance(s) or land form alterations involving more than 50 cubic yards of material;

   b. Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction;

   c. Residential and non-residential structures intended for human habitation; and

   d. Accessory structures which are greater than 528 square feet in size, outside floodway areas.

G. Sensitive lands permits issued by the Hearings Officer.

1. The Hearings Officer shall have the authority to issue a sensitive lands permit in the 100-year floodplain by means of a Type IIIA procedure, as governed by Section 18.390.050, using approval criteria contained in Section 18.775.070.

2. Sensitive lands permits shall be required in the 100-year floodplain when any of the following circumstances apply:
a. Ground disturbance(s) or landform alterations in all floodway areas;

b. Ground disturbance(s) or landform alterations in floodway fringe locations involving more than 50 cubic yards of material;

c. Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction provided no development occurs in the floodway;

d. Structures intended for human habitation; and

e. Accessory structures which are greater than 528 square feet in size, outside of floodway areas.

H. Other uses. Except as explicitly authorized by other provisions of this chapter, all other uses are prohibited on sensitive land areas.

I. Nonconforming uses. A use established prior to the adoption of this title, which would be prohibited by this Chapter or which would be subject to the limitations and controls imposed by this Chapter, shall be considered a nonconforming use. Nonconforming uses shall be subject to the provisions of Chapter 18.760.

18.775.030 Administrative Provisions

A. Interagency Coordination. The appropriate approval authority shall review all sensitive lands permit applications to determine that all necessary permits shall be obtained from those federal, state, or local governmental agencies from which prior approval is also required.

1. As governed by CWS “Design and Construction Standards”, the necessary permits for all “development”, as defined in Section 18.775.020.A above, shall include a CWS Service Provider Letter, which specifies the conditions and requirements necessary, if any, for an applicant to comply with CWS water quality protection standards and for the Agency to issue a Stormwater Connection Permit.

B. Alteration or relocation of water course.

1. The Director shall notify communities adjacent to the affected area and the State Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;

2. The Director shall require that maintenance is provided within the altered or relocated portion of a watercourse so that the flood-carrying capacity is not diminished.

C. Apply Standards. The appropriate approval authority shall apply the standards set forth in Sections 18.775.040, and 18.775.070 when reviewing an application for a sensitive lands permit.

D. Elevation and flood-proofing certification. The appropriate approval authority shall require that the elevations and flood-proofing certification required in Section 18.775.030.E below be provided prior to permit issuance and verification upon occupancy and final approval.
E. Maintenance of records.

1. Where base flood elevation data is provided through the Flood Insurance Study, the Building Official shall obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;

2. For all new or substantially improved flood-proofed structures, the Building Official shall:
   a. Verify and record the actual elevation (in relation to mean sea level); and
   b. Maintain the flood-proofing certifications required in this chapter.

3. The Director shall maintain for public inspection all other records pertaining to the provisions in this chapter.

18.775.040 General Provisions for Floodplain Areas

A. Permit review. The appropriate approval authority shall review all permit applications to determine whether proposed building sites will minimize the potential for flood damage.

B. Special flood hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood Insurance Study of the City of Tigard,” effective February 18, 2005, with accompanying Flood Insurance Rate Maps effective February 18, 2005, is hereby adopted by reference and declared to be a part of this chapter. This Flood Insurance Study is on file at the Tigard Civic Center.

C. Base flood elevation data. When base flood elevation data has not been provided in accordance with Section 18.775.040.B above, the Director shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Sections 18.775.040.M and 18.775.040.N below.

D. Test of reasonableness. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits shall be reviewed to assure that the potential for flood damage to the proposed construction will be minimized. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these sensitive land areas may result in higher insurance rates.

E. Resistant to flood damage. All new construction and substantial improvements, including manufactured homes, shall be constructed with materials and utility equipment resistant to flood damage.

F. Minimize flood damage. All new construction and substantial improvements, including manufactured homes, shall be constructed using methods and practices that minimize flood damage.

G. Equipment protection. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
H. Water Supply Systems. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.

I. Anchoring. All new construction, all manufactured homes and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

J. Sanitary sewerage systems. New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of floodwater into the systems and discharge from the systems into floodwater.

K. On-site water disposal systems. On-site water disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

L. Residential Construction.

1. New construction and substantial improvement of any residential structure, including manufactured homes, shall have the lowest floor, including the basement, elevated at least one foot above base flood elevation;

2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
   a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
   b. The bottom of all openings shall be no higher than one foot above grade; and
   c. Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of flood waters.

3. Manufactured homes shall be securely anchored to an adequately anchored permanent foundation system. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

M. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation, or together with attendant utility and sanitary facilities, shall:

1. Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in Section 18.775.030.E.2; and

4. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 18.775.040.I.2. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).

N. Subdivisions and partitions in 100-year floodplain. Subdivisions and partitions in the 100-year floodplain shall meet the following criteria:

1. The design shall minimize the potential for flood damage;

2. Public utilities and facilities such as sewer, gas, electrical, and water systems shall be located and constructed so as to minimize flood damage;

3. Adequate drainage shall be provided to reduce exposure to flood damage; and

4. For subdivisions or partitions which contain more than 50 lots or 5 acres and where base flood elevation data is not available from the Federal Emergency Management Agency (FEMA) or another authoritative source, the applicant shall generate base flood elevation data to be reviewed as part of the application.

O. Recreational vehicles. Recreational vehicles placed on sites within zones A1-A30, AH, and AE on the community’s Flood Insurance Rate Map either:

1. Are on the site for fewer than 180 consecutive days;

2. Are fully licensed and ready for highway use:
   a. Are on wheels or jacking system,
   b. Are attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
   c. Meet the requirements of E, F, I, and L above and the elevation and anchoring requirements for manufactured homes. (Ord. 05-01)

18.775.050 General Provisions for Wetlands

A. Code compliance requirements. Wetland regulations apply to those areas classified as significant on the City of Tigard “Wetland and Streams Corridors Map”, and to a vegetated corridor ranging from 25 to 200 feet wide, measured horizontally, from the defined boundaries of the wetland, per “Table 3.1 Vegetated Corridor Widths” and “Appendix C” Natural Resource Assessments” of the CWS “Design and Construction Standards”. Wetland locations may include but are not limited to those areas identified as wetlands in “Wetland Inventory and Assessment for the City of Tigard, Oregon,” Fishman Environmental Services, 1994.

Sensitive Lands 18.775-9 Code Update: 4/05
B. **Delineation of wetland boundaries.** Precise boundaries may vary from those shown on wetland maps; specific delineation of wetland boundaries may be necessary. Wetland delineation will be done by qualified professionals at the applicant’s expense.

**18.775.060** Expiration of Approval: Standards for Extension of Time

A. **Voiding of permit.** Approval of a sensitive lands permit shall be void if:

1. Substantial construction of the approved plan has not begun within a one-and-one-half year period; or
2. Construction on the site is a departure from the approved plan.

B. **Granting of extension.** The Director shall, upon written request by the applicant and payment of the required fee, grant an extension of the approval period not to exceed one year, provided that:

1. No changes are made on the original plan as approved by the approval authority;
2. The applicant can show intent of initiating construction of the site within the one year extension period; and
3. There have been no changes to the applicable Comprehensive Plan policies and ordinance provisions on which the approval was based.

C. **Notice of the decision.** Notice of the decision shall be provided to the applicant. The Director’s decision may be appealed by the applicant as provided by Section 18.390.040.G and 18.390.040.H.

**18.775.070** Sensitive Land Permits

A. **Permits required.** An applicant who wishes to develop within a sensitive area, as defined in Chapter 18.775, must obtain a permit in certain situations. Depending on the nature and intensity of the proposed activity within a sensitive area, either a Type II or Type III permit is required, as delineated in Sections 18.775.020.F and 18.775.020.G. The approval criteria for various kinds of sensitive areas, e.g.; floodplain, are presented in Sections 18.775.070.B – 18.775.070.E below.

B. **Within the 100-year floodplain.** The Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:

1. Land form alterations shall preserve or enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;
2. Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.120 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards;

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*Sensitive Lands 18.775-10 Code Update: 4/05*
3. Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;

4. The land form alteration or development plan includes a pedestrian/bicycle pathway in accordance with the adopted pedestrian/bicycle pathway plan, unless the construction of said pathway is deemed by the Hearings Officer as untimely;

5. The plans for the pedestrian/bicycle pathway indicate that no pathway will be below the elevation of an average annual flood;

6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS permits and approvals shall be obtained; and

7. Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the comprehensive plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian/bicycle pathway plan.

C. With steep slopes. The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit on slopes of 25% or greater or unstable ground based upon findings that all of the following criteria have been satisfied:

1. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than that required for the use;

2. The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property;

3. The structures are appropriately sited and designed to ensure structural stability and proper drainage of foundation and crawl space areas for development with any of the following soil conditions: wet/high water table; high shrink-swell capability; compressible/organic; and shallow depth-to-bedrock; and

4. Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in accordance with Chapter 18.745, Landscaping and Screening.

D. Within drainageways. The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit within drainageways based upon findings that all of the following criteria have been satisfied:

1. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than that required for the use;

2. The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property;
3. The water flow capacity of the drainageway is not decreased;

4. Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in accordance with Chapter 18.745, Landscaping and Screening;

5. The drainageway will be replaced by a public facility of adequate size to accommodate maximum flow in accordance with the adopted 1981 Master Drainage Plan;

6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS approvals shall be obtained;

7. Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the Comprehensive Plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian bicycle pathway plan.

E. Within wetlands. The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:

1. The proposed land form alteration or development is neither on wetland in an area designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map nor is within the vegetative corridor established per "Table 3.1 Vegetative Corridor Widths" and Appendix C: Natural Resources Assessments" of the CWS "Design and Construction Standards", for such a wetland;

2. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use;

3. Any encroachment or change in on-site or off-site drainage which would adversely impact wetland characteristics have been mitigated;

4. Where natural vegetation has been removed due to land form alteration or development, erosion control provisions of the Surface Water Management program of Washington County must be met and areas not covered by structures or impervious surfaces will be replanted in like or similar species in accordance with Chapter 18.745, Landscaping and Screening;

5. All other sensitive lands requirements of this chapter have been met;

6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS approvals shall be obtained;

7. The provisions of Chapter 18.790, Tree Removal, shall be met;

8. Physical Limitations and Natural Hazards, Floodplains and Wetlands, Natural Areas, and Parks, Recreation and Open Space policies of the Comprehensive Plan have been satisfied.
**18.775.080 Application Submission Requirements**

A. **Application submission requirements.** All applications for uses and activities identified in Sections 18.775.020.A – 18.775.020.G shall be made on forms provided by the Director and must include the following information in graphic, tabular and/or narrative form. The specific information on each of the following is available from the Director:

1. A CWS Stormwater Connection permit;
2. A site plan;
3. A grading plan; and
4. A landscaping plan.

**18.775.090 Special Provisions for Development within Locally Significant Wetlands and Along the Tualatin River, Fanno Creek, Ball Creek, and South Fork of Ash Creek**

A. In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 666-023-0030) pertaining to wetlands, all wetlands classified as significant on the City of Tigard “Wetlands and Streams Corridors Map” are protected. No land form alterations or developments are allowed within or partially within a significant wetland, except as allowed/approved pursuant to Section 18.775.130.

B. In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to riparian corridors, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top of the bank, is established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.

1. The standard width for “good condition” vegetated corridors along the Tualatin River is 75 feet, unless wider in accordance with CWS “Design and Construction Standards”, or modified in accordance with Section 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard “Wetlands and Streams Corridors Map”) is located within the 75-foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.

2. The standard width for “good condition” vegetated corridors along Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50 feet, unless wider in accordance with CWS “Design and Construction Standards”, or modified in accordance with Section 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard “Wetlands and Streams Corridors Map”) is located within the 50 foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.

3. The minimum width for “marginal or degraded condition” vegetated corridors along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50% of the standard width, unless wider in accordance with CWS “Design and Construction Standards”, or modified in accordance with Section 18.775.130.

4. The determination of corridor condition shall be based on the Natural Resource Assessment guidelines contained in the CWS “Design and Construction Standards”.

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*Sensitive Lands 18.775-13 Code Update: 4/05*
5. The standard setback distance or vegetated corridor area applies to all development proposed on property located within or partially within the vegetated corridors, except as allowed below:

a. Roads, pedestrian or bike paths crossing the vegetated corridor from one side to the other in order to provide access to the sensitive area or across the sensitive area, as approved by the City per Section 18.775.070 and by CWS “Design and Construction Standards”;

b. Utility/service provider infrastructure construction (i.e. storm, sanitary sewer, water, phone, gas, cable, etc.), if approved by the City and CWS;

c. A pedestrian or bike path, not exceeding 10 feet in width and meeting the CWS “Design and Construction Standards”;

d. Grading for the purpose of enhancing the vegetated corridor, as approved by the City and CWS;

e. Measures to remove or abate hazards, nuisances, or fire and life safety violations, as approved by the regulating jurisdiction;

f. Enhancement of the vegetated corridor for water quality or quantity benefits, fish, or wildlife habitat, as approved by the City and CWS;

g. Measures to repair, maintain, alter, remove, add to, or replace existing structures, roadways, driveways, utilities, accessory uses, or other developments provided they are consistent with City and CWS regulations, and do not encroach further into the vegetated corridor or sensitive area than allowed by the CWS “Design and Construction Standards.

6. Land form alterations or developments located within or partially within the Goal 5 safe harbor setback or vegetated corridor areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek that meet the jurisdictional requirements and permit criteria of the CWS, U.S. Army Corps of Engineers, Division of State Lands, and/or other federal, state, or regional agencies, are not subject to the provisions of Section 18.775.090.B, except where the:

a. Land form alterations or developments are located within or partially within a good condition vegetated corridor, as defined in Sections 18.775.090.B.1 and 18.775.090.B.2;

b. Land form alterations or developments are located within or partially within the minimum width area established for marginal or a degraded condition vegetated corridor, as defined in Section 18.775.090.B.3.

These exceptions reflect instances of the greater protection of riparian corridors provided by the safe harbor provisions of the Goal 5 administrative rule.

18.775.100 Adjustments to Underlying Zone Setback Standards

Adjustments to dimensional standards of the underlying zone district may be approved by the Planning Director when necessary to further the purpose of this section.

A. Adjustment option. The Planning Director may approve up to 50% adjustment to any dimensional standard (e.g., setback height or lot area) of the underlying zone district to allow development...
consistent with the purposes of this section. The purpose of the adjustment process is to reduce adverse impacts on wetlands, stream corridors, fish and wildlife habitat, water quality and the potential for slope of flood hazards.

B. Adjustment criteria. A special adjustment to the standards in the underlying zoning district may be requested under Type II procedure when development is proposed within or adjacent to the vegetated corridor area or within or adjacent to areas designated as “Strictly Limit” or “Moderately Limit” on the City of Tigard “Significant Habitat Areas Map.” Verification of significant habitat boundaries shall be done in accordance with the procedures described in Section 18.775.140. In order for the Director to approve a dimensional adjustment to standards in the underlying zoning district, the applicant shall demonstrate that all the following criteria are fully satisfied:

1. The adjustment is the minimum necessary to allow a permitted use, while at the same time minimizing disturbance to a water resource, riparian setback area or water quality buffer.

2. Explicit consideration has been given to maximizing vegetative cover, minimizing excavation and minimizing impervious surface area on unbuildable land.

3. Design options have been considered to reduce the impacts of development, including but not limited to multi-story construction, siting of the residence close to the street to reduce driveway distance, maximizing the use of native landscaping materials, minimizing parking areas, minimizing hydrologic impacts and garage space.

4. In no case shall the impervious surface area as a single-family residence (including the building footprint, driveway and parking areas, accessory structures, swimming pools and patios) exceed 3,000 square feet of a vegetated corridor area.

5. Assurances are in place to guarantee that future development will not encroach further on land under the same ownership within the vegetated corridor area.

6. Protected vegetated corridor, significant habitat areas and adjacent buffer areas must be:
   a. Placed in a non-buildable tract or protected with a restrictive easement.
   b. Restoration and enhancement of habitat and buffer areas required, including monitoring for five years.

Note:
At their public workshop meeting on November 21, 2006, Council asked staff to reconsider the proposed language (18.775.100.B.6) requiring restoration, enhancement and monitoring of protected areas and that these areas be placed in a non-buildable tract or restrictive easement. Council also questioned the usefulness of “restrictive easements” as a tool for protecting habitat. Staff is in the process of considering alternatives and preparing a response to these concerns.

C. Reduction to Minimum Density Requirements for Developments That Include Inventoried Significant Habitat Areas. The minimum number of units required by Section 18.510.040 (Density Calculation) may be waived if necessary to ensure that impacts on habitat areas are minimized.

1. Approval criteria: Reduction requests will be approved if the review body finds that the applicant has shown that the following criteria are met:

   Sensitive Lands  18.775-15  Code Update: 4/05
a. An area of the property lot or parcel to be developed has been identified on the Significant Habitat Areas Map.” Verification of significant habitat boundaries shall be done in accordance with the procedures described in Section 18.775.140. Delineation of habitat boundaries: Precise boundaries may vary from those shown on the “Significant Habitat Areas Map”; specific precise delineation of significant habitat boundaries will be done by qualified professionals at the applicant’s expense using the methodology described in Section 18.775.140.

b. The proposal will be consistent with the character of the neighboring area.

c. This provision may only be applied to properties that were inside the Metro Urban Growth Boundary (UGB) on January 1, 2002.

d. The proposal will directly result in the protection of significant habitat areas through placement in a non-buildable tract or protected with a restrictive easement.

2. Procedure:

a. The amount of reduction in the minimum density shall be calculated by subtracting the number of square feet of inventoried significant habitat that is permanently protected from the total number of square feet used to calculate the minimum density requirement.

b. Requests for a reduction are processed as a Type II procedure along with the development proposal for which the application has been filed.

The Planning Director may impose any reasonable condition necessary to mitigate identified impacts resulting from development on otherwise unbuildable land.

18.775.110 Density Transfer

Density may be transferred from vegetated corridor areas as provided in Sections 18.715.020 – 18.715.030.

18.775.120 Variances to Section 18.775.090 Standards

Variances to the use provisions of Section 18.775.090 are not permitted. Variances from measurable (dimensional) provisions of this section shall be discouraged and may be considered only as a last resort.

A. Type II variance option. The Hearings Officer shall hear and decide variances from dimensional provisions of this chapter under Type III procedure, in accordance with the criteria in Chapter 18.370 of the zoning ordinance.

B. Additional criteria. In addition to the general variance criteria described in Chapter 18.370, all the following additional criteria must be met to grant a variance to any dimensional provision of this chapter:

1. The variance is necessary to allow reasonable economic use of the subject parcel of land, which is owned by the applicant, and which was not created after the effective date of this chapter;

Sensitive Lands 18.775-16 Code Update: 4/05
2. Strict application of the provisions of this chapter would otherwise result in the loss of a buildable site for a use that is permitted outright in the underlying zoning district, and for which the applicant has submitted a formal application;

3. The applicant has exhausted all options available under this chapter to relieve the hardship;

4. Based on review of all required studies identical to those described in Section 3.02.5.c Tier 2 Alternatives Analysis of the CWS “Design and Construction Standards”, the variance is the minimum necessary to afford relief, considering the potential for increased flood and erosion hazard, and potential adverse impacts on native vegetation, fish and wildlife habitat, and water quality;

5. Based on review of all required studies identical to those described in Section 3.02.5 of the CWS “Design and Construction Standards”, no significant adverse impacts on water quality, erosion or slope stability will result from approval of this hardship variance, or these impacts have been mitigated to the greatest extent possible;

6. Loss of vegetative cover shall be minimized. Any lost vegetative cover shall be replaced on-site, on a square foot for square foot basis, by native vegetation.

18.775.130 Plan Amendment Option

Any owner of property affected by the Goal 5 safe harbor (1) protection of significant wetlands and/or (2) vegetated areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek may apply for a quasi-judicial comprehensive plan amendment under Type IV procedure. This amendment must be based on a specific development proposal. The effect of the amendment would be to remove Goal 5 protection from the property, but not to remove the requirements related to the CWS Stormwater Connection Permit, which must be addressed separately through an Alternatives Analysis, as described in Section 3.02.5 of the CWS “Design and Construction Standards”. The applicant shall demonstrate that such an amendment is justified by either of the following:

A. ESEE analysis. The applicant may prepare an Environmental, Social, Economic and Energy (ESEE) consequences analysis prepared in accordance with OAR 660-23-040.

1. The analysis shall consider the ESEE consequences of allowing the proposed conflicting use, considering both the impacts on the specific resource site and the comparison with other comparable sites within the Tigard Planning Area;

2. The ESEE analysis must demonstrate to the satisfaction of the Tigard City Council that the adverse economic consequences of not allowing the conflicting use are sufficient to justify the loss, or partial loss, of the resource;

3. In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning area that can meet the specific needs of the proposed use;

4. The ESEE analysis shall be prepared by a team consisting of a wildlife biologist or wetlands ecologist and a land use planner or land use attorney, all of whom are qualified in their respective fields and experienced in the preparation of Goal 5 ESEE analysis;

Sensitive Lands 18.775-17 Code Update: 4/05
5. If the application is approved, then the ESEE analysis shall be incorporated by reference into the Tigard Comprehensive Plan, and the “Tigard Wetland and Stream Corridor Map” shall be amended to remove the site from the inventory.

B. Determination of “insignificance”. In this case, the applicant must demonstrate that the sensitive area site(s) no longer meet(s) the applicable significance threshold defined by the Goal 5 administrative rule, relative to other comparable resources within the Tigard Planning Area.

1. Significance thresholds are described and applied in the addendum to the City of Tigard Local Wetlands Inventory adopted by reference as part of this chapter.

2. In considering this claim, the City Council shall determine that the decline in identified resource values did not result from a violation of this chapter or any other provision of the Tigard Community Development Code.

18.775.140 Significant Habitat Areas Map Verification Procedures Delineation Methodology.

A. Delineation Methodology—The Significant Habitat Areas Map shall be the basis for determining the general location of Significant Habitat Areas on or adjacent to the site.

A. Applicants who concur that the Significant Habitat Areas Map is accurate shall submit the following information to serve as the basis for verifying the boundaries of inventoried habitat areas:

1. Submission requirements.

   a. A detailed property description;

   b. A scale map of the property showing the locations of Significant Habitat Areas, any existing built area, wetlands or water bodies, Clean Water Services’ vegetated corridor, the 100-year floodplain, the 1996 flood inundation line, and contour lines (2-ft. intervals for slope less than 15% and 10-ft intervals for slopes 15% or greater); and

   c. A current aerial photograph of the property.

2. Decision Process. The Planning Director’s decision shall be based on consideration of submitted information, site visit information, and other factual information. Should the applicant disagree with the Planning Director’s determination on the location of significant habitat areas on the property, the precise boundaries shall be verified by the applicant in accordance with the detailed delineation methodology outlined in Section 18.775.140.B.

B. Applicants who believe that the map is inaccurate shall submit a detailed If resources are indicated on the map, delineations shall be conducted by a qualified professional in accordance with the following methodology to verify the precise boundaries of the inventoried habitat areas by means of a Type II procedure.

1. Verifying boundaries of inventoried riparian habitat. Locating habitat and determining its riparian habitat class is a four-step process:

   a. Locate the Water Feature that is the basis for identifying riparian habitat.
1) Locate the top of bank of all streams, rivers, and open water within 200 feet of the property.

2) Locate all flood areas—the 100-year floodplain or 1996 flood inundation line, whichever is greater, within 100 feet of the property.

3) Locate all wetlands within 150 feet of the property based on the Tigard "Wetland and Stream Corridors Map" and on the Metro 2002 Wetland Inventory Map (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232). Identified wetlands on the property shall be further delineated consistent with methods currently accepted by the Oregon Division of State Lands and the U.S. Army Corps of Engineers.

b. Identify the vegetative cover status of all areas on the property that are within 200 feet of the top of bank of streams, rivers, and open water, are wetlands or are within 150 feet of wetlands, and are flood areas and within 100 feet of flood areas.

1) Vegetative cover status shall be as identified on the Metro Vegetative Cover Map

2) The vegetative cover status of a property may be adjusted only if (1) the property was developed prior to the time the regional program was approved, or (2) an error was made at the time the vegetative cover status was determined. To assert the latter type of error, applicants shall submit an analysis of the vegetative cover on their property using summer 2002 aerial photographs and the following definitions of vegetative cover types in Table 18.775.1.

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low structure vegetation or open</td>
<td>Areas that are part of a contiguous area one acre or larger of grass, meadow, crop-</td>
</tr>
<tr>
<td>soils</td>
<td>lands, or areas of open soils located within 300 feet of a surface stream (low structure vegetation areas may include areas of</td>
</tr>
<tr>
<td></td>
<td>shrub vegetation less than one acre in size if they are contiguous with areas of grass, meadow, crop-lands, orchards,</td>
</tr>
<tr>
<td></td>
<td>Christmas tree farms, holly farms, or areas of open soils located within 300 feet of a surface stream and together form an area</td>
</tr>
<tr>
<td></td>
<td>of one acre in size or larger).</td>
</tr>
<tr>
<td>Woody vegetation</td>
<td>Areas that are part of a contiguous area one acre or larger of shrub or open or scattered forest canopy (less than 60% crown</td>
</tr>
<tr>
<td></td>
<td>closure) located within 300 feet of a surface stream.</td>
</tr>
<tr>
<td>Forest canopy</td>
<td>Areas that are part of a contiguous grove of trees of one acre or larger in area with approximately 60% or greater crown closure,</td>
</tr>
<tr>
<td></td>
<td>irrespective of whether the entire grove is within 200 feet of the relevant water feature.</td>
</tr>
</tbody>
</table>

c. Determine whether the degree that the land slopes upward from all streams, rivers, and open water within 200 feet of the property is greater than or less than 25% (using the vegetated corridor measurement methodology as described in Clean Water Services Design and Construction Standards); and

d. Identify the riparian habitat classes applicable to all areas on the property using Table 18.775.2 and Table 18.775.3.
Table 18.775.2
Method for Locating Boundaries of Class I and II Riparian Areas

<table>
<thead>
<tr>
<th>Distance in feet from Water Feature</th>
<th>Developed areas not providing vegetative cover</th>
<th>Low structure vegetation or open soils</th>
<th>Woody vegetation (shrub and scattered forest canopy)</th>
<th>Forest Canopy (closed to open forest canopy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Streams</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-50</td>
<td>Class II</td>
<td>Class I</td>
<td>Class I</td>
<td>Class I</td>
</tr>
<tr>
<td>50-100</td>
<td>Class II</td>
<td>Class I</td>
<td>Class I</td>
<td>Class I</td>
</tr>
<tr>
<td>100-150</td>
<td>Class II if slope&gt;25%</td>
<td>Class I if slope&gt;25%</td>
<td>Class II</td>
<td>Class II if slope&gt;25%</td>
</tr>
<tr>
<td>150-200</td>
<td>Class II if slope&gt;25%</td>
<td>Class I if slope&gt;25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wetlands (Wetland feature itself is a Class I Riparian Area)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-100</td>
<td>Class II</td>
<td>Class I</td>
<td>Class I</td>
<td>Class I</td>
</tr>
<tr>
<td>100-150</td>
<td>Class II</td>
<td>Class I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flood Areas (Undeveloped portion of flood area is a Class I Riparian Area)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-100</td>
<td>Class II</td>
<td>Class I</td>
<td>Class I</td>
<td>Class I</td>
</tr>
</tbody>
</table>

The vegetative cover type assigned to any particular area was based on two factors: the type of vegetation observed in aerial photographs and the size of the overall contiguous area of vegetative cover to which a particular piece of vegetation belonged. As an example of how the categories were assigned, in order to qualify as "forest canopy" the forested area had to be part of a larger patch of forest of at least one acre in size.

Areas that have been identified as habitats of concern, as designated on the Metro Habitats of Concern Map (on file in the Metro Council office), shall be treated as Class I riparian habitat areas in all cases, subject to the provision of additional information that establishes that they do not meet the criteria used to identify habitats of concern as described in Metro’s Technical Report for Fish and Wildlife. Examples of habitats of concern include: Oregon white oak woodlands, bottomland hardwood forests, wetlands, native grasslands, riverine islands or deltas, and important wildlife migration corridors.

Table 18.775.3
Tualatin Basin “Limit” Decision

<table>
<thead>
<tr>
<th>RESOURCE CATEGORY</th>
<th>CONFLICTING USE CATEGORY</th>
<th>High Intensity Urban</th>
<th>Other Urban</th>
<th>Future Urban (2002 and 2004 additions)</th>
<th>Non-Urban (outside UGB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I &amp; II Riparian Inside Vegetated Corridor</td>
<td>Moderately Limit</td>
<td>Strictly Limit</td>
<td>Strictly Limit</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Class I &amp; II Riparian Outside Vegetated Corridor</td>
<td>Moderately Limit</td>
<td>Moderately Limit</td>
<td>Moderately Limit</td>
<td>Moderately Limit</td>
<td></td>
</tr>
<tr>
<td>All Other Resource Areas</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td></td>
</tr>
<tr>
<td>Inner Impact Area</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td></td>
</tr>
<tr>
<td>Outer Impact Area</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td>Lightly Limit</td>
<td></td>
</tr>
</tbody>
</table>

* Vegetated Corridor standards are applied consistently throughout the District; in HIU areas they supersede the "limit" decision.
2. **Verifying boundaries of inventoried upland habitat.** Upland habitat was identified based on the existence of contiguous patches of forest canopy, with limited canopy openings. The "forest canopy" designation is made based on analysis of aerial photographs, as part of determining the vegetative cover status of land within the region. Upland habitat shall be as identified on the Significant Habitat Areas Map unless corrected as provided in this subsection.

   a. Except as provided below, vegetative cover status shall be as identified on the Metro Vegetative Cover Map used to inventory habitat at the time the area was brought within the urban growth boundary (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232).

   b. The only allowed corrections to the vegetative cover status of a property are as follows:

      1) To correct errors made when the vegetative status of an area was determined based on analysis of the aerial photographs used to inventory the habitat at the time the area was brought within the urban growth boundary. The perimeter of an area delineated as "forest canopy" on the Metro Vegetative Cover Map may be adjusted to more precisely indicate the dripline of the trees within the canopied area provided that no areas providing greater than 60% canopy crown closure are de-classified from the "forest canopy" designation. To assert such errors, applicants shall submit an analysis of the vegetative cover on their property using the aerial photographs that were used to inventory the habitat at the time the area was brought within the urban growth boundary and the definitions of the different vegetative cover types provided in Table 18.775.1; and

      2) To remove tree orchards and Christmas tree farms from inventoried habitat; provided, however, that Christmas tree farms where the trees were planted prior to 1975 and have not been harvested for sale as Christmas trees shall not be removed from the habitat inventory.

   c. If the vegetative cover status of any area identified as upland habitat is corrected pursuant to 18.775.140.A.2.b.1. to change the status of an area originally identified as "forest canopy," then such area shall not be considered upland habitat unless it remains part of a forest canopy opening less than one acre in area completely surrounding by an area of contiguous forest canopy.
Chapter 18.810
STREET AND UTILITY IMPROVEMENT STANDARDS

Sections:

18.810.010 Purpose
18.810.020 General Provisions
18.810.030 Streets
18.810.040 Blocks
18.810.050 Easements
18.810.060 Lots
18.810.070 Sidewalks
18.810.080 Public Use Areas
18.810.090 Sanitary Sewers
18.810.100 Storm Drainage
18.810.110 Bikeways and Pedestrian Pathways
18.810.120 Utilities
18.810.130 Cash or Bond Required
18.810.140 Monuments
18.810.150 Installation Prerequisite
18.810.160 Installation Conformation
18.810.170 Plan Check
18.810.180 Notice to City
18.810.190 City Inspection
18.810.200 Engineer's Certification
18.810.210 Completion Requirements

18.810.010 Purpose

A. Purpose. The purpose of this chapter is to provide construction standards for the implementation of public and private facilities and utilities such as streets, sewers, and drainage.

18.810.020 General Provisions

A. When standards apply. Unless otherwise provided, construction, reconstruction or repair of streets, sidewalks, curbs and other public improvements shall occur in accordance with the standards of this title. No development may occur and no land use application may be approved unless the public facilities related to development comply with the public facility requirements established in this section and adequate public facilities are available. Applicants may be required to dedicate land and build required public improvements only when the required exaction is directly related to and roughly proportional to the impact of the development.

B. Standard specifications. The City Engineer shall establish standard specifications consistent with the application of engineering principles.

C. Section 7.40 applies. The provision of Section 7.40 of the Tigard Municipal Code shall apply to this chapter.

D. Adjustments. Adjustments to the provisions in this chapter related to street improvements may be

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Street Utility Improvement Standards 18.810-1 Code Update: 10/02
granted by means of a Type II procedure, as governed by Section 18.390.040, using approval
criteria in Section 18.370.030 C9. (Ord. 99-22)

E. Except as provided in Section 18.810.030S, as used in this chapter, the term "streets" shall mean "public streets" unless an adjustment under Section 18.810.020.D is allowed. (Ord. 99-22)

18.810.030 Streets

A. Improvements.

1. No development shall occur unless the development has frontage or approved access to a public street.

2. No development shall occur unless streets within the development meet the standards of this chapter.

3. No development shall occur unless the streets adjacent to the development meet the standards of this chapter, provided, however, that a development may be approved if the adjacent street does not meet the standards but half-street improvements meeting the standards of this title are constructed adjacent to the development.

4. Any new street or additional street width planned as a portion of an existing street shall meet the standards of this chapter;

5. If the City could and would otherwise require the applicant to provide street improvements, the City Engineer may accept a future improvements guarantee in lieu of street improvements if one or more of the following conditions exist:
   a. A partial improvement is not feasible due to the inability to achieve proper design standards;
   b. A partial improvement may create a potential safety hazard to motorists or pedestrians;
   c. Due to the nature of existing development on adjacent properties it is unlikely that street improvements would be extended in the foreseeable future and the improvement associated with the project under review does not, by itself, provide a significant improvement to street safety or capacity;
   d. The improvement would be in conflict with an adopted capital improvement plan;
   e. The improvement is associated with an approved land partition on property zoned residential and the proposed land partition does not create any new streets; or
   f. Additional planning work is required to define the appropriate design standards for the street and the application is for a project which would contribute only a minor portion of the anticipated future traffic on the street.

6. The standards of this chapter include the standard specifications adopted by the City Engineer pursuant to Section 18.810.020.B.

Street Utility Improvement Standards 18.810-2 Code Update: 10/02
7. The approval authority may approve adjustments to the standards of this chapter if compliance with the standards would result in an adverse impact on natural features such as wetlands, bodies of water, significant habitat areas, steep slopes, or existing mature trees. The approval authority may also approve adjustments to the standards of this chapter if compliance with the standards would have a substantial adverse impact on existing development or would preclude development on the property where the development is proposed. In approving an adjustment to the standards, the approval authority shall balance the benefit of the adjustment with the impact on the public interest represented by the standards. In evaluating the impact on the public interest, the approval authority shall consider the criteria listed in Section 18.810.030 E.1. An adjustment to the standards may not be granted if the adjustment would risk public safety.

B. Creation of rights-of-way for streets and related purposes. Rights-of-way shall be created through the approval of a final subdivision plat or major partition; however, the Council may approve the creation of a street by acceptance of a deed, provided that such street is deemed essential by the Council for the purpose of general traffic circulation:

1. The Council may approve the creation of a street by deed of dedication without full compliance with the regulations applicable to subdivisions or major partitions if any one or more of the following conditions are found by the Council to be present:

   a. Establishment of a street is initiated by the Council and is found to be essential for the purpose of general traffic circulation, and partitioning or subdivision of land has an incidental effect rather than being the primary objective in establishing the road or street for public use; or

   b. The tract in which the road or street is to be dedicated is an isolated ownership of one acre or less and such dedication is recommended by the Commission to the Council based on a finding that the proposal is not an attempt to evade the provisions of this title governing the control of subdivisions or major partitions.

2. With each application for approval of a road or street right-of-way not in full compliance with the regulations applicable to the standards, the proposed dedication shall be made a condition of subdivision and major partition approval:

   a. The applicant shall submit such additional information and justification as may be necessary to enable the Commission in its review to determine whether or not a recommendation for approval by the Council shall be made;

   b. The recommendation, if any, shall be based upon a finding that the proposal is not in conflict with the purpose of this title;

   c. The Commission in submitting the proposal with a recommendation to the Council may attach conditions which are necessary to preserve the standards of this title; and

3. All deeds of dedication shall be in a form prescribed by the City and shall name “the public,” as grantee.
C. Creation of access easements. The approval authority may approve an access easement established by deed without full compliance with this title provided such an easement is the only reasonable method by which a lot large enough to develop can be created:

1. Access easements shall be provided and maintained in accordance with the Uniform Fire Code Section 10.207;

2. Access shall be in accordance with Sections 18.705.030.H and 18.705.030I.

D. Street location, width and grade. Except as noted below, the location, width and grade of all streets shall conform to an approved street plan and shall be considered in their relation to existing and planned streets, to topographic conditions, to public convenience and safety, and in their appropriate relation to the proposed use of the land to be served by such streets:

1. Street grades shall be approved by the City Engineer in accordance with Subsection M below; and

2. Where the location of a street is not shown in an approved street plan, the arrangement of streets in a development shall either:
   a. Provide for the continuation or appropriate projection of existing streets in the surrounding areas, or
   b. Conform to a plan adopted by the Commission, if it is impractical to conform to existing street patterns because of particular topographical or other existing conditions of the land. Such a plan shall be based on the type of land use to be served, the volume of traffic, the capacity of adjoining streets and the need for public convenience and safety.

E. Minimum rights-of-way and street widths. Unless otherwise indicated on an approved street plan, or as needed to continue an existing improved street, street right-of-way and roadway widths shall not be less than the minimum width described below. Where a range is indicated, the width shall be determined by the decision-making authority based upon anticipated average daily traffic (ADT) on the new street segment. (The City Council may adopt by resolution, design standards for street construction and other public improvements. The design standards will provide guidance for determining improvement requirements within the specified ranges.) These are presented in Table 18.810.1.

1. The decision-making body shall make its decision about desired right-of-way width and pavement width of the various street types within the subdivision or development after consideration of the following:
   a. The type of road as set forth in the Comprehensive Plan Transportation Chapter - Functional Street Classification;
   b. Anticipated traffic generation;
   c. On-street parking needs;
   d. Sidewalk and bikeway requirements;

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Street Utility Improvement Standards 18.810-4 Code Update: 10/02
e. Requirements for placement of utilities;
f. Street lighting;
g. Drainage and slope impacts;
h. Street tree location;
i. Planting and landscape areas;
j. Safety and comfort for motorists, bicyclists, and pedestrians;
k. Access needs for emergency vehicles.
## Table 18.810.1  
### Minimum Widths for Street Characteristics

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>Right-of-Way Width (Ft)</th>
<th>Pavement Width (Ft)</th>
<th>Number of Lanes</th>
<th>Min. Lane Width (Ft)</th>
<th>On-street Parking Width (Ft)</th>
<th>Bike Lane Width (Ft)</th>
<th>Sidewalk Width (Ft)</th>
<th>Landscape Strip Width (Ft) exclusive of curb</th>
<th>Median Width (Ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial</td>
<td>64'-128'</td>
<td>Varies</td>
<td>2 - 7 (Refer to TSP)</td>
<td>12'</td>
<td>N/A</td>
<td>6' (New Streets)</td>
<td>5'-6' (Existing Streets)</td>
<td>8' (Res. &amp; Ind. Zones)</td>
<td>10' (Comm. Zones)</td>
</tr>
<tr>
<td>Collector</td>
<td>58'-96'</td>
<td>Varies</td>
<td>2 - 5 (Refer to TSP)</td>
<td>11'</td>
<td>N/A</td>
<td>6' (New Streets)</td>
<td>5'-6' (Existing Streets)</td>
<td>6' (Res. &amp; Ind. Zones)</td>
<td>8' (Comm. Zones)</td>
</tr>
<tr>
<td>Neighborhood Route</td>
<td>50'–58'</td>
<td>28'-36'</td>
<td>2</td>
<td>10'</td>
<td>8'</td>
<td>5'-6'</td>
<td>5'-6&quot;(2)</td>
<td>5'</td>
<td>N/A</td>
</tr>
<tr>
<td>Local: Industrial/Commercial</td>
<td>50'</td>
<td>36'</td>
<td>2</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>5'-6&quot;(2)</td>
<td>5'</td>
<td>N/A</td>
</tr>
<tr>
<td>Local: Residential</td>
<td>Under 1500 ADT</td>
<td>54'/50&quot;(3)</td>
<td>2</td>
<td>8' (both sides)</td>
<td>N/A</td>
<td>N/A</td>
<td>5'-6&quot;(3)</td>
<td>5'</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Under 500 ADT</td>
<td>50'/46&quot;(3)</td>
<td>2</td>
<td>8' (one side)</td>
<td>N/A</td>
<td>N/A</td>
<td>5'-6&quot;(3)</td>
<td>5'</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Under 200 ADT</td>
<td>46'/42&quot;(3)</td>
<td>2</td>
<td>(No Parking)</td>
<td>N/A</td>
<td>N/A</td>
<td>5'-6&quot;(3)</td>
<td>5'</td>
<td>N/A</td>
</tr>
<tr>
<td>Cul-de-sac bulbs in Industrial and Commercial zones</td>
<td>50' radius</td>
<td>42' radius</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Cul-de-sac bulbs in Residential zones</td>
<td>47' radius</td>
<td>40' radius</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Alley: Residential</td>
<td>16'</td>
<td>16&quot;</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Alley: Business</td>
<td>20'</td>
<td>20&quot;</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

(Ord. 02-33)

1. Medians required for 5 and 7 lane roadways. They are optional for 3 lane roadways.
2. Sidewalk widths for these streets shall be 5 ft with landscape strip: 6 ft if against curb (if permitted in accordance with 18.810.070.C).
3. "Skinny Street" roadway widths are permitted where cross section and review criteria are met. Refer to corresponding cross sections (Figures 18.810.3, 18.810.4 and 18.810.5) for details and conditions.
Figure 18.810.1
Arterials Sample Cross Sections
(Ord. 02-33)

2 Lane 6'-6" RW

3 Lane 7'-0" RW

5 Lane 8'-10" RW

7 Lane 10'-12" RW

Street Utility Improvement Standards 18.810-7 Code Update: 10/02
Figure 18.810.2
Collector Sample Cross Sections
(Ord. 02-33)

2 Lane 58'-62' RW

3 Lane 70'-74' RW

5 Lane 92'-96' RW

Street Utility Improvement Standards 18.810-8  Code Update: 10/02
Figure 18.810.3
Neighborhood Routes
Sample Cross Sections
(Ord. 02-33)

Figure 18.810.4
Local Residential Streets - <1,500 vpd
(Ord. 02-33)
Figure 18.810.5
Local Residential Streets < 500 vpd
(Ord. 02-33)

A. Standard (sample)

Residential Local Street/Cul-de-sac
One Side On-street Parking

Criteria:
• Traffic Flow Plan must be submitted and approved.
• Not appropriate for streets serving more than 500 vpd.
• No parking permitted within 30 feet of an intersection.
• Appropriate adjacent to single family detached development only.
• Must provide a minimum of (1) off-street parking space for every 20 feet of restricted street frontage.

Figure 18.810.6
Local Residential Street < 200 vpd
(Ord.02-33)

A. Standard (sample)

Cul-de-sac/Residential Local Street
(No parking)

Criteria:
• Must provide a minimum of (1) off-street parking space for every 20 feet of restricted street frontage.
• No parking permitted within 30 feet of an intersection.
F. Future street plan and extension of streets.

1. A future street plan shall:
   a. Be filed by the applicant in conjunction with an application for a subdivision or partition. The plan shall show the pattern of existing and proposed future streets from the boundaries of the proposed land division and shall include other parcels within 530 feet surrounding and adjacent to the proposed land division. At the applicant’s request, the City may prepare a future streets proposal. Costs of the City preparing a future streets proposal shall be reimbursed for the time involved. A street proposal may be modified when subsequent subdivision proposals are submitted.
   b. Identify existing or proposed bus routes, pullouts or other transit facilities, bicycle routes and pedestrian facilities on or within 530 feet of the site.

2. Where necessary to give access or permit a satisfactory future division of adjoining land, streets shall be extended to the boundary lines of the tract to be developed, and
   a. These extended streets or street stubs to adjoining properties are not considered to be culs-de-sac since they are intended to continue as through streets at such time as the adjoining property is developed.
   b. A barricade shall be constructed at the end of the street by the property owners which shall not be removed until authorized by the City Engineer, the cost of which shall be included in the street construction cost.
   c. Temporary hammerhead turnouts or temporary cul-de-sac bulbs shall be constructed for stub street in excess of 150 feet in length.

G. Street spacing and access management. Refer to 18.705.030.H.

H. Street alignment and connections.

1. Full street connections with spacing of no more than 530 feet between connections is required except where prevented by barriers such as topography, railroads, freeways, pre-existing developments, lease provisions, easements, covenants or other restrictions existing prior to May 1, 1995 which preclude street connections. A full street connection may also be exempted due to a regulated water feature if regulations would not permit construction.

2. All local, neighborhood routes and collector streets which abut a development site shall be extended within the site to provide through circulation when not precluded by environmental or topographical constraints, existing development patterns or strict adherence to other standards in this code. A street connection or extension is considered precluded when it is not possible to redesign or reconfigure the street pattern to provide required extensions. Land is considered topographically constrained if the slope is greater than 15% for a distance of 250 feet or more. In the case of environmental or topographical constraints, the mere presence of a constraint is not sufficient to show that a street connection is not possible. The applicant must show why the constraint precludes some reasonable street connection.
3. Proposed street or street extensions shall be located to provide direct access to existing or planned transit stops, commercial services, and other neighborhood facilities, such as schools, shopping areas and parks.

4. All developments should provide an internal network of connecting streets that provide short, direct travel routes and minimize travel distances within the development.

I. Intersection angles. Streets shall be laid out so as to intersect at an angle as near to a right angle as practicable, except where topography requires a lesser angle, but in no case shall the angle be less than 75° unless there is special intersection design, and:

1. Streets shall have at least 25 feet of tangent adjacent to the right-of-way intersection unless topography requires a lesser distance;

2. Intersections which are not at right angles shall have a minimum corner radius of 20 feet along the right-of-way lines of the acute angle; and

3. Right-of-way lines at intersection with arterial streets shall have a corner radius of not less than 20 feet.

J. Existing rights-of-way. Whenever existing rights-of-way adjacent to or within a tract are of less than standard width, additional rights-of-way shall be provided at the time of subdivision or development.

K. Partial street improvements. Partial street improvements resulting in a pavement width of less than 20 feet; while generally not acceptable, may be approved where essential to reasonable development when in conformity with the other requirements of these regulations, and when it will be practical to require the improvement of the other half when the adjoining property developed.

L. Culs-de-sacs. A cul-de-sac shall be no more than 200 feet long shall not provide access to greater than 20 dwelling units, and shall only be used when environmental or topographical constraints, existing development pattern, or strict adherence to other standards in this code preclude street extension and through circulation:

1. All culs-de-sac shall terminate with a turnaround. Use of turnaround configurations other than circular, shall be approved by the City Engineer; and

2. The length of the cul-de-sac shall be measured from the centerline intersection point of the two streets to the radius point of the bulb.

3. If a cul-de-sac is more than 300 feet long, a lighted direct pathway to an adjacent street may be required to be provided and dedicated to the City.

M. Street names. No street name shall be used which will duplicate or be confused with the names of existing streets in Washington County, except for extensions of existing streets. Street names and numbers shall conform to the established pattern in the surrounding area and as approved by the City Engineer.
N. Grades and curves.
   1. Grades shall not exceed ten percent on arterials, 12% on collector streets, or 12% on any other street (except that local or residential access streets may have segments with grades up to 15% for distances of no greater than 250 feet), and
   2. Centerline radii of curves shall be as determined by the City Engineer.

O. Curbs, curb cuts, ramps, and driveway approaches. Concrete curbs, curb cuts, wheelchair, bicycle ramps and driveway approaches shall be constructed in accordance with standards specified in this chapter and Section 15.04.080; and:
   1. Concrete curbs and driveway approaches are required; except
   2. Where no sidewalk is planned, an asphalt approach may be constructed with City Engineer approval; and
   3. Asphalt and concrete driveway approaches to the property line shall be built to City configuration standards.

P. Streets adjacent to railroad right-of-way. Wherever the proposed development contains or is adjacent to a railroad right-of-way, provision shall be made for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land. The distance shall be determined with due consideration at cross streets or the minimum distance required for approach grades and to provide sufficient depth to allow screen planting along the railroad right-of-way in nonindustrial areas.

Q. Access to arterials and collectors. Where a development abuts or is traversed by an existing or proposed arterial or collector street, the development design shall provide adequate protection for residential properties and shall separate residential access and through traffic, or if separation is not feasible, the design shall minimize the traffic conflicts. The design shall include any of the following:
   1. A parallel access street along the arterial or collector;
   2. Lots of suitable depth abutting the arterial or collector to provide adequate buffering with frontage along another street;
   3. Screen planting at the rear or side property line to be contained in a nonaccess reservation along the arterial or collector; or
   4. Other treatment suitable to meet the objectives of this subsection;
   5. If a lot has access to two streets with different classifications, primary access should be from the lower classification street.

R. Alleys, public or private.
   1. Alleys shall be no less than 20 feet in width. In commercial and industrial districts, alleys shall be provided unless other permanent provisions for access to off-street parking and loading facilities
are made.

2. While alley intersections and sharp changes in alignment shall be avoided, the corners of necessary alley intersections shall have a radius of not less than 12 feet.

S. Survey monuments. Upon completion of a street improvement and prior to acceptance by the City, it shall be the responsibility of the developer’s registered professional land surveyor to provide certification to the City that all boundary and interior monuments shall be reestablished and protected.

T. Private streets.

1. Design standards for private streets shall be established by the City Engineer; and

2. The City shall require legal assurances for the continued maintenance of private streets, such as a recorded maintenance agreement.

3. Private streets serving more than six dwelling units are permitted only within planned developments, mobile home parks, and multi-family residential developments.

U. Railroad crossings. Where an adjacent development results in a need to install or improve a railroad crossing, the cost for such improvements may be a condition of development approval, or another equitable means of cost distribution shall be determined by the public works Director and approved by the Commission.

V. Street signs. The City shall install all street signs, relative to traffic control and street names, as specified by the City Engineer for any development. The cost of signs shall be the responsibility of the developer.

W. Mailboxes. Joint mailbox facilities shall be provided in all residential developments, with each joint mailbox serving at least two dwelling units.

1. Joint mailbox structures shall be placed adjacent to roadway curbs;

2. Proposed locations of joint mailboxes shall be designated on a copy of the preliminary plat or development plan, and shall be approved by the City Engineer/US Post Office prior to final plan approval; and

3. Plans for the joint mailbox structures to be used shall be submitted for approval by the City Engineer/US Post Office prior to final approval.

X. Traffic signals. The location of traffic signals shall be noted on approved street plans. Where a proposed street intersection will result in an immediate need for a traffic signal, a signal meeting approved specifications shall be installed. The cost shall be included as a condition of development.

Y. Street light standards. Street lights shall be installed in accordance with regulations adopted by the City’s direction.

Z. Street name signs. Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.
AA. Street cross-sections. The final lift of asphalt concrete pavement shall be placed on all new constructed public roadways prior to final City acceptance of the roadway and within one year of the conditional acceptance of the roadway unless otherwise approved by the City Engineer. The final lift shall also be placed no later than when 90% of the structures in the new development are completed or three years from the commencement of initial construction of the development, whichever is less.

1. Sub-base and leveling course shall be of select crushed rock;
2. Surface material shall be of Class C or B asphaltic concrete;
3. The final lift shall be placed on all new construction roadways prior to City final acceptance of the roadway; however, not before 90% of the structures in the new development are completed unless three years have elapsed since initiation of construction in the development;
4. The final lift shall be Class C asphaltic concrete as defined by A.P.W.A. standard specifications; and
5. No lift shall be less than 1-1/2 inches in thickness. (Ord. 99-22)

AB. Traffic calming. When, in the opinion of the City Engineer, the proposed development will create a negative traffic condition on existing neighborhood streets, such as excessive speeding, the developer may be required to provide traffic calming measures. These measures may be required within the development and/or offsite as deemed appropriate. As an alternative, the developer may be required to deposit funds with the City to help pay for traffic calming measures that become necessary once the development is occupied and the City Engineer determines that the additional traffic from the development has triggered the need for traffic calming measures. The City Engineer will determine the amount of funds required, and will collect said funds from the developer prior to the issuance of a certificate of occupancy, or in the case of subdivision, prior to the approval of the final plat. The funds will be held by the City for a period of five (5) years from the date of issuance of certificate of occupancy, or in the case of a subdivision, the date of final plat approval. Any funds not used by the City within the five-year time period will be refunded to the developer.

AC. Traffic study.

1. A traffic study shall be required for all new or expanded uses or developments under any of the following circumstances:
   a. when they generate a 10% or greater increase in existing traffic to high collision intersections identified by Washington County.
   b. Trip generations from development onto the City street at the point of access and the existing ADT fall within the following ranges:

<table>
<thead>
<tr>
<th>Existing ADT</th>
<th>ADT to be added by development</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3,000 vpd</td>
<td>2,000 vpd</td>
</tr>
<tr>
<td>3,001-6,000 vpd</td>
<td>1,000 vpd</td>
</tr>
<tr>
<td>&gt;6,000 vpd</td>
<td>500 vpd or more</td>
</tr>
</tbody>
</table>
c. If any of the following issues become evident to the City engineer:

(1) High traffic volumes on the adjacent roadway that may affect movement into or out of the site
(2) Lack of existing left-turn lanes onto the adjacent roadway at the proposed access drive(s)
(3) Inadequate horizontal or vertical sight distance at access points
(4) The proximity of the proposed access to other existing drives or intersections is a potential hazard
(5) The proposal requires a conditional use permit or involves a drive-through operation
(6) The proposed development may result in excessive traffic volumes on adjacent local streets.

2. In addition, a traffic study may be required for all new or expanded uses or developments under any of the following circumstances:

a. when the site is within 500 feet of an ODOT facility and/or
b. trip generation from a development adds 300 or more vehicle trips per day to an ODOT facility and/or
c. trip generation from a development adds 50 or more peak hour trips to an ODOT facility.

(Ord. 02-33)

18.810.040 Blocks

A. Block design. The length, width and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control and safety of street traffic and recognition of limitations and opportunities of topography.

B. Block Sizes.

1. The perimeter of blocks formed by streets shall not exceed 2,000 feet measured along the centerline of the streets except:

   a. Where street location is precluded by natural topography, wetlands, significant habitat areas, or other bodies of water, or pre-existing development; or
   b. For blocks adjacent to arterial streets, limited access highways, collectors or railroads.
   c. For non-residential blocks in which internal public circulation provides equivalent access.

2. Bicycle and pedestrian connections on public easements or right-of-ways shall be provided when
full street connection is exempted by B.1 above. Spacing between connections shall be no more than 330 feet, except where precluded by environmental or topographical constraints, existing development patterns, or strict adherence to other standards in the code. (Ord. 02-33)

18.810.050 Easements

A. Easements. Easements for sewers, drainage, water mains, electric lines or other public utilities shall be either dedicated or provided for in the deed restrictions, and where a development traversed by a watercourse, or drainageway, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the watercourse.

B. Utility easements. A property owner proposing a development shall make arrangements with the City, the applicable district and each utility franchise for the provision and dedication of utility easements necessary to provide full services to the development. The City's standard width for public main line utility easements shall be 15 feet unless otherwise specified by the utility company, applicable district, or City Engineer.

18.810.060 Lots

A. Size and shape. Lot size, width, shape and orientation shall be appropriate for the location of the development and for the type of use contemplated, and:

1. No lot shall contain part of an existing or proposed public right-of-way within its dimensions;

2. The depth of all lots shall not exceed 2-1/2 times the average width, unless the parcel is less than 1-1/2 times the minimum lot size of the applicable zoning district;

3. Depth and width of properties zoned for commercial and industrial purposes shall be adequate to provide for the off-street parking and service facilities required by the type of use proposed.

B. Lot frontage. Each lot shall abut upon a public or private street, other than an alley, for a width of at least 25 feet unless the lot is created through a minor land partition in which case Subsection 18.162.050 (C) applies, or unless the lot is for an attached single-family dwelling unit, in which case the lot frontage shall be at least 15 feet.

C. Through lots. Through lots shall be avoided except where they are essential to provide separation of residential development from major traffic arterials or to overcome specific disadvantages of topography and orientation, and:

1. A planting buffer at least ten feet wide is required abutting the arterial rights-of-way; and

2. All through lots shall provide the required front yard setback on each street.

D. Lot side lines. The side lines of lots, as far as practicable, shall be at right angles to the street upon which the lots front.

E. Large lots. In dividing tracts into large lots or parcels which at some future time are likely to be redivided, the Commission may require that the lots be of such size and shape, and be so divided into building sites, and contain such site restrictions as will provide for the extension and opening of

Street Utility Improvement Standards 18.816-17 Code Update: 10/02
streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size. The land division shall be denied if the proposed large development lot does not provide for the future division of the lots and future extension of public facilities.

18.810.070 Sidewalks

A. Sidewalks. All industrial streets and private streets shall have sidewalks meeting City standards along at least one side of the street. All other streets shall have sidewalks meeting City standards along both sides of the street. A development may be approved if an adjoining street has sidewalks on the side adjoining the development, even if no sidewalk exists on the other side of the street.

B. Requirement of developers

1. As part of any development proposal, or change in use resulting in an additional 1,000 vehicle trips or more per day, an applicant shall be required to identify direct, safe (1.25 x the straight line distance) pedestrian routes within 1/2 mile of their site to all transit facilities and Neighborhood Activity Centers (schools, parks, libraries, etc.). In addition, the developer may be required to participate in the removal of any gaps in the pedestrian system off-site if justified by the development.

2. If there is an existing sidewalk, on the same side of the street as the development, within 300 feet of a development site in either direction, the sidewalk shall be extended from the site to meet the existing sidewalk, subject to rough proportionality (even if the sidewalk does not serve a neighborhood activity center).

C. Planter strip requirements. A planter strip separation of at least five feet between the curb and the sidewalk shall be required in the design of streets, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant portions of the street; it would conflict with the utilities, there are significant natural features (large trees, water features, significant habitat areas, etc) that would be destroyed if the sidewalk were located as required, or where there are existing structures in close proximity to the street (15 feet or less). Additional consideration for exempting the planter strip requirement may be given on a case by case basis if a property abuts more than one street frontage.

D. Sidewalks in central business district. In the central business district, sidewalks shall be 10 feet in width, and:

1. All sidewalks shall provide a continuous unobstructed path; and

2. The width of curbside sidewalks shall be measured from the back of the curb.

E. Maintenance. Maintenance of sidewalks, curbs, and planter strips is the continuing obligation of the adjacent property owner.

F. Application for permit and inspection. If the construction of a sidewalk is not included in a performance bond of an approved subdivision or the performance bond has lapsed, then every person, firm or corporation desiring to construct sidewalks as provided by this chapter, shall, before entering upon the work or improvement, apply for a street opening permit to the Engineering department to so build or construct.

Street Utility Improvement Standards  18.810-18  Code Update: 10/02
1. An occupancy permit shall not be issued for a development until the provisions of this section are satisfied.

2. The City Engineer may issue a permit and certificate allowing temporary noncompliance with the provisions of this section to the owner, builder or contractor when, in his opinion, the construction of the sidewalk is impractical for one or more of the following reasons:
   a. Sidewalk grades have not and cannot be established for the property in question within a reasonable length of time;
   b. Forthcoming installation of public utilities or street paving would be likely to cause severe damage to the new sidewalk;
   c. Street right-of-way is insufficient to accommodate a sidewalk on one or both sides of the street; or
   d. Topography or elevation of the sidewalk base area makes construction of a sidewalk impractical or economically infeasible; and

3. The City Engineer shall inspect the construction of sidewalks for compliance with the provision set forth in the standard specifications manual.

G. Council initiation of construction. In the event one or more of the following situations are found by the Council to exist, the Council may adopt a resolution to initiate construction of a sidewalk in accordance with City ordinances:

1. A safety hazard exists for children walking to or from school and sidewalks are necessary to eliminate the hazard;

2. A safety hazard exists for pedestrians walking to or from a public building, commercial area, place of assembly or other general pedestrian traffic, and sidewalks are necessary to eliminate the hazard;

3. 50% or more of the area in a given block has been improved by the construction of dwellings, multiple dwellings, commercial buildings or public buildings and/or parks; and

4. A criteria which allowed noncompliance under Section E.1.b above no longer exists and a sidewalk could be constructed in conformance with City standards. (Ord. 02-33, Ord. 99-22)

18.810.080 Public Use Areas

A. Dedication requirements.

1. Where a proposed park, playground or other public use shown in a development plan adopted by the City is located in whole or in part in a subdivision, the Commission may require the dedication or reservation of such area within the subdivision, provided that the reservation or dedication is roughly proportional to the impact of the subdivision on the park system.
2. Where considered desirable by the Commission in accordance with adopted comprehensive plan policies, and where a development plan of the City does not indicate proposed public use areas, the Commission may require the dedication or reservation of areas within the subdivision or sites of a character, extent and location suitable for the development of parks or other public use, provided that the reservation or dedication is roughly proportional to the impact of the subdivision on the park system.

B. Acquisition by public agency. If the developer is required to reserve land area for a park, playground, or other public use, such land shall be acquired by the appropriate public agency within 18 months following plat approval, at a price agreed upon prior to approval of the plat, or such reservation shall be released to the subdivider. (Ord. 99-22)

18.810.090 Sanitary Sewers

A. Sewers required. Sanitary sewers shall be installed to serve each new development and to connect developments to existing mains in accordance with the provisions set forth in Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments) and the adopted policies of the comprehensive plan.

B. Sewer plan approval. The City Engineer shall approve all sanitary sewer plans and proposed systems prior to issuance of development permits involving sewer service.

C. Over-sizing. Proposed sewer systems shall include consideration of additional development within the area as projected by the Comprehensive Plan.

D. Permits denied. Development permits may be restricted by the Commission or Hearings Officer where a deficiency exists in the existing sewer system or portion thereof which cannot be rectified within the development and which if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of state or federal standards pertaining to operation of the sewage treatment system.

18.810.100 Storm Drainage

A. General provisions. The Director and City Engineer shall issue a development permit only where adequate provisions for storm water and flood water runoff have been made, and:

1. The storm water drainage system shall be separate and independent of any sanitary sewerage system;

2. Where possible, inlets shall be provided so surface water is not carried across any intersection or allowed to flood any street; and

3. Surface water drainage patterns shall be shown on every development proposal plan.

B. Easements. Where a development is traversed by a watercourse, drainageway, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of such watercourse and such further width as will be adequate for conveyance and maintenance.
C. **Accommodation of upstream drainage.** A culvert or other drainage facility shall be large enough to accommodate potential runoff from its entire upstream drainage area, whether inside or outside the development, and:

1. The City Engineer shall approve the necessary size of the facility, based on the provisions of Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments).

D. **Effect on downstream drainage.** Where it is anticipated by the City Engineer that the additional runoff resulting from the development will overload an existing drainage facility, the Director and Engineer shall withhold approval of the development until provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with the Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments).

### 18.810.110 Bikeways and Pedestrian Pathways

A. **Bikeway extension.**

1. As a standard, bike lanes shall be required along all Arterial and Collector routes and where identified on the City's adopted bicycle plan in the Transportation System Plan (TSP).

2. Developments adjoining proposed bikeways identified on the City's adopted pedestrian/bikeway plan shall include provisions for the future extension of such bikeways through the dedication of easements or rights-of-way, provided such dedication is directly related to and roughly proportional to the impact of the development.

3. Any new street improvement project shall include bicycle lanes as required in this document and on the adopted bicycle plan.

B. **Cost of construction.** Development permits issued for planned unit developments, conditional use permits, subdivisions and other developments which will principally benefit from such bikeways shall be conditioned to include the cost or construction of bikeway improvements in an amount roughly proportional to the impact of the development.

C. **Minimum width.**

1. Minimum width for bikeways within the roadway is five feet per bicycle travel lane.

2. Minimum width multi-use paths separated from the road is ten (10) feet. The width may be reduced to eight (8) feet if there are environmental or other constraints.

3. The minimum width for pedestrian only off-street paths is five (5) feet.

4. Design standards for bike and pedestrian-ways shall be determined by the City Engineer. (Ord. 02-33, Ord. 99-22)
18.810.120 Utilities

A. Underground utilities. All utility lines including, but not limited to those required for electric, communication, lighting and cable television services and related facilities shall be placed underground, except for surface mounted transformers, surface mounted connection boxes and meter cabinets which may be placed above ground, temporary utility service facilities during construction, high capacity electric lines operating at 50,000 volts or above, and:

1. The developer shall make all necessary arrangements with the serving utility to provide the underground services;
2. The City reserves the right to approve location of all surface mounted facilities;
3. All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and
4. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

B. Information on development plans. The applicant for a development shall show on the development plan or in the explanatory information, easements for all underground utility facilities, and:

1. Plans showing the location of all underground facilities as described herein shall be submitted to the City Engineer for review and approval; and
2. Care shall be taken in all cases to ensure that above ground equipment does not obstruct vision clearance areas for vehicular traffic.

C. Exception to under-grounding requirement.

1. The developer shall pay a fee in-lieu of under-grounding costs when the development is proposed to take place on a street where existing utilities which are not underground will serve the development and the approval authority determines that the cost and technical difficulty of under-grounding the utilities outweighs the benefit of under-grounding in conjunction with the development. The determination shall be on a case-by-case basis. The most common, but not the only, such situation is a short frontage development for which undergrounding would result in the placement of additional poles, rather than the removal of above-ground utilities facilities.
2. An applicant for a development which is served by utilities which are not underground and which are located across a public right-of-way from the applicant’s property shall pay the fee in-lieu of undergrounding.
3. Properties within the CBD zoning district shall be exempt from the requirements for under-grounding of utility lines and from the fee in-lieu of undergrounding.
4. The exceptions in Subsections 1 through 3 of this section shall apply only to existing utility lines. All new utility lines shall be placed underground.

D. Fee in-lieu of under-grounding.

Street Utility Improvement Standards 18.810-22 Code Update: 10/02
1. The City Engineer shall establish utility service areas in the City. All development which occurs within a utility service area shall pay a fee in-lieu of undergrounding for utilities if the development does not provide underground utilities, unless exempted by this code.

2. The City Engineer shall establish the fee by utility service area which shall be determined based upon the estimated cost to underground utilities within each service area. The total estimated cost for undergrounding in a service area shall be allocated on a front-foot basis to each party within the service area. The fee due from any developer shall be calculated based on a front-foot basis.

3. A developer shall receive a credit against the fee for costs incurred in the undergrounding of existing overhead utilities. The City Engineer shall determine the amount of the credit, after review of cost information submitted by the applicant with the request for credit.

4. The funds collected in each service area shall be used for undergrounding utilities within the City at large. The City Engineer shall prepare and maintain a list of proposed undergrounding projects which may be funded with the fees collected by the City. The list shall indicate the estimated timing and cost of each project. The list shall be submitted to the City Council for their review and approval annually.

18.810.130 Cash or Bond Required

A. Guarantee. All improvements installed by the developer shall be guaranteed as to workmanship and material for a period of one year following acceptance by the City Council.

B. Cash deposit or bond. Such guarantee shall be secured by cash deposit or bond in the amount of the value of the improvements as set by the City Engineer.

C. Compliance requirements. The cash or bond shall comply with the terms and conditions of Section 18.430.090.

18.810.140 Monuments

A. Replacement required. Any monuments that are disturbed before all improvements are completed by the subdivider shall be replaced prior to final acceptance of the improvements.

18.810.150 Installation Prerequisite

A. Approval required. No public improvements, including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting or other requirements shall be undertaken except after the plans have been approved by the City, permit fee paid, and permit issued.

B. Permit fee. The permit fee is required to defray the cost and expenses incurred by the City for construction and other services in connection with the improvement. The permit fee shall be set by Council resolution.

18.810.160 Installation Conformance

A. Conformance required. In addition to other requirements, improvements installed by the developer
either as a requirement of these regulations or at his own option, shall conform to the requirements of
this chapter and to improvement standards and specifications followed by the City.

B. Adopted installation standards. The Standard Specifications for Public Works Construction, Oregon
Chapter A.P.W.A., and Design and Construction Standards for Sanitary and Surface Water
Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions
or amendments) shall be a part of the City's adopted installation standard(s); other standards may also
be required upon recommendation of the City Engineer.

18.810.170 Plan Check

A. Submittal requirements. Work shall not begin until construction plans and construction estimates
have been submitted and checked for adequacy and approved by the City Engineer in writing. The
developer can obtain detailed information about submittal requirements from the City Engineer.

B. Compliance. All such plans shall be prepared in accordance with requirements of the City.

18.810.180 Notice to City

A. Commencement. Work shall not begin until the City has been notified in advance.

B. Resumption. If work is discontinued for any reason, it shall not be resumed until the City is notified.

18.810.190 City Inspection

A. Inspection of improvements. Improvements shall be constructed under the inspection and to the
satisfaction of the City. The City may require changes in typical sections and details if unusual
conditions arising during construction warrant such changes in the public interest.

18.810.200 Engineer's Certification

A. Written certification required. The developer's engineer shall provide written certification of a form
provided by the City that all improvements, workmanship and materials are in accord with current
and standard engineering and construction practices, and are of high grade, prior to City acceptance of
the subdivision's improvements or any portion thereof for operation and maintenance.

18.810.210 Completion Requirements (To be completed.)
STAFF REPORT TO THE
PLANNING COMMISSION
FOR THE CITY OF TIGARD, OREGON

120 DAYS = N/A

SECTION I. APPLICATION SUMMARY

FILE NAME: HABITAT-FRIENDLY DEVELOPMENT PROVISIONS
CASE NOS: Comprehensive Plan Amendment (CPA) CPA 2006-00001
Development Code Amendment (DCA) DCA 2006-00004

APPLICANT: City of Tigard
13125 SW Hall Boulevard
Tigard, OR 97223

PROPOSAL: Amendments to the Tigard Comprehensive Plan (Volume I) and Community
Development Code (Sections 18.360, 18.370, 18.705, 18.715, 18.765, 18.775, 18.810) in compliance
with Statewide Planning Goal 5 and Metro Tide 13 (Nature in Neighborhoods) to adopt the proposed Significant Habitat Areas Map and to
implement the recommendations of the Tualatin Basin Fish & Wildlife Habitat Program aimed at encouraging the use of habitat-friendly development practices. The proposed amendments will not result in increased development restrictions but
will give developers the option to take advantage of greater regulatory flexibility in exchange for the use of habitat-friendly practices. Amendments will remove barriers to, and provide code flexibility for, development that incorporates habitat-friendly techniques.

LOCATION: Citywide

ZONING: CBD, C-G, C-P, I-H, I-L, I-P, MUC, MUE, MUE-1, MUE-2, MUR-1, MUR-2, R-
1, R-2, R-3.5, R-4.5, R-7, R-12, R-25.

COMP PLAN: Commercial, Industrial, Mixed Use, Residential.

APPLICABLE REVIEW CRITERIA: Community Development Code Chapters 18.360, 18.370, 18.380, 18.390, 18.705,
18.715, 18.765, 18.775 and 18.810; Comprehensive Plan Policies 2, 3 & 4; Metro Functional Plan Tide 3 and 13; and Statewide Planning Goals 1, 2, 5 and 6.

SECTION II. STAFF RECOMMENDATION

Staff recommends that the Planning Commission find that this request for Comprehensive Plan
Amendment and Development Code Amendment is the necessary approval criteria. Therefore, staff
recommends APPROVAL of the CPA 2006-00001 and DCA 2006-00004 according to the findings made
in Section IV of this report.
SECTION III. BACKGROUND INFORMATION

Project History
Statewide Planning Goal 5 and Metro’s Regional Goal 5 Program

One of the 19 statewide planning goals which form the framework for local planning programs, Goal 5 aims to protect natural resources and conserve scenic and historic areas and open spaces. Under Goal 5, Metro is authorized to adopt as part of their Urban Growth Management Functional Plan (Functional Plan), regional programs to address all applicable requirements of Goal 5 and State Administrative Rules for designated “regional resources”.

Goal 5 establishes three basic steps to comply with its standard inventory process, which include: conducting an inventory and map of significant resources; analyzing the economic, social, environmental and energy (ESEE) impacts of protecting inventoried resources; and, developing a program to implement the ESEE decision to allow, limit or prohibit conflicting uses.

In 2002, Metro completed the first step by completing an inventory for Regionally Significant Riparian Corridors and Wildlife Habitat. As part of this effort, Metro established criteria to define and identify regionally significant riparian corridors and wildlife habitat.

Tualatin Basin Fish and Wildlife Habitat Program

Also in 2002, an alliance was formed between local jurisdictions within Washington County, known as the Tualatin Basin Partners for Natural Places (Partners), working with the Portland Metropolitan Service District (Metro), Tualatin Hills Parks and Recreation District and Clean Water Services, to develop a basin-specific approach to protecting fish and wildlife habitat. Councilor Sally Harding represents the City of Tigard on the Tualatin Basin Natural Resource Coordinating Committee (TBNRCC), comprised of elected officials, while Associate Planner Denver Igarta serves on the Steering Committee, which is comprised technical staff.

The Tualatin Basin partnership initiated the second step of analyzing the environmental, social, economic, and energy (ESEE) consequences of allowing, limiting or prohibiting (ALP) conflicting uses in areas identified in Metro’s inventory of regionally significant riparian corridors and wildlife habitat. The ESEE analysis was completed in July 2004 and resulted in the Tualatin Basin ALP Map, which forms the basis for the proposed Significant Habitat Areas Map.

Finally, the Tualatin Basin Fish & Wildlife Habitat Program was developed to address the third required step by implementing the recommendations of the ESEE analysis. The TBNRCC voted to send on to Metro their Goal 5 Program for improving the environmental health of the Tualatin Basin. In September 2005, Metro incorporated the Tualatin Basin Program as part of the regional Nature in Neighborhoods Program (Title 13). Under an intergovernmental agreement between the Tualatin Basin Partners and Metro, local jurisdictions must now implement applicable elements of the Basin program. Recently, the Partners formulated a strategy for local implementation of program elements. The Program Implementation Report prepared by the Partners recommends development code amendments for local jurisdictions to incorporate habitat-friendly development provisions and remove regulatory barriers. The amendments being proposed were identified based on an analysis of these recommendations and existing City of Tigard regulations.

HABITAT-FRIENDLY DEVELOPMENT PROVISIONS – Staff Report to Planning Commission

CPA 2006-00001/DCA 2006-00004
Proposal Description
The primary intent of the proposed changes is to encourage habitat-friendly development by implementing recommendations of the Tualatin Basin Fish & Wildlife Habitat Program in compliance with Statewide Planning Goal 5 and Metro's Nature in Neighborhoods Program (Title 13).

Amendments are being proposed to the Tigard Comprehensive Plan and Community Development Code to implement the recommendations of the Tualatin Basin Fish & Wildlife Habitat Program by adopting the proposed Significant Habitat Areas Map and habitat-friendly development provisions. The proposed amendments will not result in increased development restrictions but will give property owners and developers the option to take advantage of greater regulatory flexibility in exchange for the use of habitat-friendly practices. Amendments will also remove barriers to development that incorporates recommended habitat-friendly techniques.

SECTION IV SUMMARY OF REPORT

• Applicable criteria, findings and conclusions
  • Tigard Community Development Code
    o Chapter 18.360
    o Chapter 18.370
    o Chapter 18.380
    o Chapter 18.390
    o Chapter 18.705
    o Chapter 18.715
    o Chapter 18.765
    o Chapter 18.775
    o Chapter 18.810
  • Applicable Comprehensive Plan Policies
    o Policy 2, Policy 3 & Policy 4
  • Applicable Metro Standards
    o Title 3 & Title 13
  • Statewide Planning Goals
    o Goals 1, 2, 5 & 6
  • City Department and outside agency comments

SECTION V APPLICABLE CRITERIA AND FINDINGS

CITY OF TIGARD COMMUNITY DEVELOPMENT CODE (TITLE 18)

Chapter 18.360 Site Development Review
This chapter does not include review criteria relevant to the proposed amendments. Since revisions to this chapter are being proposed, the purposes of the chapter were reviewed to determine consistency with the proposed amendments.

18.360.010 Purpose

A. Promote general welfare. The purpose and intent of site development review is to promote the general welfare by directing attention to site planning, and giving regard to the natural environment and the elements of creative design to assist in conserving and enhancing the appearance of the City.

B. General purposes. It is in the public interest and necessary for the promotion of the health, safety and welfare, convenience, comfort and prosperity of the citizens of the City of Tigard:
C. Environmental enhancement. To prevent the erosion of natural beauty, the lessening of environmental amenities, the dissipation of both usefulness and function, and to encourage additional landscaping, it is necessary:

The proposed amendments are aimed at encouraging development that incorporates habitat-friendly methods and techniques as part of site planning considerations. The proposal directly addresses the objective stated in 18.360.010.C. of preventing "the erosion of natural beauty, the lessening of environmental amenities, the dissipation of both usefulness and function, and to encourage additional landscaping." In particular, the proposed amendment to 18.360.090.A.2.c. would complement the purpose statement "to encourage the innovative use of materials, methods and techniques" by encourage developers to incorporate techniques for reducing site hydrology and fish and wildlife habitat impacts into their site planning.

Chapter 18.370. Variances and adjustments
This chapter does not include review criteria relevant to the proposed amendments. Since revisions to this chapter are being proposed, the purposes of the chapter were reviewed to determine consistency with the proposed amendments.

18.370.010 Variances
A. Purpose. The purpose of this section is to provide standards for the granting of variances from the applicable zoning requirements of this title where it can be shown that, owing to special and unusual circumstances related to a specific property, the literal interpretation of the provisions of the applicable zone would cause an undue or unnecessary hardship, except that no use variances shall be granted.

The proposed amendments will result in adoption of the proposed “Significant Habitat Areas Map” which depicts the inventory of “significant” riparian and upland habitat areas. The inventory process factored in the economic, social, environmental and energy (ESEE) impacts of protecting inventoried resources. Based on this analysis a program was developed to implement the ESEE decision by proposing amendments to local regulations. The proposed amendments will offer greater regulator flexibility to encourage developers to give special consideration to “significant habitat areas” located on their properties.

Chapter 18.380. Zoning Map and Text Amendments:
18.380.020 Legislative Amendments to this Title and Map
A. Legislative amendments. Legislative zoning map and text amendments shall be undertaken by means of a Type IV procedure, as governed by Section 18.390.060G.

The proposed amendments to the Tigard Comprehensive Plan and Community Development Code would establish rules and regulations to be applied generally to all similarly affected properties (with inventoried significant habitat) throughout the City of Tigard; and therefore, the application is being processed as a Type IV Procedure, Legislative Amendment, as governed by Section 18.390.060.G.

Chapter 18.390. Decision-Making Procedures
18.390.020.B.4. Type IV Procedure. Type IV procedures apply to legislative matters. Legislative matters involve the creation, revision, or large-scale implementation of public policy. Type IV matters are considered initially by the Planning Commission with final decisions made by the City Council.

The proposed amendments to the Tigard Comprehensive Plan and Community Development Code will
be reviewed under the Type IV procedure as detailed in the Section 18.390.060.G. In accordance with this section, the amendments will initially be considered by the Planning Commission with City Council making the final decision.

18.390.060G. Decision-making considerations. The recommendation by the Commission and the decision by the Council shall be based on consideration of the following factors:
1. The Statewide Planning Goals and Guidelines adopted under Oregon Revised Statutes Chapter 197;
2. Any federal or state statutes or regulations found applicable;
3. Any applicable METRO regulations;
4. Any applicable comprehensive plan policies; and
5. Any applicable provisions of the City's implementing ordinances.

The findings presented in this staff report address the review criteria listed above as being applicable to the proposed amendments to the Comprehensive Plan and Development Code.

Chapter 18.705. Access, Egress, and Circulation

This chapter does not include review criteria relevant to the proposed amendments. Since revisions to this chapter are being proposed, the purposes of the chapter were reviewed to determine consistency with the proposed amendments.

18.705.010.A. Purpose. The purpose of this chapter is to establish standards and regulations for safe and efficient vehicle access and egress on a site and for general circulation within the site.

The proposed amendment to this chapter explicitly adds pervious paving surfaces to the list of hard surfaced materials for paving required walkways. The provision requires any pervious paving surface to be designed and maintained to remain well-drained to ensure the long-term function of the walkway to provide safe and efficient access and circulation.

Chapter 18.715. Density Computations

This chapter does not include review criteria relevant to the proposed amendments. Since revisions to this chapter are being proposed, the purposes of the chapter were reviewed to determine consistency with the proposed amendments.

18.715.010.A. Purpose. The purpose of this chapter is to implement the comprehensive plan by establishing the criteria for determining the number of dwelling units permitted.

Currently, the Tigard Development Code Section 18.715.030 allows for 25% of the unbuildable area within sensitive lands (i.e. 100-yr. floodplain, steep slopes, drainageways) to be transferred to the remaining buildable land areas (not to exceed 125% of the maximum permitted by the applicable comprehensive plan designation). The Planned Development Chapter of the Code allows for a density bonus of up to 10% as an incentive to increase or enhance open space, architectural character and/or site variation incorporated into the development. In addition, the Tree Removal Chapter allows for a density bonus of up to 20% as an incentive for retaining existing canopy cover (trees over 12 inches in caliper).

At their September 25, 2006, work session, the Planning Commission considered the Tualatin Basin recommendation to allow “all development potential to be transferred” from qualified habitat areas. The Planning Commissioners expressed concerns that the lack of adequate design criteria for, and the proposed administrative-level approval of, density transfers may result in development which is incompatible with the surrounding neighborhood. They conferred that design standards for transferring density, and perhaps a higher-level of review, may be required to ensure an adequate degree of compatibility. The Planning Commission decided not to support an amendment to allow density transfers at this time; rather, to return to this issue at a later date, when more time can be devoted to the development of appropriate design review standards and procedures.
Applicable comprehensive plan policies are addressed within this staff report.

**Chapter 18.765. Off-Street Parking and Loading Requirements**

This chapter does not include review criteria relevant to the proposed amendments. Since revisions to this chapter are being proposed, the purposes of the chapter were reviewed to determine consistency with the proposed amendments.

18.765.010 Purpose

B. Adequate capacity. These regulations are also intended to establish vehicle parking areas which have adequate capacity and which are appropriately located and designed to minimize any hazardous conditions on the site and at access points.

The proposed amendments to this chapter explicitly add pervious paving surfaces to the list of appropriate surface materials for paving access drives, and vehicle and bicycle parking spaces. The provisions require any pervious paving surface to be designed and maintained to remain well drained to ensure the long-term function and safe condition of the surface.

**Chapter 18.775. Sensitive Lands**

This chapter does not include review criteria relevant to the proposed amendments. Since revisions to this chapter are being proposed, the purposes of the chapter were reviewed to determine consistency with the proposed amendments.

18.775.010 Purpose

A. Maintain integrity of rivers, streams, and creeks.

B. Implement comprehensive plan and floodplain management program.


D. Implement the Metro Urban Growth Management Functional Plan.

E. Implement Statewide Planning Goal 5 (Natural Resources).

F. Protect public health, safety, and welfare.

G. Location.

As described in Section III (Background) of this report, the Tualatin Basin Fish and Wildlife Habitat Program was developed as a basin-specific approach to meet Statewide Goal 5 requirements for inventorying riparian areas and wildlife habitat and to comply with Metro's Urban Growth Management Functional Plan Title 13 (the regional Nature in Neighborhoods program). In addition, the Tualatin Basin program was developed to complement Clean Water Services Design and Constructions Standards to protect the beneficial uses of water (including rivers, streams and creeks) within the Tualatin Basin. The amendments proposed are intended to implement the Basin-wide program by adopting habitat-friendly development provisions aimed at reducing the detrimental impacts of development on fish and wildlife habitat within the City of Tigard.

The inventory of significant fish and wildlife habitat was conducted in accordance with Oregon Administrative Rule 660-023 Procedures and Requirements for Complying with Goal 5. Based on the findings of an economic, social, environmental and energy (ESEE) analysis, the Tualatin Basin assigned a different "limit" decision to areas and mapped the strictly, moderately and lightly limit areas. The proposed Significant Habitat Areas map delineates the "general location" of each "limit" classification, and the proposed delineation methodology provides procedures for verifying the precise boundaries of the inventoried habitat areas. The proposed amendments would adopt the proposed "Significant Habitat Areas Map" and add "significant habitat areas" to the list of sensitive lands potentially unsuitable for development.

Applicable comprehensive plan policies are addressed within this staff report.
Chapter 18.810. Street and Utility Improvement Standards

This chapter does not include review criteria relevant to the proposed amendments. Since revisions to this chapter are being proposed, the purposes of the chapter were reviewed to determine consistency with the proposed amendments.

18.810.010. Purpose. The purpose of this chapter is to provide construction standards for the implementation of public and private facilities and utilities such as streets, sewers, and drainage.

18.810.030. The approval authority may approve adjustments to the standards of this chapter if compliance with the standards would result in an adverse impact on natural features such as wetlands, steep slopes, or existing mature trees.

The Streets Section (18.810.030) of this chapter provides for approval of adjustments if compliance with street standards would result in adverse impact to natural features. The proposed amendments would adopt the proposed "Significant Habitat Areas Map", add "significant habitat areas" to the list of sensitive lands, and provide for flexibility in development standards to minimize impacts on resource areas. The proposed changes to this chapter would add inventoried "significant habitat areas" to the list of natural features where street standards may be adjusted.

CONCLUSION: Based on the analysis above, staff finds that the proposed amendments satisfy the applicable review criteria and are consistent with the purposes of the chapters being amended within the Tigard Community Development Code.

CITY OF TIGARD COMPREHENSIVE PLAN POLICIES

A review of the comprehensive plan identified the following relevant policies for the proposed amendments:

Policy 2 – Citizen Involvement

2.1.1 The City shall maintain an ongoing citizen involvement program and shall ensure that citizens will be provided an opportunity to be involved in all phases of the planning process.

Since 2002, the Tualatin Basin Partners (including the City of Tigard) had been engaged in a lengthy series of outreach efforts through the inventory, analysis, and program development phases of their cooperative effort. Regular steering committee and coordinating committee meetings held monthly were open to the public. A total of nine open houses were held as part of the Tualatin Basin effort (three for each of the three phases – inventory, analysis and program), and three public hearings were also held. In September 2006, a stakeholder dialog was held with individuals representing the environmental and development communities. In addition, the Partners produced a project website, newsletters and information booths (at various events) and held CPO (Citizen Participation Organization) and panel discussions. Throughout the process, program status updates were posted on the City of Tigard website.

As part of the Comprehensive Plan Amendment process, public notices were sent to 2,674 potentially affected property owners informing them of the proposed amendments and public hearings scheduled with the Planning Commission and the City Council. An information sheet was enclosed in the mailing to provide a brief background and overview of the proposed changes, as well as, contact details to obtain more information. In addition, notice of the public hearing was published in the September 28, 2006, issue of the Tigard Times.

Policy 3 – Natural Features and Open Space

3.4 Natural Areas
3.4.1 The City shall designate, in accordance with Goal 5, the following as areas of significant environmental concern.
   c. Areas valued for their fragile character as habitats for plants, animal or aquatic life, or having endangered plant or animal species, or specific natural features, valued for the need to protect natural areas.

The proposed amendments address the policy to designate “significant” habitats and will result in adoption of the inventory of fish and wildlife habitat areas within the City of Tigard. The proposed “Significant Habitat Areas Map” is based on the inventory of regionally significant riparian corridors and wildlife habitat completed by Metro in 2002. As part of this effort, Metro evaluated habitat sites based on two sets of criteria, one for riparian habitat and one for upland wildlife habitat. Habitat areas were ranked based on their relative health and importance for providing benefits to fish and wildlife. The inventory also factored in data on sensitive species sighting locations, sensitive bird sites, and wildlife species and habitats of concern, as well as the habitat needs of sensitive wildlife and the amount of potential habitat available.

The inventory followed the steps outlined by Statewide Goal 5 including an assessment of economic, social, environmental and energy (ESSE) impacts. Based on this analysis, the Tualatin Basin assigned a different “limit” decision to areas and mapped the strictly, moderately and lightly limit areas. The proposed Significant Habitat Areas map delineates the “general location” of each “limit” classification, and the proposed delineation methodology provides procedures for verifying the precise boundaries of the inventoried habitat areas. The proposed amendments would adopt the proposed “Significant Habitat Areas Map” and add “significant habitat areas” to the list of sensitive lands potentially unsuitable for development. The proposed amendments will offer greater regulator flexibility to encourage developers to give special consideration to the preservation of sensitive habitat on their properties.

3.4.2 The City shall:
   a. Protect fish and wildlife habitat along stream corridors by managing the riparian habitat and controlling erosion, and by requiring that areas of standing trees and natural vegetation along natural drainage courses and waterways be maintained to the maximum extent possible;

The proposed amendments will offer greater regulator flexibility to encourage developers to preserve “significant habitat areas” located on their properties to the maximum extent possible. Habitat-friendly provisions would encourage the preservation of fish and wildlife habitat (including along stream corridors) by allowing reduction of minimum density requirements, adjustment to site dimensional and street improvement standards, and low impact development techniques.

3.5 Parks, Recreation and Open Space

3.5.1 The City shall encourage private enterprise and intergovernmental agreements which will provide for open space, recreation lands, facilities, and preserve natural, scenic and historic areas in a manner consistent with the availability of resources.

Based on the recommendations of the Tualatin Basin Fish & Wildlife Habitat Program and the inventory of “significant fish and wildlife areas”, the proposed amendments were identified to encourage property owners and developers to preserve the significant habitat resources on their properties.

Policy 4 — Air, Water, and Land Resources

4.2 Water Quality
4.2.1 All development within the Tigard Urban Planning Area shall comply with applicable Federal, State and Regional water quality standards, including those contained in the Clean Water Services' Design and Construction Manual.

The Tualatin Basin Fish and Wildlife Habitat Program, which formed the basis for the proposed amendments, was developed as a basin-specific approach to meet Statewide Goal 5 requirements for inventorying riparian areas and wildlife habitat and to comply with Metro's Urban Growth Management Functional Plan Title 13 (the regional Nature in Neighborhoods program). In addition, the Tualatin Basin program was developed to complement Clean Water Services Design and Constructions Standards to protect the beneficial uses of water (including rivers, streams and creeks) within the Tualatin Basin.

The proposed amendment to 18.360.090.A.2.c. would encourage developers to incorporate innovative methods and techniques for reducing site hydrology and fish and wildlife habitat impacts into their site planning.

3. The City shall cooperate with the Metropolitan Service District and other appropriate agencies to establish practices which minimize the introduction of pollutants into ground and surface waters.

The Tualatin Basin Partners for Natural Places, an alliance of local governments in Washington County, collaborated with Metro and Clean Water Services to develop the basin-specific approach and to meet federal, state and regional requirements for protecting fish and wildlife habitat.

CONCLUSION: Based on the analysis above, staff finds that the proposed amendments satisfy the applicable policies contained in the City of Tigard Comprehensive Plan.

METRO Framework Plan

Metro Functional Plan Title 3 – Water Quality, Flood Management, and Fish/Wildlife Habitat Conservation – protect beneficial uses and functional values of water quality and flood management resources by limiting uses in these areas. Establish buffer zones around resource areas to protect from new development.

In 2002, the City of Tigard adopted Comprehensive Plan and Code Amendments to comply with Title 3 of Metro's Urban Growth Management Functional Plan, which outlines water quality and flood management requirements for the region. The adopted standards were based on a unified program developed by local governments in the Tualatin Basin and implemented through the Clean Water Services District's (CWS) Design & Construction Standards, which provides for vegetated stream corridor buffers up to 200 feet wide and mandating restoration of corridors in marginal or degraded condition.

The multi-jurisdictional approach undertaken by Tualatin Basin jurisdictions was continued with the formation of the Tualatin Basin alliance to develop a program to meet Statewide Goal 5 requirements for inventorying riparian areas and wildlife habitat and to comply with Metro's Urban Growth Management Functional Plan Title 13 (the regional Nature in Neighborhoods program). The Tualatin Basin Fish and Wildlife Habitat Program was developed to complement Clean Water Services Design and Constructions Standards to protect the beneficial uses of water (including rivers, streams and creeks) within the Tualatin Basin.
In addition, Clean Water Services, local cities, Washington County, Metro, and Tualatin Hills Park and Recreation District, partnered on a parallel effort to develop the CWS Healthy Streams Plan (HSP), an updated watershed plan designed to enhance the functions of the Tualatin Basin surface water system and address the Clean Water Act and Endangered Species Act (ESA). One of the proposed changes to the Development Code would allow HSP projects to be permitted outright when performed in coordination with the City.

Metro Functional Plan Title 13 – Nature in Neighborhoods – conserve, protect, and restore a continuous ecologically viable streamside corridor system, from the streams' headwaters to their confluence with other streams and rivers, and with their floodplains in a manner that is integrated with upland wildlife habitat and with the surrounding urban landscape; and control and prevent water pollution for the protection of the public health and safety, and to maintain and improve water quality throughout the region.

As stated above, the Tualatin Basin Fish and Wildlife Habitat Program was developed to address Statewide Goal 5 requirements for inventorying riparian areas and wildlife habitat and to comply with Metro's Urban Growth Management Functional Plan Title 13 (the regional Nature in Neighborhoods program). As stated under Metro Code Section 3.07.1330 (B) (5), the Tualatin Basin Program serves as an alternative for member jurisdictions to implement Title 13 as established by an intergovernmental agreement (IGA) between Metro and the Tualatin Basin Natural Resource Coordinating Committee (TBNRCC).

One of the conditions set by the IGA is that Tualatin Basin members must adopt provisions to facilitate and encourage the use of habitat-friendly development practices where technically feasible and appropriate. The Program Implementation Report, prepared by the Tualatin Basin Partners, recommends development code amendments for local jurisdictions to incorporate habitat-friendly development provisions and remove regulatory barriers. The amendments being proposed were identified based on an analysis of these recommendations and existing City of Tigard regulations.

CONCLUSION: Based on the analysis above, staff finds that the proposed amendments satisfy the applicable Metro regulations.

Statewide Planning Goals

Statewide Planning Goal 1 – Citizen Involvement:
This goal outlines the citizen involvement requirement for adoption of Comprehensive Plans and changes to the Comprehensive Plan and implementing documents.

A series of outreach efforts was undertaken by the Tualatin Basin Partners, including Tigard, throughout inventory, analysis, and program development phases of this effort. Regular steering committee and coordinating committee meetings held monthly were open to the public. A total of nine open houses and three public hearings were held as part of the Tualatin Basin effort. A stakeholder dialog was held in September 2006 with individuals representing various environmental and development interests. In addition, the Partners produced a project website, newsletters and information booths (at various events) and held CPO (Citizen Participation Organization) and panel discussions. Throughout the process, program status updates were posted on the City of Tigard website.

As part of the Comprehensive Plan Amendment process, public notices were sent to 2,674 potentially affected property owners informing them of the proposed amendments and public hearings scheduled with the Planning Commission and the City Council. An information sheet was enclosed in the mailing...
and a webpage was create on the City website to provide a brief background and overview of the proposed changes, as well as, contact details to obtain more information. In addition, notice of the public hearing was published in the September 28, 2006, issue of the Tigard Times.

**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.

The Comprehensive Plan was acknowledged by DLCD as being consistent with the statewide planning goals.

The proposed amendments to the Tigard Comprehensive Plan and Community Development Code are being processed as a Type IV procedure, which requires any applicable statewide planning goals, federal or state statutes or regulations, METRO regulations, comprehensive plan policies, and City's implementing ordinances, be addressed as part of the decision-making process. All applicable review criteria have been addressed within this staff report; therefore, the requirements of Goal 2 have been met.

**Statewide Planning Goal 5 – Natural Resources**
Requires the inventory and protection of natural resources, open spaces, historic areas and sites suitable for removal and processing of mineral and aggregate resources.

Goal 5 establishes three basic steps to comply with its standard inventory process, which include:
1. Conducting an inventory and map of significant resources;
2. Analyzing the economic, social, environmental and energy (ESEE) impacts of protecting inventoried resources;
3. Developing a program to implement the ESEE decision to allow, limit or prohibit conflicting uses.

Metro completed the first step by adopting an inventory for Regionally Significant Riparian Corridors and Wildlife Habitat. The Tualatin Basin Partners completed the second step by analyzing the environmental, social, economic and energy (ESEE) consequences of allowing, limiting or prohibiting (ALP) conflicting uses in areas identified in Metro’s inventory. The final step was partially completed when Metro incorporated the Tualatin Basin Fish and Wildlife Habitat Program as part of the regional Nature in Neighborhoods Program. Now Tualatin Basin members must adopt provisions to facilitate and encourage the use of habitat-friendly development practices, where technically feasible and appropriate. The amendments being proposed will implement the habitat protection program in compliance with Goal 5 requirements and Metro’s regional Title 13 program.

**Statewide Planning Goal 6—Air, Water and Land Resource Quality**
To maintain and improve the quality of the air, water and land resources of the state.

Once a regional functional plan has been acknowledged by the State Land Conservation and Development Commission, local governments within Metro must apply the requirements of the functional plan to comply with Statewide Planning Goals. In 2002, the City of Tigard adopted Comprehensive Plan and Code Amendments to comply with Title 3 of Metro’s Urban Growth Management Functional Plan, which outlines water quality and flood management requirements to comply with Goal 6 water quality provisions. The adopted standards were based on a unified program developed by local governments in the Tualatin Basin and implemented through the Clean Water Services District’s (CWS) Design & Construction Standards, which provides for vegetated stream corridor buffers up to 200 feet wide and mandating restoration of corridors in marginal or degraded condition.

Title 3, section 3.07.350.C., directed Metro to complete the inventory, analysis and program development
to protect fish and wildlife habitat. The regional Nature in Neighborhoods Program and Title 13 of Metro's Urban Growth Management Functional Plan were the outcomes of this effort.

The proposed amendments are intended to implement the Tualatin Basin Fish and Wildlife Habitat Program, which was developed to complement Clean Water Services Design and Constructions Standards to protect the beneficial uses of water. The Tualatin Basin Fish and Wildlife Program maintains protections offered through Title 3, while providing for the removal of barriers to habitat friendly development that minimizes impacts to site hydrology and habitat.

**CONCLUSION:** Based on the analysis above, staff finds that the proposed amendments satisfy the applicable Statewide Planning Goals.

**State or Federal Regulations**

**Federal Endangered Species Act**

In 1973, the Federal Government passed the Endangered Species Act to protect and recover imperiled species and the ecosystems which they depend. Under Statewide Planning Goal 5, local governments are required to obtain current habitat inventory information for wildlife habitat inventories.

The proposed amendments will result in adoption of the inventory of fish and wildlife habitat areas within the City of Tigard. The proposed “Significant Habitat Areas Map” is based on the inventory of regionally significant riparian corridors and wildlife habitat completed by Metro in 2002. In determining habitats of concern, Metro gathered data on sensitive species sighting locations, sensitive bird sites, and wildlife species of concern; linked sensitive wildlife species to their habitat needs; and estimated the amount of potential habitat available.

**Federal Clean Water Act**

The Clean Water Act regulates impacts to wetlands and other navigable waters of the United States.

The Tualatin Basin Fish and Wildlife Habitat Program is one of multiple efforts developed in coordination with Clean Water Services, the surface water management and sanitary sewer system utility for urban Washington County, to protect surface water quality. The proposed amendments are intended to implement the Tualatin Basin Program, which was developed to complement other efforts developed in coordination with Clean Water Services (including the Healthy Streams Plan, Stormwater Management Plan, Design and Constructions Standards) and designed to address the Clean Water Act and Endangered Species Act (ESA). One of the proposed changes to the Development Code would allow HSP projects to be permitted outright when performed in coordination with the City.

**SECTION VI. CITIZEN COMMENTS**

John Frewing reviewed the proposal and has offered the following comments:

**General Response:**

The proposed amendments were identified to implement the recommendations of the Tualatin Basin Fish & Wildlife Habitat Program in compliance with Statewide Planning Goal 5 and Metro's Nature in Neighborhoods Program (Title 13). Further revisions to the City of Tigard existing regulations which go beyond the scope of this application should be addressed as part (and incorporated into) the larger Comprehensive Plan update process and any subsequent code enhancements identified for the City's local implementing ordinances.
1. Volume II (Policies) of the Tigard Comp Plan should be amended to implement habitat-friendly development provisions.

Response: Applicable policies contained in Volume II of the City of Tigard Comprehensive Plan have been reviewed within this staff report. Based on the analysis, the proposed amendments were determined to be consistent with existing Comp Plan policies. The City is currently in the process of updating both Volume I and Volume II of the Comprehensive Plan. Any amendments to the policies and strategies contained in Volume II (Findings, Policies & Implementation Strategies) will be considered as part of the larger Comprehensive Plan update process.

2. A. The proposed change to TCDC 18.360.090 only addresses stormwater runoff, it does not address many other factors which are included in habitat-friendly development.

Response: The proposed text change to Section 18.360.090.A.2. has been broadened (beyond stormwater issues) to address potential impacts to site hydrology and fish and wildlife habitat. Also, a list of six broad categories of habitat-friendly development methods has been added, which includes: water quality facilities, pervious pavement, soil amendment, roof runoff controls, habitat-friendly fencing and re-directed outdoor lighting. These categories were identified to cover the methods and techniques recommended by the Tualatin Basin Partners.

B. The proposed changes to TCDC 18.360.090 call for 'consideration' of innovative methods and techniques regarding stormwater runoff. This word (consider) is used elsewhere in the Tigard code regarding evaluation of habitat-friendly design features. A definition of 'consider' should be added to the Tigard code.

Response: The proposed revision to Section 18.360.090.A.2. invites developers to consider methods and techniques for reducing impacts to site hydrology and fish and wildlife habitat based on the surface water drainage patterns and inventoried habitat areas on their property. The standard groups these techniques into six broad categories (i.e. water quality facilities, pervious pavement, soil amendment, roof runoff controls, habitat-friendly fencing and re-directed outdoor lighting). "Consideration" of the habitat-friendly development techniques would be determined to be met if this review criterion is addressed within the development proposal in relationship to on-site conditions.

3. The Proposed Tigard Significant Habitat Areas Map has an important note on it, to the effect that its information is for 'general location only'. A. The TCDC should have added to it a definition of Significant Habitat Area (Chapter 18.120) and should include a procedure (Chapter 18.775) for any party to add or subtract significant habitat areas to the proposed map within the context of a specific development application; as proposed, only the applicant can make such change.

Response: The general location of "strictly", "moderately" and "lightly" limit habitat areas is shown on the proposed "Significant Habitat Areas Map"; however, the standards shall be applied to a specific site based on the delineation methodology proposed under Section 18.775.140 of the Sensitive Lands Chapter. As required for wetlands and floodplains, the precise delineation of the "limit" areas shall be surveyed by a qualified professional.

For adjustments to the regional (riparian and upland) habitat inventory, the Tualatin Basin Program utilizes the regional "map correction" process established by Metro. A map correction request form may be obtain on Metro's website and submitted along with sufficient evidence documenting the mapping error. As part of the regional program, local jurisdictions must coordinate with Metro for on-going maintenance of the habitat inventory maps.

B. The map and associated implementation procedures should include provision for identification and protection of individual 'habitat of concern' areas outside the generalized definitions and colorings of the map.

Response: The proposed "Significant Habitat Areas Map" is based on the inventory of regionally significant riparian corridors and wildlife habitat completed by Metro in 2002. As outlined by
Statewide Goal 5 rules, Metro identified habitats of concern by gathering data on sensitive species sighting locations, sensitive bird sites, and wildlife species of concern; linked sensitive wildlife species to their habitat needs; and estimated the amount of potential habitat available. The inventory “significant” habitat areas and the analysis of consequences of allowing, limiting or prohibiting (ALP) conflicting uses were conducted according to the procedures and requirements for complying with State Goal 5 as defined in Oregon Administrative Rule (OAR) 660-023. Resources situated outside the mapped boundaries (for significant habitat areas) must be delineated by a qualified professional following the proposed delineation methodology.

4. The proposed TCDC amendments to allow alternative pervious surfaces for parking include the requirement that such surfaces be maintained in a well-drained condition. This is a good requirement, but it is almost unique in the TCDC to place an ongoing responsibility of the land owner in the TCDC.

Response: The text revision requiring pervious paving surfaces to be designed and maintained to remain well-drained borrows existing language from the “bicycle parking design standards” found in 18.765.050.D. The current standard requires surfaces to be “designed to remain well-drained.” Since pervious surfaces must be maintained to ensure long-term permeability, the requirement for maintenance was added as part of the text revision.

Tualatin Basin effort has been coordinated with concurrent efforts by Clean Water Service (CWS), including their Healthy Streams Plan, Stormwater Management Plan, and update of the Design and Construction Standards. CWS is currently in the process of revising its Design and Construction Standards to include technical details on stormwater management techniques identified in coordination with the Tualatin Basin Partners.

5. The meaning of these Class I and Class II areas should be explained and they should be applied to development standards in Chapter 18.775.

Response: A summary of the Tualatin Basin “Limit” Decision was added (refer to Table 18.775.3) to the methodology for verifying boundaries for inventoried riparian habitat (18.773.140.A.1) describing the relationship between “Class I & II” riparian areas and the “strictly limit” “moderately limit” areas on the proposed Significant Habitat Areas Map.

6. Audubon Society Stormwater Pavement Impacts Reduction (SPIR) Report: These changes define and add reference to practices which can reduce the impact of stormwater and pavement on the flora and fauna habitat in Tigard.

Tigard standards for stormwater retention in new development applications should be clarified to require the use of bioswales, rain gardens, ponding, etc.

Response: The text revisions being proposed were identified to complement the current standards within the Tigard Community Development Code and existing language which encourages the preservation of existing trees and the use of native plants. Amendments to the Development Code are being proposed to promote the use of low impact/habitat-sensitive development techniques. These techniques were grouped into six broad categories, which include water quality facilities, pervious pavement, soil amendment, roof runoff controls, habitat friendly fencing and re-directed outdoor lighting. For instance, the category for water quality facilities covers techniques for infiltration, retention, detention and/or treatment of stormwater, such as bioswales. These categories were identified to cover the methods and techniques recommended by the Tualatin Basin Partners and those systems approved by Clean Water Services.

Dayle Beach reviewed the proposal and has offered the following comment:

1. Almost all the land bordering Red Rock Creek has been classified as habitat-friendly with the exception of a big gap between 72nd Ave. and the theater entrance from 99W. I strongly suggest that the planners take another look at this Red Rock Creek area.

Response: As part of the assessment of conflicting uses, the Tualatin Basin Partners conducted a site-specific economic, social, environmental and energy (ESEE) analysis of inventoried subwatershed sites. This analysis factored in site characteristics and features (such as land uses and...
natural features) resulting in some site-level adjustments to the regional inventory.

The area in question was originally mapped by Metro as Class II riparian habitat. The site is designated as publicly-owned right of way and is currently protected under Clean Water Services “Design and Construction Standards” and the City of Tigard’s Development Code. Existing regulations are more restrictive and therefore supersede the proposed habitat-friendly development provisions.
Proposed Significant Habitat Areas
City of Tigard
Oregon

- Strictly Limit
- Moderately Limit
- Lightly Limit
- Major Street
- Street
- Railroad
- City of Tigard

HABITAT-FRIENDLY DEVELOPMENT PROVISIONS — Staff Report to Planning Commission
1. CALL TO ORDER

President Inman called the meeting to order at 7:00 p.m. The meeting was held in the Tigard Civic Center, Town Hall, at 13125 SW Hall Blvd.

2. ROLL CALL

Commissioners Present: President Inman; Commissioners Buehner, Caffall, Meads, Vermilyea (arrived late), and Walsh.

Commissioners Absent: Commissioners Harbison and Munro

Staff Present: Dick Bewersdorff, Planning Manager; Beth St. Amand, Senior Planner; Denver Igarta, Associate Planner; Jerree Lewis, Planning Commission Secretary

3. PLANNING COMMISSION COMMUNICATIONS AND COMMITTEE REPORTS

Commissioner Walsh reported on the Tree Board. He advised that the Tree Board will attend a workshop with the Planning Commission on November 6th to discuss two proposed code amendments. At their last meeting, the Tree Board also discussed the Costco parking lot canopy.

Commissioner Buehner reported that the City Center Advisory Commission met last week. They decided to leave the rest of the design review issues to the discretion of the Planning Commission. They will start working on the Master Plan for the park and the outreach effort to the downtown property owners.

Commissioner Buehner also reported on the Transportation Financing Task Force. They are scheduled for public meetings on the 9th and the 30th to discuss the gas tax proposal.

Commissioner Meads reported on the Park and Recreation Advisory Board. They are working on financing for a start up recreation program in Tigard. They will be adding it to the budget for the next fiscal year. The Board would like to use existing resources as much as possible. They hope to have a pilot program with some classes and after school activities.
4. APPROVE MEETING MINUTES

It was moved and seconded to approve the October 2, 2006 meeting minutes as submitted. The motion passed unanimously.

5. PUBLIC HEARING

5.1 COMPREHENSIVE PLAN AMENDMENT (CPA) 2006-00001/DEVELOPMENT CODE AMENDMENT (DCA) 2006-00004 HABITAT-FRIENDLY DEVELOPMENT PROVISIONS

REQUEST: Amendments to the Tigard Comprehensive Plan (Volume I) and Community Development Code (Sections 18.360, 18.370, 18.705, 18.715, 18.765, 18.775, 18.810) in compliance with Statewide Planning Goal 5 and Metro Title 13 (Nature in Neighborhoods) to adopt the Significant Habitat Areas Map and to implement the recommendations of the Tualatin Basin Fish & Wildlife Habitat Program aimed at encouraging the use of habitat-friendly development practices. The proposed amendments will not result in increased development restrictions but will give developers the option to take advantage of greater regulatory flexibility in exchange for the use of habitat-friendly practices. Amendments will remove barriers to, and provide code flexibility for development that incorporates habitat-friendly techniques. The complete text of the proposed Code Amendment can be viewed on the City's website at http://www.tigard-or.gov/code_amendments.

LOCATION: Citywide.


APPLICABLE REVIEW CRITERIA: Community Development Code Chapters 18.360, 18.370, 18.380, 18.390, 18.705, 18.715, 18.765, 18.775 and 18.810; Comprehensive Plan Policies 2, 3 & 4; Metro Functional Plan Title 3 and 13; and Statewide Planning Goals 1, 2, 5 and 6.

STAFF REPORT

Associate Planner Denver Igarta gave a PowerPoint presentation (Exhibit A) on proposed habitat-friendly development code amendments. He advised that the purpose of the amendments is to encourage the use of habitat-friendly development methods by implementing the Tualatin Basin Fish Wildlife Habitat Program. The intent is to convey a benefit to the developer in exchange for use of development practices that are sensitive to habitat on site. It is not intended to increase development restrictions. The program is a voluntary, incentive-based approach.

Igarta advised that the program would be in compliance with the Statewide Planning Goal 5 and Metro Functional Plan, Title 13. He noted that there are 3 steps involved with the inventory of habitat areas (a regional significant habitat inventory completed by Metro; an
assessment of conflicting uses - environmental, social, economic, energy [ESEE] assessment; development of a program).

The focus of the implementation phase of the program is on habitat-friendly development (a broad-range of techniques that reduce the impact on fish and wildlife habitat). There are two steps involved – remove barriers for the use of habitat-friendly practices and develop guidelines for using habitat-friendly development practices.

The Tualatin Basin Partners wrote a report for implementing the program to protect habitat. The recommendations included a list of 11 techniques of habitat-friendly development practices. In reviewing the techniques, Tigard determined that the City was substantially meeting a number of them through local ordinances already in use. However, there is a gap and some amendments are needed to address the rest of the techniques.

Igarta reviewed the significant habitat area map and described the habitat “limit” classifications. He detailed each of the proposed amendments for the Commission.

With regard to the proposed amendment for on-site density transfers, Igarta noted that the Planning Commission discussed this amendment earlier and decided not to support it at this time; they will revisit on-site density transfers at a later time.

Igarta advised that the Planning Commission would be holding a public hearing tonight and sending a recommendation to Council. City Council is scheduled for a workshop on November 21st and will hold a public hearing on the proposed amendments on December 12th.

Commissioner Buchner asked about the letter from Dayle Beach. He referred to a gap on Red Rock Creek along 72nd Ave. Igarta advised that when Metro did their inventory, they carried out the regional inventory. When the Tualatin Basin Partners took over the inventory, they performed a more specific district-wide inventory that looked more closely at resources on site and did an ESEE assessment. Complementary to this, we also have Clean Water Services (CWS) Design and Construction Standards which include vegetative corridor restrictions to development directly adjacent to streams. For the site Mr. Beach is referring to, those resources are protected by more strict regulations that are part of the CWS Design and Construction Standards. They supersede the habitat benefits provisions which are completely voluntary.

Commissioner Walsh asked about lot adjustments. Igarta answered that this provision allows the property owner to choose to restructure a building envelope to save resources; without the provision, there may be standards that restrict how that could happen. For example, the provision could allow a setback adjustment where the owner could put the structure closer to a lot line in order to preserve a resource on the other side of the site.
Igarta reported that, when staff was looking at the habitat-friendly recommendations, they did an extensive assessment of the existing code. Some of what is in the existing code covers a lot of the Tualatin Basin recommendations. Where there is a gap, there are standards in place that could be extended to the habitat areas. The proposed habitat-friendly code provisions are intended to complement the existing code to provide for preservation of significant habitat.

PUBLIC TESTIMONY - IN FAVOR

None

PUBLIC TESTIMONY - IN OPPOSITION

Fred Fields, 1149 SW Davenport, Portland, OR 97201, asked if the Tualatin Basin Partners were a legally constituted organization. Commissioner Buehner answered that the Partners were made up of representatives from all the jurisdictions in the Tualatin Valley. Metro delegated the responsibility of reviewing standards to this group. Each jurisdiction will review the recommendations and decide whether or not to implement them into their own codes. Igarta advised that the Tualatin Basin Partners submitted their program report to Metro. Metro adopted the program report, maps, and analysis as part of their Nature in Neighborhoods Program which has been adopted as a functional plan for the region.

Mr. Fields asked about compensation for property owners. President Inman advised that this will provide increased flexibility for builders. Commissioner Meads also noted that the measures are voluntary — property owners are not required to do anything that they wouldn’t want to do.

Mr. Fields asked about increased density. The Commission advised that the density transfer portion of the proposed amendment is not going to be included with the rest of the code amendments at this time. That particular recommendation is being deferred for discussion at a later time. That section of the existing code is not going to change at this time.

Sue Bielke, 11755 SW 114th Place, Tigard, OR 97223 testified on several issues (a copy of her testimony is included as Exhibit B). She believes that the program proposed by the Tualatin Basin Partners would protect fewer habitats than the region-wide program. She noted that there are segments of some streams not shown on the significant habitat areas map, e.g., a tributary of Ash Creek located north of Cascade Blvd. a small permanent creek north of Tigard Street, and other gaps on the map for streams. In addition, she noted that some areas shown on the map indicate less protection for some habitat areas. She recommended that the current map not be adopted until corrections can be made.
Ms. Bielke believes that "strictly limit", "moderately limit", and "lightly limit" don't give adequate protection to some resources. She would rather change it to "prohibit", "strictly limit", and "moderately limit". She also recommends increasing buffer areas in some areas.

Ms. Bielke opposes the exemption for the Clean Water Services Healthy Streams Plan. By exempting CWS, citizens would not be allowed to comment on projects. Citizens should be able to ask questions and raise concerns about CWS projects.

Commissioner Meads asked about making modifications to the map. Staff advised that the process would be to obtain a form from Metro, provide documentation/support materials, and submit it all back to Metro. For delineation errors, the Tualatin Basin Partners are establishing a delineation methodology for how to verify precise boundaries of resources on site. The methodology will be adopted as part of the code amendments.

Igarta advised that the map is intended as a general location map which would trigger on-the-ground delineation. It is not intended to show the precise location of resources.

Commissioner Buehner asked if amendments would have to go through DLCD. Staff answered that amendments would go to Metro. Commissioner Buehner also asked what the process would be if she had an issue in terms of a particular spot. Staff answered that she would need to fill out the form at Metro. Metro updates their maps and verifies requests for changes. Metro staff reviews the documentation requirements to determine whether or not the materials are correct. They take action based on that determination. The map is updated on a regular basis, not necessarily immediately. There is no deadline for this. Map maintenance is a coordinated effort between Metro and the jurisdictions.

President Inman asked if the map itself will be going into the Comprehensive Plan. Staff answered yes, but we do not have an inventory that accurately maps all the resources. Sue Bielke said this could be something to add to the Comp Plan—a future comprehensive survey of resources (wildlife, fish, etc.) and make it a goal. The Commission noted that it would be extremely expensive to do this, but that additional changes could be made during the Comp Plan update process.

Commissioner Walsh asked if the public would not have an opportunity to comment, if the CWS exemption section was adopted. Dick Bewersdorff advised that exemptions are already in the code—they are uses that are allowed outright. He said this could be an area for the Comp Plan update and Zoning Code update. If it would result in more takings, there could be more ballot measure 37 issues. The Commission asked to what extent there is opportunity for public comment with respect to CWS Healthy Stream Plan projects. Staff answered that CWS would need to go through DSL for their Healthy Streams Plan projects, but there would be no opportunity for citizen input if they are exempt from sensitive lands review. Commissioner Vermilyea clarified that if we adopt this specific amendment, we are precluding public comment as it relates to Clean Water projects.
Commissioner Buehner noted that there is not a lot of leverage with CWS. She wonders why the City should give up the little bit of leverage we have for the convenience of CWS.

John Frewing, 7110 SW Lola Lane, Tigard, OR 97223, asked when an amendment for density transfer would be considered. The Commission advised that they will probably discuss it next year during the Comp Plan update.

Mr. Frewing asked that the record be held open for 7 days so he could have time to review materials he received in response to questions he had. Staff advised that this was a legislative hearing and the Commission would have to consider the request.

Mr. Frewing agreed with previous discussion about public testimony for CWS projects. He asked if the CWS exemption was part of the Tualatin Valley Partners recommendation for all jurisdictions. Staff answered yes.

Staff explained the process for map corrections to Mr. Frewing. The City would be notified whenever Metro maps are updated. Tigard would then update the significant habitat map. It was noted that the map only shows general areas of resources. When land is developed, the developer would have an analyst do the delineation. Map errors will show up during the development stage. The map acts as reference point, it is not specific or accurate as far as significant habitat areas.

Staff advised that the City is not proposing amendments to Volume II of the Comprehensive Plan at this time. The significant habitat map is part of the inventory, it's not regulatory. The purpose of the proposed regulations is to encourage habitat friendly development.

Regarding Code Section 18.360.090, Mr. Frewing suggested defining the word “consideration”. Commissioner Buehner proposed looking at this as we go through Phase II of the Comp Plan process. Commissioner Vermilyea said that maybe a description of a process for demonstrating consideration could be used.

Mr. Frewing referred to the proposed list of innovative methods listed in Section 18.360.090.A.2.C. He suggested adding a 7th method - retaining vegetative cover and retaining canopy cover.

For Section 18.775.140 A.1.a.2, Mr. Frewing would like to see clarification of the term “flood areas”. Commissioner Vermilyea suggested being consistent with the existing language under 18.775.010 (on page 5).

For Section 18.775.140 A.1.a.3, Mr. Frewing asked about unidentified wetlands – is there any obligation to pick those up? The Commission discussed changes to the proposed language [see motion for final proposed language].
Tim LeBrun, 13275 SW Greenfield Dr., Tigard, OR 97223, signed up to speak but left the meeting before doing so.

Duane Wilson, Five Centerpointe Drive, Suite #280, Lake Oswego, OR 97035, asked if this is voluntary, why delineate? If a developer chooses not to participate in habitat friendly construction, what recourse does the City have? The Commission answered that there is no recourse by the City; however, CWS has some requirements. It was noted that the regulations weren't intended to be voluntary when the discussions first began, but when Measure 37 passed, Metro had to make the regulations voluntary.

Mr. Wilson asked about limiting or prohibiting conflicting uses. Staff answered that the limit decision and conflicting use analysis are based on the process laid out by Statewide Goal 5 procedures for inventorying the resources. When assessing the ESEE consequences of the uses, the voluntary regulations encourage developers to take advantage of flexibility to protect resources.

Mr. Wilson asked about benefits for the developer. President Inman put forth a scenario where a developer is doing a project that involves a significant habitat and is being required to provide right-of-way for access. The developer could perhaps have the flexibility to narrow the street improvements to minimize the impact to the habitat. This flexibility may not be currently allowed. It could also allow a developer to take a benefit by using pervious asphalt for an apartment complex project. These regulations would give the developer the ability to do that, which is not currently in the code. These regulations allow the developer to take those kinds of measures/advancements, and do more green projects without being in conflict with the current code.

Mr. Wilson believes the term “limit or prohibit conflicting uses” should be defined. Staff advised that this term, as written in the staff report, is not in the Code. This is just background information, showing the process for Statewide Goal 5 rules. It will not be part of the Development Code.

Staff advised that delineation in sensitive lands would be required to take advantage of the program flexibility. If developers want to use the benefits from the program, they must do the delineation. They are not required to delineate habitat areas if they do not want to take advantage of the provisions.

Mr. Wilson asked, if the City is adopting the map into the Comprehensive Plan, wouldn’t any change to the map require a Comp Plan Amendment? Staff advised that the map will be adopted as an inventory document; it’s not part of Volume II which is the policy document. The map will be in Volume I, which consists of non-binding background information.
PUBLIC HEARING CLOSED

After deliberation, the Commission modified some of the proposed code language. Commissioner Vermilyea then moved to recommend to City Council approval of the habitat-friendly development provisions and proposed amendments as presented, except as modified by the Planning Commission (noted below), including the staff report and testimony heard this evening. Modifications the proposed amendments include:

1. On page 2 of 10, under 18.360.090 A.2.c., add number 7 to read, “Preservation of existing vegetative or canopy cover.”
2. On page 5 of 10, under 18.775.020 C. Exemptions – delete this section.
3. On page 6 of 10, under 18.775.140 A.1.a.2, change language to read: “Locate all 100-year floodplain areas or 1996 flood inundation line, whichever is greater, within 100 feet of the property.”
4. On page 6 of 10, under 18.775.140 A.1.a.3, the first sentence shall end after the word “property”; the rest of the sentence shall be deleted. The second sentence shall read, “Identified wetlands on the property shall be further delineated consistent with methods currently accepted by the Oregon Division of State Lands and the U.S. Army Corps of Engineers.”

Commissioner Buehner seconded the motion. A vote was taken and the motion passed unanimously.

6. COMPREHENSIVE PLAN UPDATE
   • NATURAL RESOURCES REPORT - Continuation

Denver Igarta gave a PowerPoint presentation on Wetlands and Fish and Wildlife Habitat (Exhibit C). He advised that the wetland inventory was conducted in 1994 by a consultant. The local wetland inventory looked at significant habitat based on functional assessment. The City's Safe Harbor process puts regulatory restrictions on grading, excavation, placement of fill, and removal of vegetation.

Igarta reviewed the wetland statistics with the Commission. He noted that the local wetland inventory map was submitted to the Department of State Lands (DSL) and approved. It has been adopted as part of our Development Code. He advised that the consultant performed the inventory, which was approved by DSL. The map is maintained based on approved Comp Plan amendments and delineations that we receive from DSL. DSL sends us a notification if they have changed their map inventory. We are required to amend our maps to represent what the State has changed. Metro is not involved with this process.

Staff confirmed that there are two separate methods for determining wetlands inventory in Tigard – Metro and DSL. Typically, if there is a development proposal that would affect wetlands (to fill or remove wetland), the proposal has to go through the Comp Plan.
amendment process to remove the Safe Harbor provisions and then is submitted to DSL so they can update their map. Until there is a development activity that will potentially have an adverse impact to a wetland, we may not know that the wetland exists. An on-the-ground delineation is a very expensive endeavor. Commissioner Vermilyea believes that if the City knew what is truly out there, there would be an opportunity to plan, protect, and be proactive. The current process is entirely reactive with regard to wetlands and habitat.

Senior Planner Beth St. Amand noted the local wetlands inventory was done in 1994, which set the baseline. There is a question about anything identified since then. Delineation is just a survey; there should also be an assessment, such as with the ESEE process, that should be done. There is a potential to make some changes when going through the Comp Plan update process.

Commissioner Vermilyea would like to be able to identify areas of concern that can be taken into consideration as the City goes through the Comp Plan process. The goal should be to have our information be as accurate and up-to-date as possible. It was suggested that there may be a way to gather supplemental work that has already been done.

Igarta explained the importance of coordination with other jurisdictions with regard to fish and wildlife habitat. He reviewed the statistics and findings of the fish and wildlife habitat analysis and the habitat map produced the Tualatin Basin Partners.

John Frewing noted that there have been dozens of developments in Tigard over the past several years. In some cases, they have included a natural resources assessment. He wonders if staff has incorporated that information from those individual applications onto this map. Staff answered that previous applications have not been examined to update the map. The map is intended to be a general location map.

President Inman asked the Commissioners if they thought they had enough information to evaluate where we are and what we want to do with the Comp Plan. Also, as part of the Comp Plan review, does the Commission want to spend the resources to prioritize and update the maps? Commissioner Buehner believes it would be a good idea to pull development applications where there are known wetland delineations. Staff noted that they would be limited to floodplain, drainageways, and buffers.

Commissioner Vermilyea believes that getting closer to reality on the maps, rather than general delineation, would be better than what we have now. President Inman noted that the maps are used to trigger an analysis for development. If the development has already occurred, why do we need to update the map that would no longer be used for a trigger for that site? She is more concerned about property that does not show the resources to generate further analysis. Staff suggested looking for a gap analysis now. It was noted that the information being presented at this point is a general overview of the different areas of the Comp Plan - types of resources, where they are located, etc.
7. OTHER BUSINESS
None

8. ADJOURNMENT
The meeting adjourned at 9:53 p.m.

ATTEST: President Jodie Inman

Jeree Lewis, Planning Commission Secretary
Proposed Comprehensive Plan and Development Code Amendments

Purpose
- Encourage the use of “habitat-friendly” development methods by implementing the Tualatin Basin Fish & Wildlife Habitat Program
- In compliance with:
  - Statewide Planning Goal 5
  - Metro Functional Plan Title 13 (NIN)

What is Goal 5?

Oregon’s 19 statewide planning goals are the framework for local land use planning programs.

Statewide Planning:  

GOAL 5

- Aims to protect
- Natural resources
- Scenic and historic areas
- Open spaces

Provides guidelines for local governments
- Inventory natural resources
- Identify the most significant resources
- Take steps to protect them
Goal 5 Steps: Relationship to Metro and Tualatin Basin Program

1. Implementation

Habitat-Friendly Development

Reduce detrimental impacts of development on fish and wildlife habitat.

Steps
- Remove barriers to the use of habitat-friendly practices
- Develop guidelines to encourage habitat-friendly development practices

Gap Analysis

Review existing regulations for consistency with "habitat-friendly development" recommendations of the Tualatin Basin.

Summary of Findings
- 11 recommendations were determined to be substantially met by existing regulations

- Lot Coverage Flexibility
- Parking Ratio
- Front setbacks & Parking
- Parking Lot Dimensions
- Parking Lot Landscaping
- Location of Landscaping
- Use of Native Plants
- Tree Coverage Preservation
- Minimum Lot Side Setbacks
- Minimum Street Tree Coverage
- Use of Stormwater Management Facilities
Proposed Amendments

Based on Gap Analysis:
Amendments required to address the following:
• Adopt inventory of Significant Habitat Areas
• Site-specific delineation methodology
• Encourage habitat-friendly development practices
• Allow pervious paving forCertain surfaces
• Modify net-buildable area and allow on-site density transfer from habitat areas
• Allow reduction to minimum density required
• Permit CWS Healthy Streams projects
• Lat dimensional adjustments for habitat areas
• Allow adjustments to street standards within habitat areas

Proposed Amendment

Tigard Significant Habitat Areas

Proposed Amendment
• Adopt the Significant Habitat Areas Map
• Add Significant Habitat Areas to the list of Sensitive Lands

Purpose
Adopt a map to establish the general location of each habitat “limit” classification defined based on the ESREE analysis.
Proposed Amendment

Habitat Delineation Methodology

Proposed Amendment

- Incorporate a habitat delineation methodology based on Metro's Model Ordinance

Purpose

Establish procedures for verifying the precise boundaries of the inventoried habitat areas

Proposed Amendment

"Habitat-Friendly" Development Methods

Proposed Amendment

- Innovative methods and techniques to reduce impacts to site hydrology and fish and wildlife habitat shall be considered.
- Water-quality features
- "Roof runoff controls"
- Pervious pavement
- "Habitat-friendly" fencing

Purpose

Encourage the use of techniques designed to reduce negative impacts on the environment.

Proposed Amendment

Pervious Paving Materials

Proposed Amendment

- Add pervious paving to list of allowed hard surface materials for walkways, parking areas and access drives.

Purpose

Allow paving techniques which reduce impervious area and storm water runoff
Proposed Amendment

On-Site Density Transfer
Tualatin Basin Recommendation
- Allow all development potential to be transferred from significant habitat areas to development area.

Planning Commission Consensus
- May result in development which is incompatible with the surrounding neighborhood
- Needs further consideration of appropriate design review standards and approval procedures
- Planning Commission decided to not support an amendment to allow density transfers at this time

Proposed Amendment

Permit Healthy Streams Projects
Proposed Amendment
- Exempt projects performed in coordination with the City to implement the CWS Healthy Streams Plan from sensitive land provisions.

Purpose
- Remove regulatory barriers to implementing HSP projects to improve watershed and stream health

Proposed Amendment

Lot Dimension Adjustments
Proposed Amendment
- Extend area eligible for adjustment to the highest value riparian areas:
  - Strictly Limit - Riparian Habitat
  - Moderately Limit - Riparian Habitat

Purpose
- Allow flexibility to encourage habitat sensitive site designs
Proposed Amendment

Minimum Density Requirement

Proposed Amendment
• Allow reduction of minimum density requirements in significant habitat areas.

Purpose
Alleviate pressures and impacts on significant habitat areas resulting from minimum density requirements

Proposed Amendment

Adjustment to Street Standards

Proposed Amendment
• Add significant habitat areas to the list of natural features eligible for adjustments to street improvement standards.

Purpose
Allow for reductions to required paving within significant habitat areas.

Schedule
• Public Hearing – Oct 16
• Recommendation to the City Council
• City Council Work Session – Nov 21
• Council Public Hearing – Dec 12
October 16, 2006

To: Tigard Planning Commission, City of Tigard

Re: Comments on Proposed Changes to Tigard Comprehensive Plan and Community Development Code (see applicable sections below), in compliance with Statewide Planning Goal 5 and Metro Title 13 (Nature in Neighborhoods), and adoption of the Significant Habitat Areas Map.

We are writing to comment and submit recommendations regarding the proposed changes to above referenced plans and map. We are very concerned about the proposed changes as we do not feel they will adequately protect and enhance our existing remaining natural resources in the City of Tigard, in particular habitats for certain species such as the State Listed Western Painted and Pond Turtles, and rare plant communities, such as the Willamette Prairie/Oak habitats that remain in our city. The Tualatin Basin Fish and Wildlife Habitat Program, in which Tigard is a partner and was actively involved in developing, would protect less habitat (estimated at 10-30%) than the region-wide program adopted by other cities in the region. Citizens in Tigard care about their fish, wildlife, and habitats, and do NOT want less and weaker protections for those resources.

- COMPREHENSIVE PLAN / NATURAL RESOURCE SECTION

Proposed Significant Habitat Areas Map –

o Upon reviewing this map, we find that portions or entire segments of some streams are not even on the map, this includes 1) a tributary of Ash Creek, located north and south of Cascade Blvd; 2) a small, permanent creek located north of Tigard Street just northeast of its junction with SW 115th street. 3) Other areas, such as the open space on the Fowler school district property on Tigard street, show a reduction in protections for wetlands, uplands, etc., as compared to the current Significant Habitat Areas Map. We do not agree with this change on the Fowler site, and dispute how and why other changes on the map were made that resulted in less habitat protection. This is important, as it proposes to REDUCE overall, the amount of habitat protected in the City of Tigard for a variety of species that use these habitats, including State listed native turtles which overwinter and nest up to ½ mile from a body of water, Neotropical songbirds including several declining in their range, and the State listed Northern Red-legged Frog. We strongly recommend this map NOT be adopted until corrections can be made. Since we have inventory data for many areas in Tigard from our surveys, we will gladly share this with staff working on the Map to ensure corrections are made.

o Regarding above Map, we recommend that the “Strictly Limit, Moderately Limit and Lightly Limit" be changed, in this order, to "Prohibit, Strictly Limit, and Moderately Limit". This would afford greater protections to streams and adjacent riparian habitats that have some of the greatest biological diversity left in our city, including rare neotropical migratory songbirds such
as Willow Flycatchers, State Listed Painted and Pond Turtles and Red-legged Frogs. Tigard’s current 3 categories would inadequately protect the above listed species, since it would not give strong enough protections for example, for overwintering sites on land for turtles, which need to be free of disturbance, and habitat for red-legged frogs, which need and can be found up to ¼ mile from a water source during much of the year, using these areas for resting, cover, feeding, and overwintering. Allowing even strictly limited development, such as a trail, to be put in these habitats for these State listed species has the potential to be extremely disruptive and have both short and long-term negative impacts to these imperiled species.

- Regarding above Map, we also recommend increasing buffer areas to up to 500-1000’ in some areas, in particular where State listed Sensitive species occur. This would more adequately meet the intent of Goal 5, which is to ensure long-term protections and conservation of our natural resources. This additional increase in the buffer size would also help in catastrophic scenarios, such as 100-year flooding, which can greatly alter habitats and cause major environmental damage.

- **COMMUNITY DEVELOPMENT CODE**

  - 18.715.030 - We oppose the Basin recommendation allowing all density to be transferred up to double the density allowed on the remaining buildable portion of the site. This is ridiculous, as it would most likely result in for example, no trees to be preserved on the site since the developer would have no room to preserve trees. Tigard is already allowing too much density, and this proposal further would impact resources since it would place a greater burden on parks, trails, etc., to have to accommodate double the number of people allowed on a development. If the Basin program is to be seriously considered a plan to PROTECT NATURAL RESOURCES, than it needs to not allow any more density than is currently allowed.

  - 18.715.020.A.1 - We recommend that the “e” proposed to be added should be mandatory, not “optional” as is currently recommended, as all lands on the Map are “sensitive” in nature.

  - 18.775.020.C - Exemptions - *We absolutely do not support exempting the CWS Healthy Streams Plan from provisions of this section.* Doing so would prohibit citizens from reviewing and commenting on proposed plans affecting our public natural resources in the city. In addition, #5. currently exempts routine maintenance or replacement of existing public facilities projects from this provision, and we also recommend NOT allowing this as an exemption. Too many times we have seen areas in greenways and open spaces be demolished by storm water projects and other activities, where roads are put into relative pristine open spaces, trees and all vegetation is bulldozed and wildlife is lost. These activities must not be exempt from public comment and scrutiny.
18.360.090A.2.b. Approval Criteria -- We recommend that the wording be changed to "Trees must be preserved ....", in order to more adequately protect our natural resources in our city; the present "shall" is too often left open to such a degree to interpretation that in many developments NO trees are left on the site at all.

18.775.020.B.1 and 7. -- We recommend that accessory uses such as lawns, gardens, etc. have to have a permit if a landowner proposes to put such in a floodplain, etc., since lawns, etc. provide zero habitat and in fact often increase the amounts of fertilizers, etc. used and going into a nearby waterway. If someone has a forested area and wants to turn it into a lawn, they should have to get a permit and justify what it is alright to do this. We recommend the same with fences (#7) as they also can restrict the movement of wildlife through an area and greatly disrupt movement through an area for many species of wildlife.

In conclusion, we recommend greater protections for our natural resources than what is being proposed by the Basin Plan and Tigard’s proposed revisions to the Significant Habitat Areas Map. We believe our quality of life, as well as the continued protection of our natural resources in our city, demands a larger area of habitat be preserved, greater buffers, etc., in order to ensure our resources are protected and truly meet the intentions of Goal 5 and that of the Metro Title 13.

Thank you for consideration of these comments/recommendations.

Sincerely,

Sue Beilke, Director
The Biodiversity Project of Tigard
Comprehensive Plan Update
Natural Resources
WETLANDS / FISH & WILDLIFE HABITAT

Natural Resources Overview

October 2:
• Streams and Riparian Areas
• Groundwater
• Minerals (Geology, Aggregate Resources & Soils)

October 16:
• Wetlands
• Fish and Wildlife Habitat

WETLANDS

FUNCTIONS
• Aesthetic, Educational and Recreational Values
• Ecological
• Flood Control
• Water Quality
• Aquatic & Terrestrial Habitat

Potential Threats
• Encroachment by development, altered drainage patterns, pollution and nuisance plant species.
WETLANDS

FEDERAL / STATE PLANNING & PERMITTING

- US Army Corps - Federal permitting for compliance with Section 404 of the CWA and Section 10 of the Rivers and Harbors Act
- Oregon Statewide Planning Goal 5
  - Approves Local Wetlands Inventories (LWI)
  - State permitting for removal and fill in wetlands

GOAL 5 INVENTORY PROCESS

- Local Wetland Inventory (LWI)
- Significance Determination
- Alternate Processes
- Standard ESHE
- Safe Harbor

SAFE HARBOR PROTECTIONS

Locally Significant Wetland (LSW): Wetlands which ranked highest on four of the assessed ecological functions (e.g. wildlife habitat, fish habitat, water quality, hydrologic control)

Regulatory restrictions on:
- Grading
- Excavation
- Placement of fill
- Vegetation removal
### WETLANDS

**STATISTICS & FINDINGS**

- The City has 130 wetlands cover approximately 287 acres.
- Roughly 99% of the City's wetlands are classified as "locally significant wetlands."*
- In 1997, the City adopted "safe harbor" protections for locally significant wetlands.
- Since 1997, approved hardship variances amount to a net loss of 0.45 acres of significant wetlands.
- Sensitive Lands Provisions - "significant" wetlands & CWS "vegetated corridor" buffer.

### CITY OF TIGARD WETLANDS

![Map of Tigard Wetlands]

### FISH & WILDLIFE HABITAT

**FUNCTIONS**

- Enable fish and wildlife species to meet their most basic needs (food, water, mobility, security and reproduction).
- Vegetation has aesthetic value, controls runoff and erosion, moderates temperature, reduces air pollution and provides protective cover for wildlife.
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<thead>
<tr>
<th>FISH &amp; WILDLIFE HABITAT COORDINATION</th>
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<tr>
<td>• Federal Endangered Species Act</td>
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<td>• Oregon Statewide Goal S</td>
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<td>• Procedures for compliance</td>
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<td>• Oregon Natural Heritage Program — listed species</td>
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<td>• Oregon Fish and Wildlife — species and habitat data</td>
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<tr>
<th>FISH &amp; WILDLIFE HABITAT (cont.)</th>
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<tr>
<td>• Metro Nature in Neighborhoods — Title 13, functional plan for riparian and upland wildlife habitat</td>
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<tr>
<td>• Inventory of regionally significant riparian and upland habitat areas</td>
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<td>• Tualatin Basin Partners for Natural Places</td>
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<tr>
<th>FISH &amp; WILDLIFE HABITAT (cont.)</th>
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<tr>
<td>Tualatin Fish and Wildlife Habitat Program intended to complement:</td>
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<tr>
<td>• Clean Water Services (CWS)</td>
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<td>• Design and Construction Standards</td>
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<td>• Healthy Streams Plan</td>
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<td>• Stormwater Management Plan</td>
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<td>• Existing local regulations</td>
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<td>• Tigard Development Code</td>
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<td>• Sensitive Lands</td>
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<td>• Tree removal</td>
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FISH & WILDLIFE HABITAT
STATISTICS & FINDINGS
• Metro "vegetative cover" map shows roughly 11% of the City is covered by forest canopy (2002)
• Inventoried "significant" habitat in Tigard is heavily concentrated adjacent to local stream corridors — nearly 80% classified as riparian habitat.
• Roughly 20% of City's "significant" habitat is classified as upland resources.

FISH & WILDLIFE HABITAT
STATISTICS & FINDINGS (cont.)
Tualatin Basin Economic, Social, Environmental and Energy (ESEE) findings of the inventoried regionally significant habitat:
• 588 acres designated as highest-value (strictly limit)
• 370 acres was designated as medium-value (moderately limit)
• 422 acres was designated as lower-value (lightly limit)
Exhibit E

MEMORANDUM

TO: City Council
FROM: Denver Igarta, Associate Planner
CPA 2006-00001/DCA 2006-00004
DATE: November 7, 2006

This memo transmits the recommendations to City Council made by the Planning Commission at a public hearing held on October 16, 2006, concerning proposed habitat-friendly development provisions (CPA 2006-00001/DCA 2006-00004). At the public hearing, the Planning Commission voted unanimously to recommend approval of the proposed amendments subject to the modifications which are described below.

The purpose of this memo is to inform the City Council of the proposed amendments and modifications made subsequent to the October 16th public hearing in anticipation of Council's November 21st worksession and its December 12th public hearing.

In addition to the Planning Commission recommendation, Metro independently advised the City offer a simplified process for verifying habitat boundaries to more effectively encourage habitat protection. The agency's comments were not submitted in time for the Planning Commission's public hearing. Metro's recommendation is minor in nature and does not substantively change the proposal as reviewed and recommended by the Planning Commission. Since the proposed amendment is considered legislative, Council may adopt the changes along with the provisions recommended by the Planning Commission. Staff recommends this course of action.

Background
Why is the City adopting new Habitat-Friendly Development Provisions?
The proposed amendments result from Metro assuming responsibility for fish and wildlife habitat as "regional resources" (in compliance with Statewide Goal 5) by adopting Title 13 – Nature in Neighborhoods as part of their Urban Growth Management Functional Plan, which was acknowledged in October 2006, by the State Land Conservation and Development Commission (LCDC). Following LCDC acknowledgement of the Functional Plan, local governments within Metro must apply Metro requirements rather than the requirements of Statewide Goal 5.

Since 2002, the City of Tigard has collaborated with other local jurisdictions within Washington County to develop the Tualatin Basin Fish and Wildlife Habitat Program. In September 2005, Metro incorporated the Tualatin Basin Program as part of the regional Nature in Neighborhoods Program.
(Title 13 of the Metro Functional Plan). Basin jurisdictions must now implement applicable elements of the Tualatin Basin Program by the end of the year.

It is important to emphasize that the proposed habitat-friendly development provisions are aimed at fulfilling the requirements of Title 13, which sets minimum requirements for preserving riparian and upland habitat areas. Local jurisdictions may adopt protection and restoration programs that go beyond the regional program; however, this must be carried out in accordance with standard Goal 5 procedures and be approved independently by LCDC.

What do the Habitat-Friendly Development Provisions Propose?
The proposed amendments will not result in increased development restrictions but will give property owners and developers the option to take advantage of greater regulatory flexibility in exchange for the use of habitat-friendly practices. These amendments also remove barriers to development that incorporate recommended habitat-friendly development techniques.

Status of Existing Regulations
Existing regulations contained in Clean Water Services Design and Construction Standards and the City's Community Development Code (including protections for drainageways, riparian/vegetated corridors, wetlands, floodplains, steep slopes, and trees) are more restrictive and therefore supersede the proposed voluntary habitat-friendly development provisions.

Planning Commission Recommended Changes to Staff's Original Proposal
The Planning Commission has recommended that Council adopt the proposal with the following modifications.

1. Density Transfer: At the Commission's September 25th worksession, staff proposed a density transfer provision based on the Tualatin Basin recommendation (i.e. allow development potential to be transferred from qualified habitat areas) to augment existing regulations which provide density transfer/bonuses for the following:
   - 100-yr floodplain, steep slopes and drainageways: Up to 25%
   - Wetlands: Up to 100% for land zoned R-12, R-25, and R-40;
   - Tree retention: 1% bonus for each 2% of canopy cover, up to 20%; and
   - Planned developments: 1% bonus for each 5% of the gross site area set aside in open space, up to 5%.

The Planning Commission decided to recommend to the City Council that code amendments be deferred until further consideration can be given to establishment of design standards and review procedures to ensure that proposed density transfers will be compatible with the surrounding neighborhood. The issue shall be added to the Planning Commission calendar for further discussion in the near term.

2. Exemption for Projects to Implement CWS Healthy Streams Plan: At the October 16th Public Hearing, public testimony was given in opposition to exempting projects which implement Clean Water Services Healthy Streams Plan from the City's Sensitive Lands provisions since this would remove the process for citizens to review and comment on proposed actions. Based on the testimony, the Planning Commission decided to exclude this exemption from the habitat-friendly development provisions being recommended for approval by Council.
**Metro Recommendation**
Subsequent to the October 16th Public Hearing, Metro advised City staff of the need to offer a simplified map verification process (per Metro Code Section 3.07.1330.G.2.) to applicants who agree that the adopted Significant Habitat Areas map is accurate. As a result, applicants who agree with the map would not be required to hire a professional consultant or conduct a detailed on-site delineation. In response, staff has modified the proposed map verification procedures accordingly.

**Public Hearing Comments and Responses**
In order to clarify responses to issues raised and comments submitted at the October 16th Public Hearing with the Planning Commission, staff has prepared the attached summary (refer to Attachment 6). Written comments were submitted on October 16th by the Biodiversity Project of Tigard.

**Council Options**
On December 12, 2006, a public hearing will be held with City Council on the proposed amendments. In accordance with Code Section 18.390.060.H.4., the Council has the final authority to approve, modify or deny the application for legislative change.

Should the City Council approve or modify the proposed habitat-friendly development provisions, the City of Tigard would fulfill its obligation, under Metro Title 13, to adopt provisions to facilitate and encourage the use of habitat-friendly development practices, where technically feasible and appropriate.

Should the City Council decide not to adopt the proposed amendments (which are based on the Tualatin Basin recommendations), the City may choose to amend its Comprehensive Plan and implementing ordinances to adopt Metro's Title 13 Model Ordinance and the Metro Habitat Conservation Areas Map.

**Possible Next Steps**
If the proposed habitat-friendly development provisions are adopted, the City Council could elect at a later time to enhance and expand upon existing regulations and protections beyond the minimum requirements set by Metro Title 13. Should the City decide to adopt greater limits on development outside the CWS vegetated corridor, but within inventoried significant habitat areas, it must follow State Goal 5 procedures and gain approval directly from the State Land Conservation and Development Commission (LCDC).
MEMORANDUM

TO: City Council

FROM: Denver Igarta, Associate Planner

RE: Response to the October 16th Public Hearing Issues and Comments
    CPA 2006-00001/DCyi 2006-00004

DATE: November 7, 2006

The following documents staff responses to issues brought up and written comments submitted at the October 16, 2006, public hearing.

Administrative Procedures for Verification of Precise Boundaries: The Significant Habitat Areas Map is intended to establish the "general", and not precise, location of significant riparian and upland habitat areas according to classification (i.e. "strictly", "moderately" and "lightly" limit). The proposed habitat-friendly development provisions rely on a voluntary approach to preserving habitat and their utilization within inventoried significant habitat areas would not be mandatory.

The proposed site-level delineation methodology (Section 18.775.140) is based on Metro’s model ordinance and provides procedures for verifying the precise boundaries of the inventoried habitat areas. Site-specific delineations to verify precise boundaries are not to be considered a comprehensive plan amendment.

Following the adoption of local implementing ordinances, each jurisdiction will be responsible for administering procedures for verifying the city’s adopted map deemed by Metro to be in substantial compliance with Title 13 of the Urban Growth Management Functional Plan.

Portions of Streams are Unmapped: Metro’s fish and wildlife habitat inventory, which served as the basis for the proposed Significant Habitat Areas Map, was completed in compliance with Statewide Goal 5 rules and based on an extensive scientific literature review which combined geographic information system (GIS) mapping technology, scientific recommendations, and fieldwork.

Metro utilized current data on stream locations provided by Clean Water Services in conducting their inventory of riparian habitat areas and designated significant riparian habitat based on microclimate & shade, streamflow and water storage, bank stabilization, sediment and pollution control, woody debris and channel dynamics, and organic matter input.

In October 2006, the Oregon Land Conservation and Development Commission (LCDC) approved acknowledgment of Metro’s Goal 5 (Title 13) inventory and program. Any provisions that go
beyond Metro’s Title 13 program or map must be formed following State Goal 5 procedures and be submitted directly to LCDC for approval.

Clean Water Services has created digital geographic information system (GIS) files mapping streams based on data surveyed and collected in the field in 2000 and 2001. All streams within Tigard (whether perennial or intermittent) are designated by definition as “sensitive areas” under Clean Water Services’ Design and Construction Standards, which establishes adjacent “vegetated corridor” buffers, requires a natural resource assessment for proposed development and mandates restoration of corridors in marginal or degraded condition.

**Regulatory Protections:** Existing regulations (which will still apply), including standards contained in the City of Tigard Community Development Code and CWS Design and Construction Standards, are more restrictive and therefore supersede the proposed voluntary habitat-friendly development provisions.

Both the Metro Nature in Neighborhoods Program and the Tualatin Basin Fish and Wildlife Habitat Program rely on voluntary, incentive-based approaches for proposed development outside those areas already subject to existing regulations. Further restrictions on development which go beyond the scope of this application should be addressed as part (and incorporated into) the larger Comprehensive Plan update process and any subsequent code enhancements identified for the City’s local implementing ordinances.

**Deducting Significant Habitat Areas from Net Development Area:** The proposed code amendment would give developers the “option” of deducting inventoried significant habitat from the “net acre” as recommended by the Tualatin Basin Goal 5 Program Implementation Report.