

ORDINANCE 2005-017

AN ORDINANCE AMENDING CHAPTER 6 OF THE SHERWOOD ZONING AND COMMUNITY DEVELOPMENT CODE TO REQUIRE INSTALLATION OF CONDUITS FOR PUBLIC AND FRANCHISE UTILITIES.

WHEREAS, telecommunications systems are of local concern because they are in part an extension of interstate commerce, their operations involve rights-of-way, and they contribute a vital business and community service;

WHEREAS, it is in the best interest of the City of Sherwood taxpayers and citizens to promote the rapid development of telecommunications services, on a nondiscriminatory basis, in a manner that is responsive to community and public interest, and to assure availability for municipal, educational, and community services;

WHEREAS, the Sherwood City Council adopted Ordinance No. 2005-007 on March 15, 2005 to form the "City Telecommunications Utility" commonly referred to as "Sherwood Broadband";

WHEREAS, the Sherwood Zoning and Community Development Code is currently silent regarding standards for installing telecommunication conduits when development occurs;

WHEREAS, it is necessary to clearly specify utility conduits are required to be installed when development occurs in order to ensure the Sherwood residents, employers and employees have access to telecommunications facilities;

WHEREAS, the Planning Commission initiated the plan amendment at a public meeting on September 27, 2005;

WHEREAS, a public hearing was duly noticed and held before the Planning Commission on November 8, 2005 and the Planning Commission voted to forward a recommendation of approval to the City Council based on the findings and conclusions provided in the Staff Report (Exhibit A); and

WHEREAS, after full and due consideration of the application, the Staff Report, the record, findings, and of the evidence presented at the public hearings, the Council finds the proposed plan text amendments are appropriate to ensure telecommunication utilities are provided at time of development.

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

Section 1. Commission Review & Public Hearings. The proposal by the Planning Commission for a Plan Text Amendment (City file No. PA 05-05) to amend the Sherwood Zoning and Community Development Code Section 6 was subject to full and proper review and

public hearings were held before the Planning Commission on November 8, 2005 and the City Council on December 6, 2005.

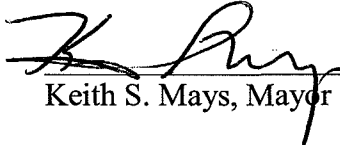
Section 2. Findings. After full and due consideration of the proposal, the City Staff Report dated November 1, 2005, the record, findings, and of the evidence presented at the public hearing, the Council finds the proposed amendments to Chapter 6 identified in Exhibit B comply with all applicable federal, state, regional and local standards and are in the best interest of the City of Sherwood residents.

Section 3. Approval. The proposal for Plan Text Amendment, identified in the document labeled "Exhibit B" and attached to this ordinance, is hereby **APPROVED**.

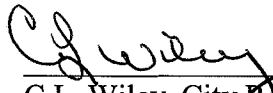
Section 4. Manager Authorized. The Planning Supervisor is hereby directed to take such action as may be necessary to document this amendment, including preparation of a certified amendment of the official City Zoning and Community Development Code in accordance with City ordinances and regulations.

Section 3. Effective Date. This ordinance shall become effective the 30th day after its enactment by the City Council and approval by the Mayor.

Duly passed by the City Council this 6th day of December 2005.


Keith S. Mays, Mayor

ATTEST:


C.L. Wiley, City Recorder

	<u>AYE</u>	<u>NAY</u>
Luman	<input checked="" type="checkbox"/>	<input type="checkbox"/>
King	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Henderson	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heironimus	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grant	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Durrell	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mays	<input checked="" type="checkbox"/>	<input type="checkbox"/>

TO: PLANNING COMMISSION

Hearing Date: November 8, 2005
Report Date: November 1, 2005

FROM: PLANNING DEPARTMENT
Julia Hajduk, Senior Planner

I. BACKGROUND

In March of 2005, the City Council amended Chapter 4 of the Municipal Code (Ordinance No. 2005-007) to create the City of Sherwood Telecommunications Utility, a public utility that provides broadband access to residences and businesses in Sherwood. The City has existing telecommunication fiber optic conduit in various locations throughout the City as illustrated in Exhibit A. However, in order to ensure access is provided to existing and future residents and employers, conduit must be installed at the time a property develops. The Sherwood Zoning and Community Development Code requires public infrastructure to be extended within and along the frontage of a project site as part of the land use review; however, at this time the public telecommunication utility is not clearly identified as a public utility. In addition, while private utility conduits are also traditionally installed by the developer during construction, and required during the Engineering Plan review, the code does not clearly mandate that conduits for utilities such as private cable, phone and electricity be installed during construction. The proposed amendments (Exhibit B) will clarify existing procedures and ensure that Sherwood residents, employers and employees have better access to affordable telecommunication services. Also included (Exhibit C) is the proposed design and construction standards from the Engineering Department which will be adopted at the same time as the proposed amendments to provide definitive standards for the installation of the conduit and appurtenances.

II. AGENCY & PUBLIC COMMENTS

Staff sent a copy of the proposed changes via e-mail to affected/interested agencies on October 18, 2005. No comments or concerns have been provided or raised to date. Direct property notice is not required for a Type V – Legislative amendment. The proposed amendment does not limit or prohibit the use of property; therefore Measure 56 notice is not required. Staff sent notice to DLCD on September 30, 2005.

III. FINDINGS

TEXT AMENDMENT (SECTION 4.203.01)

An amendment to the text of the Comprehensive Plan shall be based upon a need for such an amendment as identified by the Council or the Commission. Such an amendment shall be consistent with the intent of the Comprehensive Plan, and with all other provisions of the Plan and this Code, and with any applicable State or City statutes and regulations.

Consistency with Comprehensive Plan:

The Planning Commission initiated the plan text amendment application on September 27, 2005 after considering the changes during a regular meeting.

The proposed amendments are consistent with Chapter 7 of the Comprehensive Plan (Part 2), which lists the general policy goal as: **“to insure the provision of quality community services and facilities of a type, level and location which is adequate to support existing development and which encourages efficient and orderly growth at the least public cost.”**

The Sherwood Broadband utility clearly meets this goal by providing low cost access to Sherwood. In order to ensure this goal is met, changes to the Comprehensive Plan Parts 2 and 3 are necessary. While Chapter 7 of Part 2 of the Comprehensive Plan does not fully reflect the advancements in technology (DSL and high speed internet connections) that are now critical to the operation of our economy and communication system, this section does list communications as a public facility and service that must be provided in order to meet the policy goal identified above. The update of Chapter 6 of the Sherwood Zoning and Community Development code to require installation of conduits for said utilities as part of a proposed development and provide for this newer advancement in communications is consistent with the policies and objectives of the Comprehensive Plan.

Consistency with State Law:

There are no known State land use laws that are applicable to these proposed amendments. The public facility planning rules (OAR 660-011) do not address telecommunications.

Consistency with Regional (Metro) law:

There are no known Regional land use laws that are applicable to these proposed amendments.

IV. RECOMMENDATION

Planning staff recommends that the Planning Commission recommend **approval** of the attached plan text amendment, subject to any revisions, and forward the findings and proposal to the City Council for a second required hearing in the form of a proposed ordinance.

V. EXHIBITS

Not attached

- A. Facility Map of City of Sherwood fiber optic conduits
- B. Draft changes to Chapter 6 of the Sherwood Zoning and Community Development Code version 1.0
- C. Draft Design and Construction Standards for conduit installation
- D. Ordinance No. 2005-007 (Sherwood Broadband)

CHAPTER 6

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CHAPTER 6**PUBLIC IMPROVEMENTS****6.100 GENERALLY****6.101 STANDARDS**

To ensure the health, safety, and the economic stability of the community, and to establish a quality system of public improvements, the City shall require proposed buildings and development for which public facilities and public rights-of-way are not fully provided or improved to current City standards, to install said improvements. The Council may establish specifications to supplement the standards of this Code and other applicable ordinances. Except as otherwise provided or authorized, private improvements serving substantially the same function as equivalent public facilities, shall generally be provided and improved at the standards established by this Code and other City regulations.

6.102 FUTURE IMPROVEMENTS

The location of future public improvements including water, sanitary sewer, storm water, streets, bicycle and pedestrian paths, and other public facilities and rights-of-way, as depicted in Chapters 4, 5, 6 and 7 of the Community Development Plan, are intended as general locations only. The precise alignments and locations of public improvements shall be established during the actual development process and shall be depicted on public improvement plans submitted and approved pursuant to Section 6.200 and other applicable sections of this Code.

6.103 IMPROVEMENT PROCEDURES

Except as otherwise provided, all public improvements shall conform to City standards and specifications and shall be installed in accordance with Section 6.200. No public improvements shall be undertaken until an improvement plan review fee has been paid, improvement plans have been approved by the City, and an improvement permit has been issued.

6.200 IMPROVEMENT PLAN REVIEW**6.201 PREPARATION AND SUBMISSION**

Required improvement plans shall be prepared and stamped by a Registered Civil Engineer certifying compliance with City specifications. Two (2) sets of said plans shall be submitted to the City for review. Improvements plans shall be accompanied by a review fee as per Section 6.201.01.

6.201.01 Review Fee

Plan review fees are calculated as a percentage of the estimated total cost of improvements and are set by the "Schedule of Development and Business Fees" adopted by Resolution of the Council. This schedule is included herein for the purposes of information, but is deemed to be separate from and independent of this Code.

6.201.02 Engineering Agreement

A copy of an agreement or contract between the applicant and Registered Civil Engineer for:

- A. Surveying sufficient to prepare construction plans.
- B. Preparation of construction plans and specifications.
- C. Construction staking, and adequate inspection.
- D. Construction notes sufficient to develop accurate as-built plans.
- E. Drawing of accurate as-built plans and submission of reproducible mylars to the City.
- F. Certificate stating that construction was completed in accordance with required plans and specifications.

6.202 CONSTRUCTION PERMIT

6.202.01 Approval

The City will return one (1) set of plans to the applicant marked "approved" or "modify and resubmit." Plans marked for re-submittal must be corrected in accordance with notations or instructions. After correction and approval, additional plans shall be provided the City for office use, field inspection and submittal to affected agencies.

6.202.02 Permit and Fee

Upon approval the applicant shall obtain a construction permit. The construction permit fee is set by the "Schedule of Development Fees", adopted by Resolution of the Council. This schedule is included herein for the purposes of information, but is deemed to be separate from and independent of this Code.

6.202.03 Easement Documents

Necessary construction and/or permanent easements shall be provided in a form acceptable to the City prior to issuance of a construction permit.

6.202.04 Improvement Guarantees

Prior to issuance of a construction permit the applicant shall file the following documents with the City:

A. Liability Insurance

Evidence of public liability and property damage insurance adequate to protect the applicant and the City from all claims for damage or personal injury.

B. Performance Bond

To assure full and faithful performance in the construction of required improvements in accordance with approved construction plans, the applicant shall provide security in an amount equal to one hundred percent (100%) of the estimated cost of the improvements. In the event the applicant fails to carry out all provisions of the approved improvements plans and the City has unreimbursed costs or expenses resulting from such failure, the City shall call on the security for reimbursement. Security may be provided in the form of a surety bond executed by a surety company authorized to transact business in the State of Oregon, a cash deposit, or other form of security acceptable to the City.

6.203 CONSTRUCTION

6.203.01 Initiation of Construction

Actual improvements shall not begin, or after a discontinuance, be restarted until the City is notified in writing.

6.203.02 Inspection

All construction shall be done to the City's specifications. The City shall perform inspections to verify compliance with approved plans and shall make a final inspection of the construction at such time as the improvements are complete. The City may require changes in typical sections and details, if unusual conditions warrant the change.

6.203.03 As-Built Plans

A complete set of reproducible plans showing the public improvements as built shall be filed with the City upon completion of the improvements.

6.203.04 Suspension of Improvements Activity

The City shall have the authority to cause a suspension of improvement construction or engineering when, in the opinion of the City, work is not being done to the City's satisfaction.

6.204 ACCEPTANCE OF IMPROVEMENTS

6.204.01 Final Inspection

At such time as all public improvements, except those specifically approved for later installation, have been completed, the applicant shall notify the City of the readiness for final inspection.

6.204.02 Notification of Acceptance

The City shall give written notification of the acceptance of the improvements upon finding that the applicant has met the requirements of Section 6.200 and the specifications of all approved plans.

6.204.03 Maintenance Bond

At the time of City acceptance of public improvements, the applicant shall file with the City a maintenance bond computed at ten percent (10%) of the full value of the improvements, to provide for correction of any defective work or maintenance becoming apparent or arising within one (1) year after final acceptance of the public improvements.

6.300 STREETS

6.301 GENERALLY

6.301.01 Creation

Public streets shall be created in accordance with provisions of Section 7.304. Except as otherwise provided, all street improvements and rights-of-way shall conform to standards for the City's functional classification of said streets, as shown on the Transportation Plan Map, attached as Appendix B, in Chapter 6 of the Community Development Plan, and in other applicable City standards.

6.301.02 Street Naming

- A. All streets created by the subdivision process will be named prior to submission of the final plat.

- B. Any street created by a public dedication shall be named prior to or upon acceptance of the deed of dedication.
- C. An action to name an unnamed street in the City may be initiated by the Council or by a person filing a petition as described in Section 6.301.03.
- D. All streets named shall conform to the general requirements as outlined in Section 6.301.04.
- E. Private streets, at the request of the owner(s), may be named and addresses issued with the approval of the City. Private streets are subject to the same street name standards as are public streets. All private street signs will be provided at the owner(s) expense.

6.301.03 Street Renaming

- A. An action to rename a street in the City may be initiated by the Council:
 - 1. On its own action; or
 - 2. If a person files a petition as described in this section accompanied by a fee reasonably related to the costs of the process.
- B. A petition for naming or renaming a street shall include the following:
 - 1. A statement of the reasons for the proposed name change.
 - 2. The names and addresses of all persons owning any real property abutting the road proposed to be renamed.
 - 3. Signatures of either owners of percent sixty (60%) of the land abutting the subject road or sixty percent (60%) of the owners of land abutting the subject road.
- C. Notice and Hearing
 - 1. When a proceeding has been initiated under this section, the Council shall establish a time and place for a hearing to consider whether the proposed name change is in the public interest.
 - 2. At least ten (10) days prior to the date of hearing, notice of the proposed name change shall be provided as follows:
 - a. Notice by posting in no less than two (2) conspicuous places abutting the subject road; and
 - b. Notice by publication in a newspaper of general circulation in the area of the subject road.

3. During or before a hearing under this section, any person may file information with the Council that alleges any new matter relevant to the proceedings or controverts any matter presented to the Council.
4. After considering the matters presented under this section, the Council shall determine whether the name change is in the public interest and shall adopt findings and an ordinance granting or denying the request.
5. When the ordinance becomes final, the Council shall cause the ordinance to be recorded with the County Clerk who shall cause copies of the ordinance to be filed with the Department of Public Works, the Department of Assessment and Taxation and with the County Surveyor.
6. For the purposes of this section, "owner" means the record holder of legal title to the land, except that if there is a purchaser of the land according to a recorded land sale contract, the purchaser is the owner.

6.301.04 Street Name Standards

- A. All streets named or renamed shall comply with the following criteria:
 1. Major streets and highways shall maintain a common name or number for the entire alignment.
 2. Whenever practicable, names as specified in Section 6.301.05 shall be utilized or retained.
 3. Hyphenated or exceptionally long names shall be avoided.
 4. Similar names such as Farview and Fairview or Salzman and Saltzman shall be avoided.
 5. Consideration shall be given to the continuation of the name of a street in another jurisdiction when it is extended into the City.
- B. The following classifications (suffixes) shall be utilized in the assignment of all street names:
 1. Boulevards: North/south arterials providing through traffic movement across the community.
 2. Roads: East/west arterials providing through traffic movement across the community.
 3. Avenues: Continuous, north/south collectors or extensions thereof.

4. Streets: Continuous, east-west collectors or extensions thereof.
 5. Drives: Curvilinear collectors (less than 180 degrees) at least 1,000 feet in length or more.
 6. Lanes: Short east/west local streets under 1,000 feet in length.
 7. Terraces: short north/south local streets under 1,000 feet in length.
 8. Court: All east/west cul-de-sacs.
 9. Place: All north/south cul-de-sacs.
 10. Ways: All looped local streets (exceeding 180 degrees).
 11. Parkway: A broad landscaped collector or arterial.
- C. Except as provided for by this section, no street shall be given a name that is the same as, similar to, or pronounced the same as any other street in the City unless that street is an extension of an already-named street.
- D. All proposed street names shall be approved, prior to use, by the City.

6.301.05 Street Names

Whenever practicable, historical names will be considered in the naming or renaming of public roads. Historical factors to be considered shall include, but not be limited to the following:

- A. Original holders of Donation Land Claims in Sherwood.
- B. Early homesteaders or settlers of Sherwood.
- C. Heirs of original settlers or long-time (50-100 years) residents of Sherwood.
- D. Explorers of or having to do with Sherwood.
- E. Indian tribes of Washington County.
- F. Early leaders and pioneers of eminence.
- G. Names related to Sherwood's flora and fauna.
- H. Names associated with the Robin Hood legend.

6.302 STREET SYSTEMS IMPROVEMENT FEES (SIF)

6.302.01 Purpose

The SIF shall be reserved and used exclusively for the acquisition, expansion, extension, and capital development and redevelopment of public rights-of-way, streets, bikepaths, sidewalks, traffic control devices, and appurtenant structures, designed to provide extra system capacity, and as designated on the Transportation Plan Map, attached as Appendix B, and in Chapter 6 of the Community Development Plan. The SIF may also be utilized for expenditures relating to repayment of debt for such improvements. The SIF may not be used for street preservation improvements or for routine street system maintenance and operations.

6.302.02 Schedule of Charges

SIF's shall be assessed against new development in the City to support extra-capacity street improvements. The SIF for streets shall be set by the "Schedule of Development Fees", adopted by Resolution of the Council. This schedule is included herein for purposes of information, but is deemed to be separate from and independent of this Code.

6.302.03 Assessment

Except as otherwise provided by this Code or by State Law, the SIF is immediately due and payable and shall be collected prior to issuance of any building permits for new residential construction; for alterations or additions to buildings that increase the number of residential dwelling units; or for commercial, industrial, or institutional construction requiring new or additional off-street parking as per Section 5.302.

6.302.04 Deferral

Where the SIF due and payable from a single building permit exceeds \$3,000.00, an administrative deferral may be granted until an occupancy permit is issued. No occupancy permit shall be issued until the full SIF is paid in full.

6.303 REQUIRED IMPROVEMENTS

6.303.01 Generally

Except as otherwise provided, all developments containing or abutting an existing or proposed street, that is either unimproved or substandard in right-of-way width or improvement, shall dedicate the necessary right-of-way prior to the issuance of building permits and/or complete acceptable improvements prior to issuance of occupancy permits.

6.303.02 Existing Streets

Except as otherwise provided, when a development abuts an existing street, the improvements requirement shall apply to that portion of the street right-of-way located between the centerline of the right-of-way and the property line of the lot proposed for development. In no event shall a required street improvement for an existing street exceed a pavement width of thirty (30) feet.

6.303.03 Proposed Streets

1. Except as otherwise provided, when a development includes or abuts a proposed street, in no event shall the required street improvement exceed a pavement width of forty (40) feet.
2. Half Streets: When a half street is created, a minimum of 22 feet of driving surface shall be provided by the developer.

6.303.04 Extent of Improvements

Streets required pursuant to Section 6.300 shall be dedicated and improved consistent with Chapter 6 of the Community Development Plan, the Transportation System Plan and applicable City standards and specifications included in the Standard Transportation Drawings, and shall include curbs, sidewalks, catch basins, street lights, and street trees. Improvements shall also include any bikeways designated on the Transportation System Plan map.

Catch basins shall be installed and connected to storm sewers and drainage ways. Upon completion of the improvements, monuments shall be re-established and protected in monument boxes at every public street intersection and all points of curvature and points of tangency of their center lines. Street signs shall be installed at all street intersections and street lights shall be installed and served from an underground source of supply unless other electrical lines in the development are not underground.

6.303.05 Street Modifications

- A. Modifications to standards contained within Sections 6.300, 2.301 and the standard cross sections contained in Chapter 8 of the adopted Sherwood Transportation System Plan (TSP), may be granted in accordance with the procedures and criteria set out in this section.
- B. Types of Modifications. Requests fall within the following two categories:
 1. Administrative Modifications. Administrative modification requests concern the construction of facilities, rather than their general design, and are limited to the following when deviating from standards in Sections 6.300, 2.301 or Chapter 8 contained in the adopted Transportation System Plan:
 - a. Surfacing materials for roads or pedestrian facilities;

- b. Asphalt and/or base rock thickness less than required;
- c. Pavement marking layout;
- d. Exceeding the maximum street grade;
- e. Type and/or location of signage;
- f. Channelization;
- g. Intersection interior angles and curb radii less than required;
- h. Utilizing the current set of standards in lieu of the standards that were in place when the applicant's proposed project was vested;
- i. Access-related modifications onto collectors, arterials, and state routes; provided other substantive criteria such as sight distance and limited access points are met; and provided further that access to a lesser classification of road is not available.
- j. Needed changes as a result of a field investigation during construction; and
- k. Similar revisions to the standards.

2. Design Modifications. Design modifications deal with the vertical and horizontal geometrics and safety related issues and include the following when deviating from Section 6.300, 2.301 or Chapter 8 cross sections in the adopted Transportation System Plan.

- a. Reduced sight distances;
- b. Vertical alignment;
- c. Horizontal alignment;
- d. Geometric design (length, width, bulb radius, etc.);
- e. Design speed;
- f. Crossroads;
- g. Access policy;
- h. A proposed alternative design which provides a plan superior to these standards; and
- i. All other standards.

C. Procedure. A modification request shall be classified as an administrative decision by the City Engineer.

- 1. Administrative Modification. Administrative modifications may be requested at any time and are processed as Type II applications, unless defined under (C)(2) below. The application shall include sufficient technical analysis to enable a reasoned decision and shall include a letter of concurrency from the City Engineer.
- 2. Design Modification. Design modifications shall be proposed in conjunction with the application for the underlying development proposal and processed as a Type III application. Design modification requests shall be processed in conjunction with the underlying development proposal unless it is submitted subsequent to the decision for the underlying development proposal. The design modification application shall:
 - a. Include a written request stating the reasons for the request and the factors which would make approval of the request reasonable;
 - b. Include a letter of Concurrency from the City Engineer.
 - c. Be accompanied by a map showing the applicable existing conditions and proposed construction such as contours, wetlands, significant trees, lakes, streams and rivers, utilities, property lines, existing and proposed roads and driveways, existing and

- projected traffic patterns, and any unusual or unique conditions not generally found in other developments;
- d. In the case of modification requests based upon alleged disproportionality, include an engineering analysis of the standard sought to be modified which contrasts relevant traffic impacts from the development with the cost of complying with the standard; and
 - e. For crossroad and frontage construction and right-of-way dedication, the application shall include information indicating whether there are geographic or other factors which render connection/completion of the road unfeasible.
- D. Street modifications may be granted when criterion D.1 and any one of criteria D.2 through D.6 are met:
1. A letter of concurrency is obtained from the City Engineer or designee.
 2. Topography, right-of-way, existing construction or physical conditions, or other geographic conditions impose an unusual hardship on the applicant, and an equivalent alternative which can accomplish the same design purpose is available.
 3. A minor change to a specification or standard is required to address a specific design or construction problem which, if not enacted, will result in an unusual hardship. Self-imposed hardships shall not be used as a reason to grant a modification request.
 4. An alternative design is proposed which will provide a plan equal to or superior to the existing street standards.
 5. Application of the standards of this chapter to the development would be grossly disproportional to the impacts created.
 6. In reviewing a modification request, consideration shall be given to public safety, durability, cost of maintenance, function, appearance, and other appropriate factors, such as to advance the goals of the adopted Sherwood Comprehensive Plan and Transportation System Plan as a whole. Any modification shall be the minimum necessary to alleviate the hardship or disproportional impact.

6.304 LOCATION AND DESIGN

6.304.01 Generally

The location, width and grade of streets shall be considered in their relation to existing and planned streets, topographical conditions, and proposed land uses. The proposed street system shall provide adequate, convenient and safe traffic and pedestrian circulation, and intersection angles, grades, tangents, and curves shall be adequate for expected traffic volumes. Street alignments shall be consistent with solar access requirements as per Section 8.311, and topographical considerations.

6.304.02 Street Connectivity and Future Street Systems

- A. Future Street Systems. The arrangement of public streets shall provide for the continuation and establishment of future street systems as shown on the Local Street Connectivity Map contained in the adopted Transportation System Plan (Figure 8-8).

- B. Connectivity Map Required. New residential, commercial, and mixed use development involving the construction of new streets shall be submitted with a site plan that responds to and expands on the Local Street Connectivity map contained in the TSP.
- C. Block Length. For new streets except arterials and principal arterials, block length shall not exceed 530 feet. The length of blocks adjacent to principal arterials shall not exceed 1,800 feet.
- D. Where streets must cross water features identified in Title 3 of the Urban Growth Management Functional Plan (UGMFP), provide crossings at an average spacing of 800 to 1,200 feet, unless habitat quality or length of crossing prevents a full street connection.
- E. Where full street connections over water features identified in Title 3 of the UGMFP cannot be constructed in centers, main streets and station communities (including direct connections from adjacent neighborhoods), or spacing of full street crossings exceeds 1,200 feet, provide bicycle and pedestrian crossings at an average spacing of 530 feet, unless exceptional habitat quality or length of crossing prevents a connection.
- F. Pedestrian and Bicycle Connectivity. Paved bike and pedestrian accessways at least 8 feet wide, or consistent with cross section standards in Figure 8-6 of the TSP, shall be provided on public easements or right-of-way when full street connections are not possible, with spacing between connections of no more than 300 feet. Multi-use paths shall be built according to the Pedestrian and Bike Master Plans in the adopted Transportation System Plan.
- G. Exceptions. Streets, bike, and pedestrian connections need not be constructed when any of the following conditions exists:
 - 1. Physical or topographic conditions make a street or accessway connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided;
 - 2. Buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or
 - 3. Where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995, which preclude a required street or accessway connection.

6.304.03 Underground Utilities

All public and private underground utilities, including sanitary sewers and storm water drains, shall be constructed prior to the surfacing of streets. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

6.305 STREET DESIGN

Standard cross sections showing street design and pavement dimensions are located in the City of Sherwood Transportation System Plan, Technical Standards, and the City of Sherwood Public Works Standards, or whichever is most current.

6.305.02 Reserve Strips

Reserve strips or street plugs controlling access or extensions to streets shall not be allowed unless necessary for the protection of the public welfare or of substantial property rights. All reserve strips shall be dedicated to the City.

6.305.03 Alignment

All proposed streets shall, as far as practicable, be in alignment with existing streets. In no case shall the staggering of streets create a "T" intersection or a dangerous condition. Street offsets of less than one hundred (100) feet will not be allowed.

6.305.04 Future Extension

Where necessary to access or permit future subdivision of adjoining land, streets shall extend to the boundary of the development. Dead-end streets less than 100' in length shall either comply with City cul-de-sac standards of Section 6.305.06, or shall provide an interim hammerhead turnaround at a location that is aligned with the future street system as shown on the local street connectivity map.

A durable sign shall be installed at the applicant's expense. These signs shall notify the public of the intent to construct future streets. The sign shall read as follows: "This road will be extended with future development. For more information contact the City of Sherwood at 503-625-4202.

6.305.05 Intersection Angles

- A. Streets shall intersect as near to ninety (90) degree angles as practical, except where topography requires a lesser angle. In no case shall the permitted angle be less than eighty (80) degrees without an approved special intersection design. Streets which contain an acute angle of less than eighty (80) degrees or which include an arterial street shall have a minimum corner radius sufficient to allow for a roadway edge radius of twenty (20) feet and maintain a uniform width between the roadway and the right-of-way line.
- B. Principal arterial, arterial, collector streets, or neighborhood routes intersecting with another street shall have at least one hundred (100) feet on tangent adjacent to intersections unless topography requires a lesser distance. Local streets, except alleys, shall have at least fifty (50) feet on tangent adjacent to intersections.

6.305.06 Cul-de-Sacs

- 1. All cul-de-sacs shall be no more than one hundred (100) feet in length, shall not provide access to more than 15 dwelling units and shall be used only when exceptional

topographical constraints, existing development patterns, or compliance with other standards in this code preclude a street extension and circulation.

2. All cul-de-sacs shall terminate with a circular turnaround no more than 40 feet in radius (i.e. from center to edge of pavement) or hammerhead turnaround in accordance with the specifications in the Public Works Standards. The radius of circular turnarounds may be larger when they contain a landscaped island, parking bay in their center, Tualatin Valley Fire and Rescue submits a written request, or an industrial use requires a larger turnaround for truck access.
3. The length of the cul-de-sac shall be measured along the centerline of the roadway from the near side of the intersecting street to the farthest point of the cul-de-sac.
4. Public easements, tracts, or right-of-way shall provide paved pedestrian and bicycle accessways at least 6 feet wide where cul-de-sacs or dead-end streets are planned, to connect the ends of the streets together, connect to other streets, and/or connect to other existing or planned developments in accordance with the standards. of 6.303.04 and other City standards.

6.305.07 Grades and Curves

Grades shall not exceed six percent (6%) for principal arterials or arterials, ten percent (10%) for collector streets or neighborhood routes, and twelve percent (12%) for other streets. Center line radii of curves shall not be less than three hundred (300) feet for principal arterials, two hundred (200) feet for arterials or one hundred (100) feet for other streets. Where existing conditions, such as topography, make buildable sites impractical, steeper grades and sharper curves may be approved. Finished street grades shall have a minimum slope of one-half percent (1/2%).

6.305.08 Streets Adjacent to Railroads

Streets adjacent to railroads shall run approximately parallel to the railroad and be separated by a distance suitable to allow landscaping and buffering between the street and railroad. Due consideration shall be given at cross streets for the minimum distance required for future grade separations and to provide sufficient depth to allow screening of the railroad.

6.305.09 Buffering of Major Streets

Where a development abuts Highway 99W, or an existing or proposed principal arterial, arterial or collector street, or neighborhood route, adequate protection for residential properties shall be provided and through and local traffic shall be separated and traffic conflicts minimized. In addition, visual corridors pursuant to Section 8.304.04, and all applicable access provisions of Section 5.400, shall be met. Buffering may be achieved by: parallel access streets, lots of extra depth abutting the major street with frontage along another street, or other treatment suitable to meet the objectives of this Code.

6.305.10 Median Islands

As illustrated in Chapter 8 of the adopted Transportation System Plan, median islands may be used on principal arterial, arterial or collector streets for the purpose of controlling access, or for aesthetic purposes.

6.305.11 Curbs

Except in the Old Town Overlay District where curbless (*woonerf*) streets are permitted, curbs shall be installed on both sides of public streets and shall be at least six (6) inches in height.

6.305.12 Transit Facilities

Developments along existing or proposed transit routes, as illustrated in Figure 7-2 in the TSP, shall be required to provide areas and facilities for bus turnouts, shelters, and other transit-related facilities to Tri-Met specifications. Transit facilities shall also meet the following requirements:

1. Locate buildings within 20 feet of or provide a pedestrian plaza at major transit stops.
2. Provide reasonably direct pedestrian connections between the transit stop and building entrances on the site.
3. Provide a transit passenger landing pad accessible to disabled persons (if not already existing to transit agency standards).
4. Provide an easement or dedication for a passenger shelter and underground utility connection from the new development to the transit amenity if requested by the public transit provider.
5. Provide lighting at a transit stop (if not already existing to transit agency standards).

6.305.13 Traffic Controls

For developments of five (5) acres or more, the City may require a traffic impact analysis to determine the number and types of traffic controls necessary to accommodate anticipated traffic flow. Such analysis will be completed according to specifications established by the City. Review and approval of the analysis by the City, and any improvements indicated, shall be required prior to issuance of a construction permit.

6.305.14 Traffic Calming

- A. The following roadway design features, including internal circulation drives, may be required by the City in new construction in areas where traffic calming needs are anticipated:
1. Curb extensions (bulb-outs);
 2. Traffic diverters/circles;

- 3. Alternative paving and painting patterns;
- 4. Raised crosswalks, speed humps, and pedestrian refuges; and
- 5. Other methods demonstrated as effective through peer reviewed engineering studies.

B. With approval of the City Engineer, traffic calming measures such as speed humps and additional stop signs can be applied to mitigate traffic operations and/or safety problems on existing streets. They should not be applied with new street construction unless approved by the City Engineer and Tualatin Valley Fire & Rescue.

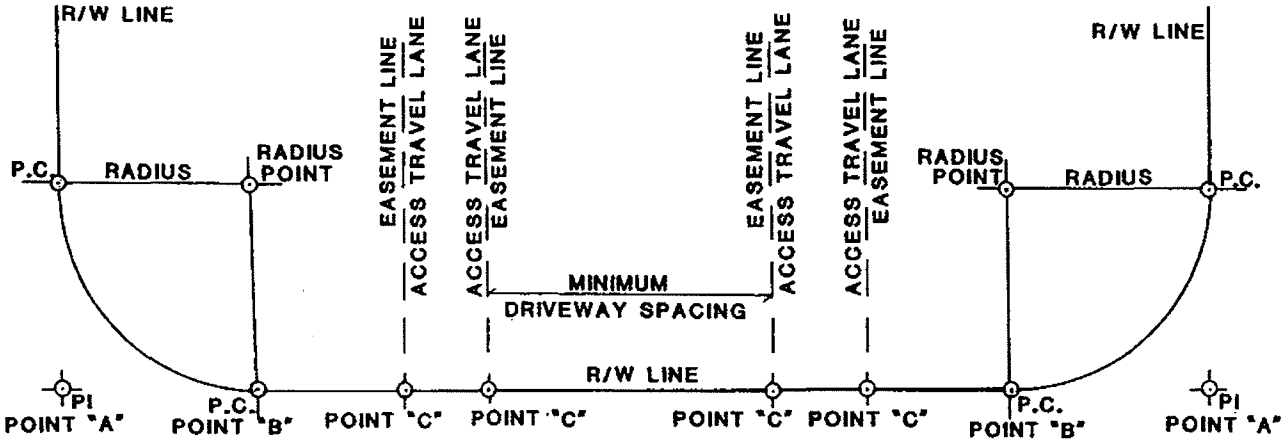
6.305.15 Vehicular Access Management

All developments shall have legal access to a public road. Access onto public streets shall be permitted upon demonstration of compliance with the provisions of adopted street standards in the *City of Sherwood Transportation Technical Standards* and the standards of Chapter 6.

A. Measurement

See following access diagram where R/W = Right-of-Way; and P.I. = Point-of-Intersection where P.I. shall be located based upon a 90 degree angle of intersection between ultimate right-of-way lines.

- 1. Minimum right-of-way radius at intersections shall conform to city standards. Where city standards do not exist, the County Road Standards shall apply.
- 2. All minimum distances stated in the following sections shall be governed by sight distance requirements according to County Road Standards.
- 3. All minimum distances stated in the following sections shall be measured to the nearest easement line of the access or edge of travel lane of the access on both sides of the road.
- 4. All minimum distances between accesses shall be measured from existing or approved accesses on both sides of the road.
- 5. Minimum spacing between driveways shall be measured from Point "C" to Point "C" as shown below:



No use will be permitted to have direct access to a street or road except as specified below. Access spacing shall be measured from existing or approved accesses on either side of a street or road. The lowest functional classification street available to the legal lot, including alleys within a public easement, shall take precedence for new access points.

1. Local Streets

Minimum right-of-way radius is fifteen (15) feet. Access will not be permitted within ten (10) feet of Point "B," if no radius exists, access will not be permitted within twenty-five (25) feet of Point "A." Access points near an intersection with a Neighborhood Route, Collector or Arterial shall be located beyond the influence of standing queues of the intersection in accordance with AASHTO standards. This requirement may result in access spacing greater than ten (10) feet.

2. Neighborhood Routes

Minimum spacing between driveways (Point "C" to Point "C") shall be fifty (50) feet with the exception of single family residential lots in a recorded subdivision. Such lots shall not be subject to a minimum spacing requirement between driveways (Point "C" to Point "C"). In all instances, access points near an intersection with a Neighborhood Route, Collector or Arterial shall be located beyond the influence of standing queues of the intersection in accordance with AASHTO standards. This requirement may result in an access spacing greater than fifty (50) feet.

3. Collectors

All commercial, industrial and institutional uses with one-hundred-fifty (150) feet or more of frontage will be permitted direct access to a Collector. Uses with less than one-hundred-fifty (150) feet of frontage shall not be permitted direct access to Collectors unless no other alternative exists.

Where joint access is available it shall be used, provided that such use is consistent with Section 5.404.02, Joint Access. No use will be permitted direct access to a Collector within one-hundred (100) feet of any present Point "A." Minimum spacing between driveways (Point "C" to Point "C") shall be one-hundred (100) feet. In all instances, access points near an intersection with a Collector or Arterial shall be located beyond the influence of standing queues of the intersection in accordance with AASHTO standards. This requirement may result in access spacing greater than one hundred (100) feet.

4. Principal Arterials, Arterials, and Highway 99W

Points of ingress or egress to and from Highway 99W, principal arterials, and arterials designated on the Transportation Plan Map, attached as Figure 1 of the Community Development Plan, Part II, shall be limited as follows:

- a. Single and two-family uses and manufactured homes on individual residential lots developed after the effective date of this Code shall not be granted permanent

driveway ingress or egress from Highway 99W, principal arterials, and arterials. If alternative public access is not available at the time of development, provisions shall be made for temporary access which shall be discontinued upon the availability of alternative access.

- b. Other private ingress or egress from Highway 99W, principal arterials, and arterial roadways shall be minimized. Where alternatives to Highway 99W, principal arterials, or arterials exist or are proposed, any new or altered uses developed after the effective date of this Code shall be required to use the alternative ingress and egress. Alternatives include shared or crossover access agreement between properties, consolidated access points, or frontage or backage road. When alternatives do not exist, access shall comply with the following standards:
 - 1) Access to Highway 99W shall be consistent with ODOT standards and policies per OAR 734, Division 51, as follows: Direct access to an arterial or principal arterial will be permitted provided that Point 'A' of such access is more than six hundred (600) feet from any intersection Point 'A' or other access to that arterial (Point 'C').
 - 2) The access to Highway 99W will be considered temporary until an alternative access to public right-of-ways is created. When the alternative access is available the temporary access to Highway 99W shall be closed.
- c. All site plans for new development submitted to the City for approval after the effective date of this Code shall show ingress and egress from existing or planned local or collector streets, including frontage or backage roads, consistent with the Transportation Plan Map and Chapter 6 of the Community Development Plan.

C. Exceptions to Access Criteria for City-Owned Streets

1. Alternate points of access may be allowed if an access management plan which maintains the classified function and integrity of the applicable facility is reviewed and approved by the City Engineer after considering the applicant's compliance with this Chapter.
2. An application for an Access Management Plan shall explain the need for the modification and demonstrate that the modification maintains the classified function and integrity of the facility. References to standards or publications used to prepare the Access Management Application shall be included with the application, including citations and numbers of engineering publications used to demonstrate compliance.
3. An access management plan shall address the safety and operational problems which would be encountered should a modification to the access spacing standards be granted. An access management plan shall be prepared and certified

by a traffic or civil engineer registered in the State of Oregon. An access management plan shall at minimum contain the following:

- (a) The minimum study area shall include the length of the site's frontage plus the distance of the applicable access spacing standard on each side of the subject property, as set forth in Section 6.306.B., measured from the property lines or access point(s), whichever is greater. For example, a property with 500 feet of frontage on an arterial (required 600 foot access spacing standard) shall have a minimum study area which is 1,700 (1,200 + 500) feet in length.
- (b) The access management plan shall address the potential safety and operational problems associated with the proposed access point. The access management plan shall review both existing and future access for all properties within the study area as defined above.
- (c) The access management plan shall include a comparison of all alternatives examined. At a minimum, the access management plan shall evaluate the proposed modification to the access spacing standard and the impacts of a plan utilizing the County standard for access spacing. Specifically, the access management plan shall identify any impacts on the operations and/or safety of the various alternatives.
- (d) The access management plan shall include a list of improvements and recommendations necessary to implement the proposed access modification, specifically addressing all safety and operational concerns identified.
- (e) Notice for a proposed access management plan shall include all property owners within the study area defined above.

D. Access in the Old Town (OT) Overlay Zone

1. Access points in the OT Overlay Zone shown in an adopted plan such as the Transportation System Plan, are not subject to the access spacing standards and do not need a variance. However, the applicant shall submit a partial access management plan for approval by the City Engineer. The approved plan shall be implemented as a condition of development approval.
2. Partial Access Management Plan.
 - a. A partial access management plan shall include:
 - 1) Drawings identifying proposed or modified access points
 - 2) A list of improvements and recommendations necessary to implement the proposed or modified access.
 - 3) A written statement identifying impacts to and mitigation strategies for facilities related to the proposed access points, especially considering safety impacts to all travel modes, operations, and the streetscape including on-street parking, tree spacing and pedestrian and bike facilities. The lowest functional classification street available to the lot, including

alleys within a public easement, shall take precedence for new access points.

- b. Access permits shall be required even if no other land use approval is requested.

6.306 SIDEWALKS

6.306.01 Required Improvements

- A. Except as otherwise provided, sidewalks shall be installed on both sides of a public street and in any special pedestrian way within new development.
- B. For Highway 99W, major or minor arterials, or in special industrial districts, the Commission may approve a development without sidewalks if alternative pedestrian routes are available.
- C. In the case of approved cul-de-sacs serving less than fifteen (15) dwelling units, sidewalks on one side only may be approved by the Commission.

6.306.02 Sidewalk Design Standards

A. Arterial Streets

Arterial and collector streets shall have minimum eight (8) foot wide sidewalks/multi-use path, located as required by this Code.

B. Local Streets

Local streets shall have minimum five (5) foot wide sidewalks, located as required by this Code.

C. Handicapped Ramps

Sidewalk handicapped ramps shall be provided at all intersections.

6.306.03 Pedestrian and Bicycle Paths

- A. Provide bike and pedestrian connections on public easements or right-of-way when full street connections are not possible, with spacing between connections of no more than 330 feet except where prevented by topography, barriers such as railroads or highways, or environmental constraints such as rivers and streams.

6.307 HIGHWAY 99W CAPACITY ALLOCATION PROGRAM (CAP)

A. Purpose

The purpose of the Highway 99W Capacity Allocation Program is to:

1. Prevent failure of Highway 99W through Sherwood;
2. Preserve capacity on Highway 99W over the next 20 years for new development within Sherwood;
3. Preserve land values in Sherwood by preventing failure of one of the City's key transportation links;
4. Insure improvements to Highway 99W and adjacent primary roadways are constructed at the time development occurs; and
5. Minimize the regulatory burden on developments that have minimal impact on Highway 99W.

B. Exclusions

The following types of projects and activities are specifically excluded from the provisions of this program:

1. Churches;
2. Elementary, middle, and high schools; and
3. Changes in use that do not increase the number of trips generated by the current use.

C. Definitions

1. "**Base Application**" means the site plan or conditional use application which invokes the provisions of this chapter.
2. "**Capacity**" means the maximum number of peak hour vehicle trips that Highway 99W through Sherwood may accommodate at the Level of Service Standard assuming full build-out of all land zoned for residential and industrial development in Sherwood.
3. "**Full Access Intersections**" means the following intersections on Highway 99W in Sherwood:

Sunset, Meinecke, Edy/N. Sherwood, Tualatin-Sherwood/Scholls-Sherwood (Roy Rogers Road, and Home Depot (Adams Street).

4. ***“ITE Manual”*** means the latest edition of the public titled “Trip Generation” by the Institute of Transportation Engineers.
5. ***“Level of Service (LOS) Standard”*** means the lowest acceptable level of service on a transportation corridor within Sherwood as stated in the Standard Requirements Section.
6. ***“Mitigation”*** means improvements to the transportation system that increase or enhance capacity.
7. ***“Net Trips”*** means the number of trips generated by a regulated activity during the PM Peak Hours. Net trips equal new trips, diverted trips, and trips from existing activities on a site that will remain. Net trips do not include: Pass-by trips, Internal trips, trips from existing facilities that will be removed, and Trips Reduced due to implementation of transportation demand strategies.
8. ***“Peak Hour”*** means a consecutive sixty (60) minute period during the twelve (12) PM hours of an average day, which experience the highest sum of traffic volumes on a roadway.
9. ***“Regulated Activity”*** means project(s) or activities proposed in the base application.
10. ***“Site Trip Limit”*** means the trip limit multiplied by the acreage of the site containing the regulated activity.
11. ***“Trip Allocation Certificate”*** means a certificate or letter from the City Engineer specifying that a regulated activity meets the trip limit and specifying any required mitigation.
12. ***“Trip Analysis”*** means a study or report that specifies the net trips from a regulated activity and analyzes the trip distribution and assignment from the activity.
13. ***“Trip Limit”*** means the maximum number of trips per acre from regulated activities that can be accommodated without violating the LOS Standard.

D. Standard Requirements

1. All regulated activities shall acquire a Trip Allocation Certificate prior to approval of their base application. Lack of a Trip Allocation Certificate shall be the basis for denial of a base application.

2. A Trip Analysis is required for **all** regulated activities prior to being considered for a Trip Allocation Certificate.
3. The Level of Service Standard for Highway 99W through Sherwood through the year 2020 is “E”.
4. The trip limit for a regulated activity shall be forty-three (43) net trips per acre.
5. Mitigation shall not be required for regulated activities occurring on land zoned General Industrial (GI) or Light Industrial (LI) when the activity produces less than eight (8) net trips per acre.

E. Trip Analysis

1. Purpose

The first step in the process of seeking a Trip Allocation Certificate is preparation of a Trip Analysis by the applicant for the regulated activity. The purpose of the Trip Analysis is to evaluate whether the net trips from a regulated activity exceed the site trip limit.

2. Timing

The Trip Analysis shall be submitted with the relevant base application. Base applications without a Trip Analysis shall be deemed incomplete.

3. Format

At a minimum, the Trip Analysis shall contain all the following information:

- a. The type and location of the regulated activity;
- b. A tax map clearly identifying the parcel(s) involved in the Trip Analysis;
- c. Square footage used to estimate trips, in accordance with methods outlined in the ITE Manual;
- d. Description of the type of activity, especially as it corresponds to activities described in the ITE Manual;
- e. Copy of the ITE Manual page used to estimate trips;
- f. Acreage of the site containing the regulated activity calculated to two (2) decimal points.
- g. Trip distributions and assignments from the regulated activity to all full access intersections impacted by ten (10) or more trips from

the regulated activity with identification of the method used to distribute trips from the site.

- h. Copies of any other studies utilized in the Trip Analysis;
- i. Summary of the net trips generated by the regulated activity in comparison to the site trip limit.
- j. Signature and stamp of a professional engineer, registered in the State of Oregon, with expertise in traffic or transportation engineering, who prepared the analysis.

4. Methods

- a. The Trip Analysis and trip generation for an activity shall be based on the ITE Manual.
- b. If a trip generation for the proposed use is not available in the ITE Manual or the applicant wishes to dispute the findings in the ITE Manual, the trip generation calculation may be based on an analysis of trips from five (5) sites with the same type of activity as that proposed.

5. Modification of Trip Analysis Requirements

The City Engineer may waive, **in writing**, some of the requirements of the Trip Analysis if:

- a. The proposed regulated activity is part of a previously approved Trip Allocation Certificate that meets the requirements of this chapter and the applicant demonstrates, to the satisfaction of the City Engineer, that the applicable provisions of the previously approved Trip Allocation Certificate shall be met; or
- b. The City Engineer determines, upon receipt of a letter of request from the applicant, that less information is required to accomplish the purposes of this chapter.

F. Trip Allocation Certificate

1. General

- a. Trip Allocation Certificates shall be issued by the City Engineer.
- b. Trip Allocation Certificates shall be valid for the same period as the land use or other city approval for the regulated activity.

- c. The City Engineer may invalidate a Trip Allocation Certificate when, in the City Engineer's judgment, the Trip Analysis that formed the basis for award of the Trip Allocation Certificate no longer accurately reflects the activity proposed under the base application.

2. Approval Criteria

- a. Upon receipt of a Trip Analysis, the City Engineer shall review the analysis. The Trip Analysis shall meet both of the following criteria to justify issuance of a Trip Allocation Certificate for the regulated activity:

- 1) Adequacy of analysis; and
- 2) Projected net trips less than the site trip limit.

- b. Adequacy of Analysis
The City Engineer shall judge this criterion based on the following factors:

- 1) Adherence to the Trip Analysis format and methods described in this chapter;
- 2) Appropriate use of data and assumptions; and
- 3) Completeness of the Trip Analysis.

3. Mitigation

- a. The Trip Allocation Certificate shall specify required mitigation measures for the regulated activity.
- b. Mitigation measures shall include improvements to Highway 99W and nearby transportation corridors that, in the judgment of the City Engineer, are needed to meet the LOS Standard and provide capacity for the regulated activity.
- c. Engineering construction plans for required mitigation measures shall be submitted and approved in conjunction with other required construction plans for the regulated activity.
- d. Mitigation measures shall be implemented in tandem with work associated with the regulated activity.
- e. Failure to implement required mitigation measures shall be grounds for revoking the regulated activity's base application approval.

G. Other Provisions

1. Acreage Calculation for a Regulated Activity

- a. Acreage calculations used to calculate net trips per acre in the Trip Analysis must use the entire area of the tax lot(s) containing the regulated activity, less 100-year flood plain area, in accordance with FIRM map for Sherwood.
- b. If the site contains existing uses, the net trips generated by these uses shall be included in the calculation of net trips generated from the site.

2. Partial Development of a Site

- a. If a regulated activity utilizes a portion of a vacant tax lot, such that the site could be further developed in the future, the applicant shall identify the potential uses for the vacant portion and reserve trips for that portion of the site in accordance with the uses identified. These reserve trips shall be included in the calculation of the net trips generated from the site.
- b. The Trip Allocation Certificate shall not be issued if the proposed future uses of the vacant area and the reserve trips are unrealistic in the opinion of the City Engineer.

6.308 BIKE PATHS

If shown on the Transportation Plan Map, attached as Appendix B, or in Chapter 5 of the Community Development Plan, bicycle paths shall be installed in public rights-of-way, in accordance with City specifications. Bike lanes shall be installed on both sides of designated roads, should be separated from the road by a twelve (12) inch stripe, not a curb, and should be a minimum of five (5) feet wide. Bike paths should not be combined with a sidewalk.

6.400 SANITARY SEWERS

6.401 REQUIRED IMPROVEMENTS

Sanitary sewers shall be installed to serve all new developments and shall connect to existing sanitary sewer mains. Provided, however, that when impractical to immediately connect to a trunk sewer system, the use of septic tanks may be approved, if sealed sewer laterals are installed for future connection and the temporary system meets all other applicable City, Unified Sewerage Agency and State sewage disposal standards.

6.402 DESIGN STANDARDS

6.402.01 Capacity

Sanitary sewers shall be constructed, located, sized, and installed at standards consistent with this Code, the Sanitary Sewer Service Plan Map attached as Appendix F, Chapter 7 of the Community Development Plan, and other applicable Unified Sewerage Agency and City standards, in order to adequately serve the proposed development and allow for future extensions.

6.402.02 Over-Sizing

- A. When sewer facilities will, without further construction, directly serve property outside a proposed development, gradual reimbursement may be used to equitably distribute the cost of that over-sized system.
- B. Reimbursement shall be in an amount estimated by the City to be a proportionate share of the cost for each connection made to the sewer by property owners outside of the development, for a period of ten (10) years from the time of installation of the sewers. The boundary of the reimbursement area and the method of determining proportionate shares shall be determined by the City. Reimbursement shall only be made as additional connections are made and shall be collected as a surcharge in addition to normal connection charges.

6.403 SERVICE AVAILABILITY

Approval of construction plans for new facilities pursuant to Section 6.200, and the issuance of building permits for new development to be served by existing sewer systems shall include certification by the City that existing or proposed sewer facilities are adequate to serve the development.

6.500 WATER SUPPLY

6.501 REQUIRED IMPROVEMENTS

Water lines and fire hydrants conforming to City and Fire District standards shall be installed to serve all building sites in a proposed development. All waterlines shall be connected to existing water mains.

6.502 DESIGN STANDARDS

6.502.01 Capacity

Water lines providing potable water supply shall be sized, constructed, located and installed at standards consistent with this Code, the Water Service Plan Map, attached as Appendix

D, Chapter 7 of the Community Development Plan, and with other applicable City standards and specifications, in order to adequately serve the proposed development and allow for future extensions.

6.502.02 Fire Protection

All new development shall comply with the fire protection requirements of Section 6.700, the applicable portions of Chapter 7 of the Community Development Plan, and the Fire District.

6.502.03 Over-Sizing

- A. When water mains will, without further construction, directly serve property outside a proposed development, gradual reimbursement may be used to equitably distribute the cost of that over-sized system.
- B. Reimbursement shall be in an amount estimated by the City to be the proportionate share of the cost of each connection made to the water mains by property owners outside the development, for a period of ten (10) years from the time of installation of the mains. The boundary of the reimbursement area and the method of determining proportionate shares shall be determined by the City. Reimbursement shall only be made as additional connections are made and shall be collected as a surcharge in addition to normal connection charges.

6.503 SERVICE AVAILABILITY

Approval of construction plans for new water facilities pursuant to Section 6.200, and the issuance of building permits for new development to be served by existing water systems shall include certification by the City that existing or proposed water systems are adequate to serve the development.

6.600 STORM WATER

6.601 REQUIRED IMPROVEMENTS

Storm water facilities, including appropriate source control and conveyance facilities, shall be installed in new developments and shall connect to the existing downstream drainage systems consistent with the Comprehensive Plan and the requirements of the Unified Sewerage Agency's water quality regulations contained in their Design and Construction Standards R&O 00-7, or its replacement.

6.602 STORM WATER SYSTEM IMPROVEMENT FEES (SIF)

6.602.01 Purpose

The SIF shall be reserved and used exclusively for the acquisition, expansion, extension, and capital development or redevelopment of public storm water conveyance systems, specific street improvements designed to direct and control storm water flows, storm water treatment facilities, storm water detention or retention ponds, or other storm water facilities, designed to provide extra system capacity, and as designated on the Storm Drainage Plan Map, attached as Appendix E, in Chapter 7 of the Community Development Plan, or in the plans of Washington County's storm water management authority. The SIF may also be utilized for expenditures relating to repayment of debt for such improvements. The SIF may not be used for storm water system preservation improvements or for routine storm water system maintenance and operations.

6.602.02 Schedule of Charges

SIF's shall be assessed against new development in the City to support extra-capacity storm water improvements. The SIF for storm water shall be set by the "Schedule of Development Fees" adopted by Resolution of the Council. This schedule is included herein for the purposes of information, but is deemed to be separate from and independent of this Code.

6.602.03 Assessment

Except as otherwise provided, the SIF is immediately due and payable and shall be collected prior to the issuance of any building permits for new construction, or for alterations or additions to buildings or sites that increase the area of impermeable surface.

6.602.04 Deferral

Where the SIF due and payable from a single building permit exceeds \$3,000.00, an administrative deferral may be granted until an occupancy permit is issued. No occupancy permit shall be issued until the SIF is paid in full.

6.603 DESIGN STANDARDS

6.603.01 Capacity

Storm water drainage systems shall be sized, constructed, located, and installed at standards consistent with this Code, the Storm Drainage Master Plan Map, attached as Exhibit E, Chapter 7 of the Community Development Plan, other applicable City standards, the Unified Sewerage Agency's Design and Construction standards R&O 00-7 or its replacement, and hydrologic data and improvement plans submitted by the developer.

6.603.02 On-Site Source Control

Storm water detention and groundwater recharge improvements, including but not limited to such facilities as dry wells, detention ponds, and roof top ponds shall be constructed to limit the site discharge of storm water from a development to a level below that produced by a twenty-five (25) year storm on the undeveloped site.

6.603.03 Conveyance System

The size, capacity and location of storm water sewers and other storm water conveyance improvements shall be adequate to serve the development and accommodate upstream and downstream flow. If an upstream area discharges through the property proposed for development, the drainage system shall provide capacity to receive the floodwater discharge from the upstream area. If downstream drainage systems are not sufficient to receive an increase in floodwater caused by new development, provisions shall be made by the developer to increase the downstream capacity.

6.604 SERVICE AVAILABILITY

Approval of construction plans for new storm water drainage facilities pursuant to Section 6.200, and the issuance of building permits for new development to be served by existing storm water drainage systems shall include certification by the City that existing or proposed drainage facilities are adequate to serve the development.

6.700 FIRE PROTECTION

6.701 REQUIRED IMPROVEMENTS

When land is developed so that any commercial or industrial structure is further than two hundred and fifty (250) feet or any residential structure is further than five hundred (500) feet from an adequate water supply for fire protection, as determined by the Fire District, the developer shall provide fire protection facilities necessary to provide adequate water supply and fire safety.

6.702 STANDARDS

6.702.01 Capacity

All fire protection facilities shall be approved by and meet the specifications of the Fire District, and shall be sized, constructed, located, and installed consistent with this Code, Chapter 7 of the Community Development Plan, and other applicable City standards, in order to adequately protect life and property in the proposed development.

6.702.02 Fire Flow

Standards published by the Insurance Services Office, entitled "Guide for Determination of Required Fire Flows" shall determine the capacity of facilities required to furnish an adequate fire flow. Fire protection facilities shall be adequate to convey quantities of water, as determined by ISO standards, to any outlet in the system, at no less than twenty (20) pounds per square inch residual pressure. Water supply for fire protection purposes shall be restricted to that available from the City water system. The location of hydrants shall be taken into account in determining whether an adequate water supply exists.

6.702.03 Access to Facilities

Whenever any hydrant or other appurtenance for use by the Fire District is required by Section 6.700, adequate ingress and egress shall be provided. Access shall be in the form of an improved, permanently maintained roadway or open paved area, or any combination thereof, designed, constructed, and at all times maintained, to be clear and unobstructed. Widths, height clearances, ingress and egress shall be adequate for District firefighting equipment. The Fire District, may further prohibit vehicular parking along private accessways in order to keep them clear and unobstructed, and cause notice to that effect to be posted.

6.702.04 Hydrants

Hydrants located along private, accessways shall either have curbs painted yellow or otherwise marked prohibiting parking for a distance of at least fifteen (15) feet in either direction, or where curbs do not exist, markings shall be painted on the pavement, or signs erected, or both, given notice that parking is prohibited for at least fifteen (15) feet in either direction.

6.703 MISCELLANEOUS REQUIREMENTS

6.703.01 Timing of Installation

When fire protection facilities are required, such facilities shall be installed and made serviceable prior to or at the time any combustible construction begins on the land unless, in the opinion of the Fire District, the nature or circumstances of said construction makes immediate installation impractical.

6.703.02 Maintenance of Facilities

All on-site fire protection facilities, shall be maintained in good working order. The Fire District may conduct periodic tests and inspection of fire protection and may order the necessary repairs or changes be made within ten (10) days.

6.703.03 Modification of Facilities

On-site fire protection facilities, may be altered or repaired with the consent of the Fire District; provided that such alteration or repairs shall be carried out in conformity with the provisions of Section 6.700.

6.800 PUBLIC AND PRIVATE UTILITIES

6.801 PURPOSE

Public telecommunication conduits as well as conduits for franchise utilities including, but not limited to, electric power, telephone, natural gas, lighting, and cable television shall be installed to serve all newly created lots and developments in Sherwood.

6.802 STANDARD

- A. Installation of utilities shall be provided in public utility easements and shall be sized, constructed, located and installed consistent with this Code, Chapter 7 of the Community Development Code, and applicable utility company and City standards.
- B. Public utility easements shall be a minimum of eight feet in width unless a reduced width is specifically exempted by the City Engineer.
- C. Where necessary, in the judgment of the City Manager or his designee, to provide for orderly development of adjacent properties, public and franchise utilities shall be extended through the site to the edge of adjacent property(ies).
- D. Franchise utility conduits shall be installed per the utility design and specification standards of the utility agency.
- E. Public Telecommunication conduits and appurtenances shall be installed per the City of Sherwood telecommunication design standards.
- F. Exceptions: Installation shall not be required if the development does not require any other street improvements. In those instances, the developer shall pay a fee in lieu that will finance installation when street or utility improvements in that location occur.

6.803 UNDERGROUND FACILITIES

Except as otherwise provided, all utility facilities, including but not limited to, electric power, telephone, natural gas, lighting, cable television, and telecommunication cable, shall be placed underground, unless specifically authorized for above ground installation, because the points of connection to existing utilities make underground installation impractical, or for other reasons deemed acceptable by the City.

6.804 EXCEPTIONS

Surface-mounted transformers, surface-mounted connection boxes and meter cabinets, temporary utility service facilities during construction, high capacity electric and communication feeder lines, and utility transmission lines operating at fifty thousand (50,000) volts or more may be located above ground. The City reserves the right to approve location of all surface-mounted transformers.

6.805 PRIVATE STREETS

The construction of new private streets shall be prohibited unless it provides principal access to two or fewer lots or parcels i.e. flag lots. Provisions shall be made to assure private responsibility for future access and maintenance through recorded easements. Unless otherwise specifically authorized, a private street shall comply with the same standards as a public street identified in the Community Development Code and the Transportation System Plan. A private street shall be distinguished from public streets and reservations or restrictions relating to the private street shall be described in land division documents and deed records. A private street shall also be signed differently from public streets and include the words "Private Street".