

ORDINANCE NO. 610

AN ORDINANCE ADOPTING PUBLIC WORKS STANDARDS OF THE CITY OF WILSONVILLE, AMENDING W.C. 3.294, AND MAKING CONFORMING AMENDMENTS TO W.C. CHAPTER 4, SECTIONS 4.156, 4.177 AND 4.178

WHEREAS, the City's current Public Works Standards was last updated in 1987 and amended by Ordinance No. 482 on April 21, 1997; and

WHEREAS, standard engineering practice is to review, revise and update construction standards to maintain compliance with the periodic changes to national and state design requirements, guidelines, and specifications; and

WHEREAS, updating the Public Works Standards and being in conformance with national and state guidelines is critical in producing high quality construction, limiting maintenance costs for the City, and limiting the City's exposure to legal liability; and

WHEREAS, the Public Works Standards provide design requirements, material specifications, construction procedures and specifications, detail drawings, testing standards, and acceptance and maintenance requirements for construction of all publicly maintained roadways and pathways, and stormwater, sanitary, and water systems to developers, design engineers, and contractors; and

WHEREAS, Public Works Standards for constructing public facilities are intended to protect the public health, safety, and welfare; and

WHEREAS, it is to the benefit of the City of Wilsonville, developers, design engineers, and contractors to have all specifications and design guidelines related to public works improvements located within a single source of information; and

WHEREAS, W.C. Chapter 4, the Wilsonville Land Development Code, contains portions of the former Public Works Standards; and,

WHEREAS, these provisions are either superseded or redundant and, given the general requirement of compliance with Public Works Standards, unnecessary. As such, amendments conforming to the newly adopted standards are necessary to clarify how the standards relate to land development; and,

WHEREAS, the Public Works Standards – 2006 is a support document to the City's Comprehensive Plan; and

WHEREAS, the following review at a public hearing, the Wilsonville Planning Commission, by Resolution No. LP06-0001, recommended Council adoption of the Public Works Standards and amendments to W.C. Chapter 4 by deleting redundant or superseded standards, cross referencing the standards, and otherwise clarifying application of the standards; and,

WHEREAS, after providing due notice as required by City Code and State Law, a public hearing was held before the City Council on April 17, 2006, at which time the Council considered the recommendation of the Planning Commission and City staff, gathered additional evidence and afforded all interested parties an opportunity to present oral and written testimony concerning the amendments and additions to the Public Works Standards – 2006 and Resolution No. LP06-0001; and

WHEREAS, the Council has carefully considered the public record, including all recommendations and testimony, and being fully advised wish to adopt the Public Works Standards – 2006 and conforming amendments to W.C. Chapter 4,

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

- Section 1. Findings. The foregoing recitations and those findings and conclusions in the attached staff report in this matter dated April 10, 2006, attached hereto as Exhibit A, are hereby adopted as findings of fact and conclusions of law.
- Section 2. Adoption. Based upon the foregoing findings, the City Council hereby adopts the Public Works Standards – 2006, attached hereto as Exhibit B.
- Section 3. Amendments.

That W.C. 3.294(1) is amended to read as follows:

(1) The "standard specifications for public works construction in the City of Wilsonville, Oregon," as amended ~~1981~~ **2006**, is hereby adopted as the public works standards for the City. All work done and materials used for public improvements in the City shall conform to such specifications unless otherwise provided for in the particular specification for work authorized by the council.

That W.C. 4.156 is amended to read as follows:

Section 4.156. Sign Regulations.

(.03) General Provisions Affecting Signs. No person shall erect, install, construct, place, alter, change, relocate, suspend or attach any sign, except for routine maintenance of existing signs, without first obtaining a sign permit,

paying the required fees, and otherwise complying with the provisions of this Code. **The location of free standing or ground mounted signs located adjacent to or near the Public Right-of-Way shall be in compliance with the City's Public Works Standards for sight distance clearance. Prior to construction, the location of the sign shall be approved by the City of Wilsonville Engineering Division.**

That W.C. 4.177 is amended to read as follows:

Section 4.177. Street Improvement Standards.

Note: This section is expected to be revised after the completion of the Transportation Systems Plan.

(.01) Except as specifically approved by the Development Review Board, all street and access improvements shall conform to the ~~Street System Master~~ **Transportation Systems Plan and the Public Works Standards**, together with the following standards:

A. All street improvements **and intersections** shall conform to the Public Works Standards and shall provide for the continuation of streets through specific developments to adjoining properties or subdivisions.

B. All streets shall be developed with curbs, utility strips and sidewalks on both sides; or a sidewalk on one side and a bike path on the other side.

1. Within a Planned Development the Development Review Board may approve a sidewalk on only one side. If the sidewalk is permitted on just one side of the street, the owners will be required to sign an agreement to an assessment in the future to construct the other sidewalk if the City Council decides it is necessary.

~~C. Intersections of streets~~

~~1. Angles: Streets shall intersect one another at right angles, unless existing development or topography make it impracticable. The minimum inside curb line radius shall be 25 feet.~~

~~2. If the intersection cannot be designed to form a right angle, then the right of way and paving within the acute angle shall have a minimum of a thirty (30) foot centerline radius and said angle shall not be less than sixty (60) degrees. Any angle less than sixty (60) degrees shall require approval by the City Engineer after consultation with the Fire District.~~

~~3. Offsets: Opposing intersections shall be designed so that no offset dangerous to the traveling public is created. Intersections on arterial streets should be separated by at least 500 feet; and in no case shall there be an offset of less than:~~

~~a. (250) feet on a minor arterial street. To the greatest extent possible, the City shall also encourage consolidation of curb cuts and access points on arterial streets.~~

~~b. (100) feet on other streets.~~

~~D. Street grades shall be a maximum of 6% on arterials and 8% for collector and local streets. Where topographic conditions dictate grades in excess of 8%, but not more than 12%, may be permitted for short distances.~~

~~E. The minimum centerline radius street curves shall be as follows:~~

- ~~1. Arterials and industrial collectors 600 feet, but may be reduced to 400 feet in commercial areas.~~
- ~~2. Residential collectors 100 feet.~~
- ~~3. Local streets 75 feet.~~

~~FC. Rights-of-way.~~

1. Prior to issuance of a **Certificate of Occupancy Building permits** or as a **part of the** recordation of a final plat, the City shall require dedication of rights-of-way in accordance with the ~~Street System Master~~ **Transportation Systems Plan**. All dedications shall be recorded with the County Assessor's Office.
2. The City shall also require a waiver of remonstrance against formation of a local improvement district, and all non-remonstrances shall be recorded in the County Recorder's Office as well as the City's Lien Docket, prior to issuance of a **Certificate of Occupancy Building Permit** or as a **part of the** recordation of a final plat.
3. In order to allow for potential future widening, a special setback requirement shall be maintained adjacent to all arterial streets. The minimum setback shall be 55 feet from the centerline or 25 feet from the right-of-way designated on the Master Plan, whichever is greater.

~~GD. Dead-end Streets. New dead-end streets or cul-de-sacs shall not exceed 200 feet in length, unless the adjoining land contains barriers such as existing buildings, railroads or freeways, or environmental constraints such as steep slopes, or major streams or rivers, that prevent future street extension and connection. No more than 25 dwelling units shall take access to a new dead-end or cul-de-sac street unless it is determined that the traffic impacts on adjacent streets will not exceed those from a development of 25 or fewer units. All other dimensional standards of dead-end streets shall be governed by the Public Works Standards. All dead-end or cul-de-sac streets shall end in a turn around with a minimum center line radius as follows:~~

- ~~1. 50 feet if curb parking allowed.~~
- ~~2. 42 feet if curb parking prohibited and posted as a towaway zone.~~
- ~~3. The minimum return radius shall be 25 feet.~~
4. Except, however, that an alternative standard or design may be approved by the Development Review Board after consultation with the Fire District.

HE. Access drives and travel lanes.

1. An access drive to any proposed development shall be designed to provide a clear travel lane free from any obstructions. ~~A minimum additional width of eight feet shall be provided on each side where parking is allowed.~~
2. Access **drive** travel lanes shall be constructed with a hard surface capable of carrying a 23-ton load. ~~Improvement width shall be:~~
 - a. ~~12 feet for one-way traffic.~~
 - b. ~~20 feet for two-way traffic.~~
3. Secondary or emergency access lanes may be improved to a minimum 12 feet with an ~~gravel or better~~ all-weather surface as approved by the Fire District. All fire lanes shall be dedicated easements.
4. Minimum access requirements shall be adjusted commensurate with the intended function of the site based on vehicle types and traffic generation.
5. **Where access drives connect to the public right-of-way, construction within the right-of-way shall be in conformance to the Public Works Standards.**

HF. Corner or clear vision area.

1. A clear vision area **which meets the Public Works Standards** shall be maintained on each corner of property at the intersection of any two streets, a street and a railroad or a street and a driveway. ~~No structures, plantings or other obstructions that would impede visibility between the height of 30 inches and 10 feet shall be allowed within said area. Measurements shall be made from the top of the curb, or, when there is no curb, from the established street center line grade.~~ However, the following items shall be exempt **from meeting this requirement**:
 - a. Light and utility poles with a diameter less than 12 inches.
 - b. **Trees less than 6" d.b.h., approved as a part of the Stage II Site Design, or administrative review.**
 - cb. **Except as allowed by b., above,** an existing tree, trimmed to the trunk, 10 feet above the curb.
 - de. Official warning or street sign.
 - ed. Natural contours where the natural elevations are such that there can be no cross-visibility at the intersection and necessary excavation would result in an unreasonable hardship on the property owner or deteriorate the quality of the site.
2. ~~Vision clearance areas shall be established by the triangular area formed by the intersection of the street right-of-way line and any driveway or street, and a straight line adjoining said line through points twenty (20) feet from their point of intersection. However, said area shall be adjusted as follows:~~
 - a. ~~Single family driveways—10 feet~~
 - b. ~~Alleys—10 feet~~

~~e. Railroad crossing (unsignalized) - 30 feet~~

~~d. As necessary to comply with the City's Public Works Standards for vision clearance.~~

JG. Vertical clearance - a minimum clearance of 12 feet above the pavement surface shall be maintained over all streets and access drives.

KH. Interim improvement standard. It is anticipated that all existing streets, except those in new subdivisions, will require complete reconstruction to support urban level traffic volumes. However, in most cases, existing and short-term projected traffic volumes do not warrant improvements to full Master Plan standards. Therefore, unless otherwise specified by the Planning Commission, the following interim standards shall apply.

1. Arterials - 24 foot paved, with standard sub-base ~~and a tapered rural or turnpike shoulder.~~ Asphalt overlays are generally considered unacceptable, but may be considered as an interim improvement based on the recommendations of the City Engineer, regarding adequate structural quality to support an overlay.
2. Half-streets are generally considered unacceptable. However, where the Development Review Board finds it essential to allow for reasonable development, a half-street may be approved. Whenever a half-street improvement is approved, it shall conform to the **requirements in the Public Works Standards.** ~~following standards:~~
 - a. ~~Minimum pavement width:~~
 - i. ~~Arterial 24 feet~~
 - ii. ~~Collector 24 feet~~
 - iii. ~~Local 20 feet~~
 - b. ~~Intersection improvements adequate to provide turn lanes shall be provided as follows:~~
 - i. ~~Arterials and industrial collectors - 40 feet paved for 250 feet beyond the center line of intersecting streets.~~
 - ii. ~~Residential collectors - 36 feet paved for 150 feet beyond the center line of intersecting streets.~~
 - c. ~~A reserve or access control strip shall be established adjacent to and paralleling the half-street improvement to insure proper articulation by adjoining properties in completion of the required street improvements.~~
3. When considered appropriate in conjunction with other anticipated or scheduled street improvements, the City Engineer may approve street improvements with a single asphalt lift. However, adequate provision must be made for interim storm drainage, pavement transitions at seams and the scheduling of the second lift through the Capital Improvements Plan.

That W.C. 4.178 is amended to read as follows:

Section 4.178. Sidewalk and Pathway Standards.

(.01) Sidewalks. All sidewalks shall be concrete and a minimum of five (5) feet in width, except where the walk is adjacent to commercial storefronts. In such cases, they shall be increased to a minimum of ten (10) feet in width.

(.02) Pathways.

A. Bicycle facilities shall be provided using a bicycle lane as the preferred facility design. ~~The Other facility designs described listed in the Public Works Standards shall~~ only be used if the bike lane standard cannot be constructed due to physical or financial constraints. ~~The alternative standards are listed in order of preference for bicycle facilities is:~~

- 1) **Bike lane**
- 2) **Shoulder bikeway**
- 3) **Shared roadway**

~~1. Bike lane. This design includes 12-foot minimum travel lanes for autos and paved shoulders, 5-6 feet wide for bikes, that are striped and marked as bicycle lanes. This shall be the basic standard applied to bike lanes on all arterial and collector streets in the City, with the exception of minor residential collectors with less than 1,500 (existing or anticipated) vehicle trips per day.~~

~~2. Shoulder bikeway. This design includes 12-foot minimum travel lanes for autos and paved shoulders, 5-6 feet wide for bikes, that are striped but not marked as a bicycle lane. This will only be used in "rural" situations when it is determined by the City Engineer that a marked bike lane is inappropriate or not feasible.~~

~~3. Shared roadway. This design features a 14-16 foot minimum travel lane width for autos and bikes. This standard will be applied to all arterial and collector streets only when sufficient pavement width is not available for a bike lane. On arterial and collector streets, bike route signage is recommended to alert motorists to the potential presence of bicyclists.~~

~~(.03) Pavement surface.~~

~~A. All bike paths shall be paved with asphalt to provide a smooth riding surface. Where pathways are adjacent to and accessible from improved public streets, the Public Works Director may require a concrete surface. At a minimum the current AASHTO "Guide for the Development of Bicycle Facilities" and the State "Oregon Bicycle Plan" shall be used to design all bicycle facilities within the City of Wilsonville. Any deviation from the AASHTO, ODOT, and City standards will require approval from the City Engineer prior to implementation of the design.~~

B. Pedestrian and Bicycle Facilities located within the public right-of-way or public easement shall be constructed in conformance with the Public Works Standards.

BC. To increase safety, all street crossings shall be marked and should be designed with a change of pavement such as brick or exposed aggregate. All Arterial crossings should **may** be signalized **at the discretion of the City Engineer.**

CD. All pathways shall be clearly posted with standard bikeway signs.

DE. Pedestrian and equestrian trails may have a gravel or sawdust surface if not intended for all weather use.

~~(.04) The minimum bike path pavement width shall be five to six (5-6) feet except as follows:~~

~~A. Bike/pedestrian path. This facility is separate from the roadway with a minimum width of 10 feet for two-way bicycle traffic only, and 12 feet if multiple use is expected. A 2-foot clear distance on both sides of the path is also required.~~

(.053) Bicycle and pedestrian paths shall be located to provide a reasonably direct connection between likely destinations. A reasonably direct connection is a route which minimizes out-of-direction travel considering terrain, physical barriers, and safety. The objective of this standard is to achieve the equivalent of a 1/4 mile grid of routes.

~~A. Bicycle and pedestrian paths shall be as short as possible and, where possible, straight enough to allow one end of the path to be seen from the other.~~

~~B. Bicycle and pedestrian paths shall be lighted either by street lights on adjacent streets or pedestrian scale lighting along the accessway. Lighting shall not shine into adjacent residences.~~

(.064) Pathway Clearance.

A. Vertical **and horizontal** clearance for bicycle and pedestrian paths is **specified in the Public Works Standards** of at least 8 feet 6 inches shall be maintained above the surface of all pathways. The clearance above equestrian trails shall be a minimum of ten feet.

~~B. All landscaping, signs and other potential obstructions shall be set back at least (1) foot from the edge of the pathway surface. No exposed rock should be permitted within two (2) feet of the path pavement and all exposed earth within two (2) feet of the pavement shall be planted with grass, sod or covered with 2" of barkdust.~~

~~(.07) Construction standards.~~

~~A. When required, concrete paths shall be constructed in accordance with City sidewalk standards.~~

~~B. Asphalt pathways shall be constructed with 4" of 0 to 3/4" rock under 3" of A.C. paving and designed to carry maintenance and service vehicles unless otherwise approved by the Public Works Director.~~

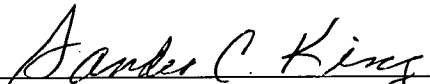
~~C. All asphalt bike path subgrades shall be treated with a soil sterilant prior to placement of base rock.~~

~~D. All expansion joints, paving joints, driveway intersections and railroad crossings shall be designed to maintain a smooth riding surface. Catch basin grates shall be designed to prevent trapping of bike wheels.~~

~~E. In areas where gravel driveways cross the path, a five foot paved apron should be provided to minimize the transfer of gravel to the pathway surface.~~

~~F. Grade changes on pathways shall provide for a minimum pedal clearance of six inches.~~

SUBMITTED to the Wilsonville City Council and read the first time at a regular meeting thereof on the 17th day of April, 2006, at the hour of 7 p.m. at the Wilsonville Community Center, 7965 SW Wilsonville Road, Wilsonville, Oregon, and scheduled for second reading at a regular meeting thereof on the 1st day of May, 2006, commencing at the hour of 7 p.m. at the Wilsonville Community Center.


Sandra C. King, MMC, City Recorder

ENACTED by the City Council on the 1st day of May, 2006, by the following votes:

YEAS: 4

NAYS: -0-


Sandra C. King, MMC, City Recorder

DATED and signed by the Mayor this 1st day of May, 2006.


CHARLOTTE LEHAN, Mayor

SUMMARY OF VOTES:

Mayor Lehan	Excused
Council President Kirk	<u>Yes</u>
Councilor Holt	<u>Yes</u>
Councilor Knapp	<u>Yes</u>
Councilor Ripple	<u>Yes</u>

Attachments: Exhibit A, Staff Report dated April 10, 2006
Exhibit B, *Public Works Standards – 2006*

WILSONVILLE CITY COUNCIL
Legislative
STAFF REPORT

HEARING DATE: April 17, 2006

DATE OF REPORT: April 10, 2006

FILE NO.: LP06-0001

APPLICANT: City of Wilsonville

REQUEST: Amendments and additions to the City of Wilsonville Public Works Standards (the Standards). The proposed amendments are to all sections of the Standards. Two additional sections and six new appendices are also being added to the Standards. To support the Standards, amendments to the Wilsonville Planning and Land Development Ordinance (the Development Code) are proposed, resulting in consistency with the Standards. The proposed amendments are to *Section 4.156 – Sign Regulations, Section 4.177 – Street Improvement Standards and Section 4.178 – Sidewalk and Pathway Standards.*

LOCATION: Citywide

STAFF REVIEWER: Steve Adams P.E., Deputy City Engineer

CRITERIA: *City of Wilsonville Public Works Standards - 2006:*

Citizen Involvement Goal 1.1, Policy 1.1.1, Implementation Measures 1.1.1.a, 1.1.1.e, 1.1.1.f; Public Facilities and Services, Goal 3.1, Policy 3.1.1, Policy 3.1.4, Implementation Measure 3.1.4 f., Policy 3.1.5, Implementation Measures 3.1.5.d, 3.1.6.v., Policy 3.1.7, Implementation Measures 3.1.7.a, 3.1.7.n 3.1.7.o, 3.1.7.r, Policy 3.1.8, Implementation Measure 3.1.8.d, Policy 3.1.13 and Implementation Measure 3.1.13.a.

Planning and Land Development Ordinance:

Sections 4.003: Consistency with Plan and Laws; 4.008: Application Procedures in General; 4.009: Who May Initiate Applications; 4.032: Authority of the Planning Commission; 4.033: Authority of the City Council; and 4.197: Zone Changes and Amendments to this Code – Procedures; Section 4.260: Improvements – Procedures; Section 4.262: Improvements – Requirements

Transportation Systems Plan – 2003

Storm Water Master Plan – 2001

Wastewater Collection System Master Plan – 2001

Water System Management Plan – 2002

SUMMARY/ISSUES: The City of Wilsonville Planning Commission reviewed the amendments to the Development Code at their March 8 meeting and unanimously voted to recommend adoption of the amendments (Exhibit B). The Public Works Standards – 2006 were made available to Planning Commission members; however, they were not requested to review the Standards as they are a technical civil engineering document used to convey the City's required design and construction information to the developer, design engineer, and contractor.

Since March 8, some minor editing has been done to the Standards, either to clarify certain sections or add late information provided from various City departments. The following is a summary of the changes to the Standards:

- References in Section 1 tying the Standards to protection of public health, safety and welfare.
- Information establishing an Order of Precedence was added as section 101.2.02.
- Three items added to Definitions (section 101.4.00).
- Requirement to show additional information on street landscaping plans (section 201.1.04.c.4(c)).
- Allowance for reduced centerline radius street curves in residential subdivisions (section 201.2.08).
- Three modifications to Table 2.5 specifying minimum turn radius at curbs.
- Additional language for street grades and intersectional sight distance (section 201.2.19.e).
- Additional language requiring shining sidewalk joints and specifying a minimum 8-foot distance from trees to sidewalks or curbs for installation of root barriers (sections 201.2.22.a and e).
- Information clarifying a maximum storm water pond depth of 4 feet (section 301.2.03).
- Reduced interior slopes of storm water ponds from 3H:1V to 4H:1V (various tables, sections, and appendices).
- Information added requiring forebays in water quantity and quality ponds (sections 301.4.03.b and 301.5.01.c.6).
- Additional information on water quality facility design (section 301.4.03.e and g).
- Information specifying maximum depth of 2 feet for open channels adjacent to roadways (section 301.7.02.d).
- Increased maximum depth of CG-30 curb inlet from 4 feet to 5 feet before requiring installation of steps (section 301.9.07.a.6).
- Information requiring tamperproof frame and cover for manholes installed outside of pavement or sidewalk areas (section 301.10.01.b.3(d) and section 401.4.01.b.3(d)).
- Revisions to sanitary pump language (section 401.3.01 through 401.3.04).
- Additional information on disposal of sanitizing solution when sterilizing new water mains (section 501.9.05.a)
- Updated information on type of water meter boxes and covers required (Table 5.3).

- Information added on specifications for water meter boxes and Corporation Stops (section 501.10.03.c and d).
- Information added for playground facilities (appendix A.1.02).

The Development Code amendments have not been modified since the Planning Commission review. No other public input has been received.

Background: Staff has been working for the past four years to update and revise extensive portions of the City of Wilsonville Public Works Standards. The currently adopted Public Works Standards were most recently updated and revised in 1987. The revised Public Works Standards – 2006 (the Standards) were developed in order to bring the Standards into compliance with several national and state design requirements, guidelines, and specifications. These include the American Association of State Highway and Transportation Officials, which provide policies on design guidelines of highways and streets and testing specifications on materials; American Public Works Association, which provide design standards and specifications for construction of public works facilities (street, structures, and storm, sanitary, and water systems); American Water Works Association, which provides standards and testing specifications for construction of water systems; ASTM International (originally known as the American Society for Testing and Materials), which provides standards and testing specifications for materials used in construction; and Oregon Department of Transportation, which provides design guidelines and standards for construction of roadways and public works facilities. Updating the Standards and being in conformance with national and state guidelines is critical in producing high quality construction, limiting maintenance costs for the City, and limiting the City's exposure to legal liability.

The City of Wilsonville's Public Works Standards provide design requirements, material specifications, construction procedures and specifications, detail drawings, testing standards, and acceptance and maintenance requirements for construction of all publicly maintained roadways and pathways, and stormwater, sanitary, and water systems to developers, design engineers, and contractors. Additionally, the revised Standards present information in a more readily accessible and easier to follow format. This was accomplished by reorganizing the layout of information provided, adding an organizational numbering system, adding sections on Stormwater & Surface Water Design and Construction Standards and Trench Excavation and Backfill, providing improved referencing within the Standards and electronically linking the internal references, using a similar presentational format for the four main sections on construction, updating and adding numerous tables, splitting the Design Details out from the Standards, and adding appendices for specific design requirements on Bicycle and Pedestrian Facilities, Landscaping Requirements for Storm Water Quantity and Quality Facilities, Fish and Wildlife Guidelines for Stream-Road Crossings, Stormwater Infiltration Requirements, and Stormwater Quality Facilities Design. Ultimately, an electronic version of these revised Standards will be made available on the City of Wilsonville website for quick reference to all developers, design engineers, contractors, and interested individuals.

The Standards have been assembled with participation from the Engineering Division, Natural Resources, Planning Division, Public Works, Environmental Services Division, and City Legal staff; they have been available for internal review by all departments. The Standards are a technical civil engineering document used to convey the City's required design and construction information to the developer, architect, design engineer, and contractor. It is the City Engineer's goal to internally review, revise, and update the Standards as needed to maintain compliance with

the periodic changes to national and state design requirements, guidelines, and specifications, and applicable Federal and State laws and regulations.

Several sections of the Wilsonville Planning and Land Development Ordinance (the Development Code) presently provide specifications and design guidelines that have been incorporated and addressed in the revised Standards. It is both difficult and confusing to the developers, architects, design engineers, and contractors when specifications and design guidelines are provided within different sources. It is to the benefit of the City of Wilsonville, developers, architects, design engineers, and contractors to have all specifications and design guidelines related to public works improvements located within a single source of information. Changes to the Development Code as outlined herein are proposed to be adopted concurrent with City Council adoption of the Public Works Standards – 2006.

Additionally the Public Works Standards have been drafted in such a manner as to allow conformance with nationally recognized standards on an ongoing basis thereby limiting the need to make periodic changes as national and state design requirements are routinely modified.

CONCLUSION:

In conclusion, Staff believes that adoption of the amendments and additions to the Public Works Standards – 2006 and proposed changes to the Development Code as presented herein will benefit both the City and developers in producing quality public works facilities and locating the required information necessary to do so.

RECOMMENDATION:

Staff respectfully recommends that the City Council adopt the proposed changes to the Public Works Standards – 2006 and the proposed changes to the Development Code.

EXHIBITS:

- Exhibit A: LP06-0001, revised Wilsonville Planning Division Legislative Staff Report, dated April 10, 2005.
- Exhibit B: City of Wilsonville *Public Works Standards – 2006*.

CONCLUSIONARY FINDINGS:

Comprehensive Plan

GOAL 1.1 To encourage and provide means for interested parties to be involved in land use planning processes, on individual cases and City-wide programs and policies.

Policy 1.1.1 *The City of Wilsonville shall provide opportunities for a wide range of public involvement in City planning programs and processes.*

Implementation Measure 1.1.1.a Provide for early public involvement to address neighborhood or community concerns regarding Comprehensive Plan and Development Code changes. Whenever practical to do so, City staff will provide information for public review while it is still in “draft” form, thereby allowing for community involvement before decisions have been made.

Response: The Planning Commission and City Council process on the proposed changes to the Wilsonville Planning and Land Development Ordinance will allow the public to be involved in land-use planning processes. Public notice of the public hearings on this matter were provided to a list of agencies, developers, architectural and engineering design firms, and interested private citizens. To date Staff has received two inquiries on these proposed changes to the Development Code. The City will continue to allow for a wide range of public participation opportunities related to citywide programs and policies. This goal and measure are satisfied.

Implementation Measure 1.1.1.e *Encourage the participation of individuals who meet any of the following criteria:*

1. *They reside within the City of Wilsonville.*
2. *They are employers or employees within the City of Wilsonville.*
3. *They own real property within the City of Wilsonville.*
4. *They reside or own property within the City’s planning area or Urban Growth Boundary adjacent to Wilsonville.*

Response: Public notice was mailed to a wide variety of agencies, developers, architectural and engineering design firms, and interested private citizens who have expressed an interest in receiving such notifications. Public notices were posted at four locations around the City, and printed in the newspaper. This notification encourages participation by a wide variety of individuals. This measure is satisfied.

Implementation Measure 1.1.1.f Establish and maintain procedures that will allow any interested parties to supply information.

Response: *The City’s legislative public hearing process before the Planning Commission and City Council provides a procedure for interested parties to supply information. This measure is satisfied.*

GOAL 3.1: *To assure that good quality public facilities and services are available with adequate capacity to meet community needs, while also assuring that growth does not exceed the community's commitment to provide adequate facilities and services.*

Policy 3.1.1 *The City of Wilsonville shall provide public facilities to enhance the health, safety, educational, and recreational aspects of urban living.*

Response: The proposed amendments to the Development Code transfer design and construction information on streets and pathways to the Standards. The Public Works Standards – 2006 provide design guidelines, details and construction specifications to the design professional and contractor. Changes to the Standards were compiled by information obtained from, or input received from the following sources:

American Association of State Highway and Transportation Officials, American Public Works Association, American Society of Civil Engineers, American Water Works Association, Asphalt Institute, City of Beaverton Public Works Standards, City of Gresham Public Works Standards, City of Tualatin Public Works Standards, City of Portland Parks and Recreation, CleanWater Services Agency of Washington County, King County Washington, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Department of Transportation, Oregon Health Division, Portland Cement Association, Portland General Electric, Stormwater Management Manual for Western Washington, Tualatin Valley Fire and Rescue, Washington County Department of Land Use and Transportation, and Water Environment Services of Clackamas County.

The information obtained from these sources enhances the health, safety, and recreational aspect of urban living. The Standards provide the required design and construction information which will result in good quality public works facilities construction having adequate capacity to meet community needs. This criterion is met.

Policy 3.1.4 *The City of Wilsonville shall continue to operate and maintain the wastewater treatment plant and system in conformance with federal, state, and regional water quality standards.*

Implementation Measure 3.1.4.f *The cost of all line extensions and individual services shall be the responsibility of the developer and/or property owners(s) seeking service. When a major line is to be extended, the City may authorize and administer formation of a Local Improvement District (LID). All line extensions shall conform to the City Sanitary Sewer Collection System Master Plan, urbanization policies, and Public Works Standards.*

Response: The proposed amendments to the Development Code have no impact on the sanitary sewer system. The revised Public Works Standards – 2006, Section 4 clarifies the responsibility of cost for extending sanitary lines, requires submittal of additional information on design, adds additional requirements on shallow manholes, laterals, and access, and updates requirements for materials, technical specifications, construction, and acceptance. This criterion is met.

Policy 3.1.5 *The City shall continue to develop, operate and maintain a water system, including wells, pumps, reservoirs, transmission mains and a surface water*

treatment plant capable of serving all urban development within the incorporated City limits, in conformance with federal, state, and regional water quality standards. The City shall also continue to maintain the lines of the distribution system once they have been installed and accepted by the City.

Implementation Measure 3.1.5.d All water lines shall be installed in accordance with the City's urban growth policies and Public Works Standards.

Response: The proposed amendments to the Development Code have no impact on the water system. The revised Public Works Standards – 2006, Section 5 requires submittal of additional information on design, adds additional requirements on construction, and updates requirements for materials, technical specifications, construction, and acceptance. This criterion is met.

Implementation Measure 3.1.6.v *The City shall continue to use pathway construction standards in the Public Works Standards.*

Response: The proposed amendments to the Development Code have no impact on pathway construction. In the revised Public Works Standards – 2006, information on bicycle, pedestrian, and multi-use pathway design, location, and construction has been assembled into Appendix A. This criterion is met.

Policy 3.1.7 **The City of Wilsonville shall develop and maintain an adequate storm drainage system. However, where the need for new facilities is the result of new development, the financial burden for drainage system improvements shall remain primarily the responsibility of developers. The City will use systems development charges, user fees, and/or other funding sources to construct facilities to improve storm water quality and control the volume of runoff.**

Implementation Measure 3.1.7.a *In order to adequately provide for urban development, the City has established and will maintain a Stormwater Master Plan, development policies/standards for control of an on and off-site drainage, Public Works Standards, and a Capital Improvements Program to upgrade deficient structures and drainage ways.*

Response: The proposed amendments to the Development Code have no impact on the storm sewer system. The revised Public Works Standards – 2006 have split the Stormwater and Surface Water Standards off from the Sanitary Sewer chapter into a new Section 3, with additional information on Landscaping Requirements, Infiltration Requirements, and Stormwater Quality Design provided in Appendices B, C, D, and E, respectively. These include Sections 301.2.00 “Hydraulic Analysis,” 301.3.00 “Hydrology and Hydraulics,” 301.4.00 “Water Quantity Facility Design,” 301.5.00 “Water Quality Facility Design,” and 301.6.00 “Operation and Maintenance Requirements.” Other changes include requiring submittal of additional information on design, add additional requirements on shallow manholes, laterals, and access, and update requirements for materials, technical specifications, construction, and acceptance. This criterion is met.

Implementation Measure 3.1.7.n *Wilsonville has established a single-storm drainage runoff standard that is applied throughout the City. That standard requires developers to plan for at least a 25-year storm event. However, the differences in the natural characteristics of the Boeckman Creek and Seely Ditch Basins and their sub-area basins will require developers and their engineers to plan for different types of detention or retention facilities in one basin than would be used in another. The appropriate criteria will be established and implemented through the City's Public Works Standards.*

Response: The proposed amendments to the Development Code have no impact on the storm sewer system. The revised Public Works Standards – 2006 have added Sections 301.2.00 “Hydraulic Analysis,” 301.3.00 “Hydrology and Hydraulics,” and 301.4.00 “Water Quantity Facility Design” to provide the information required for proper design of stormwater quantity facilities. This criterion is met.

Implementation Measure 3.1.7.o *Based on facility capacities identified in the Stormwater Master Plan, appropriate storm run-off standards shall be implemented through the City's Public Works Standards.*

Response: The proposed amendments to the Development Code have no impact on the storm sewer system. The revised Public Works Standards – 2006 have added the information required for proper design of stormwater facilities. This information is provided in Section 3 “Stormwater & Surface Water Design and Construction Standards.” This criterion is met.

Implementation Measure 3.1.7.r *Sediment and erosion control shall be provided consistent with the Public Works Standards. All approved open drainage channels and open detention/retention basins shall be designed, constructed, and maintained with appropriate safeguards to insure public health and safety.*

Response: The proposed amendments to the Development Code have no impact on the storm sewer system. In the revised Public Works Standards – 2006, Section 101.9.00 “Environmental Protection, Erosion Prevention, and Sediment Control” provides all required information on erosion control to the design engineer and contractor. Section 3 “Stormwater & Surface Water Design and Construction Standards” provides all required information on detention/retention basin and drainage channel design and construction. Appendix B “Landscape Requirements: Water Quality and Quantity Facilities” provides information on landscaping required within open stormwater facilities. Section 301.6.00 “Operation and Maintenance Requirements” provides the required information on operation and maintenance of detention/retention basins. This criterion is met.

Policy 3.1.8 **The City of Wilsonville shall continue to coordinate planning for fire safety with the Tualatin Valley Fire and Rescue District.**

Implementation Measure 3.1.8.d *The City's Public Works Standards shall be reviewed for conformity to minimum Fire District Requirements.*

Response: The proposed amendments to the Development Code have no impact on Fire District Requirements. The revised Public Works Standards – 2006 include consultation, approval, or compliance with design guidelines on intersections, cul-de-sacs, turnarounds, private streets, driveways, and fire hydrants as established by Tualatin Valley Fire & Rescue (TVF&R). This criterion is met.

Policy 3.1.13 The City of Wilsonville shall coordinate planning activities with the utility companies, to insure orderly and efficient installation of needed service lines and equipment.

Implementation Measure 3.1.13.a. *To enhance aesthetic quality, promote public safety and to protect service lines from damage (e.g., ice/wind storms or vehicle accidents), as new development occurs all utility service lines serving the developing property shall be placed underground, in accordance with the City's Public Works Standards.*

Response: The proposed amendments to the Development Code have no impact on franchise utility service lines. The revised Public Works Standards – 2006 continue the requirement that utility service lines be placed underground in easements reserved for this use. This criterion is met.

Planning and Land Development Ordinance:

Section 4.003. Consistency with Plan and Laws.

Actions initiated under this Code shall be consistent with the Comprehensive Plan and with applicable State and Federal laws and regulations as these plans, laws and regulations may now or hereafter provide.

Response: The proposed amendments to the Development Code will have no substantive bearing on the City's Comprehensive Plan, or applicable state or federal laws. The revised Public Works Standards – 2006 were developed in order to bring the Standards into compliance with several national and state design requirements, guidelines, and specifications, and are consistent with applicable State and Federal laws and regulations. This criterion is met.

Section 4.008. Application Procedures - In General.

(.01) The general application procedures listed in Sections 4.008 through 4.024 apply to all land use and development applications governed by Chapter 4 of the Wilsonville Code. These include applications for all of the following types of land use or development approvals:

F. Changes to the text of Chapter 4, pursuant to Section 4.197;

Response: This application was submitted consistent with the City's requirements for legislative amendments to the Development Code. This criterion is met.

Section 4.009. Who May Initiate Applications.

- (.04) *In the event that the City of Wilsonville is the applicant, the City Manager may authorize any City employee or consultant to act as the City's agent.*

Response: Deputy City Engineer, Steve Adams is the authorized representative acting as the City's agent on this application. The revised Public Works Standards – 2006 do not have a substantive bearing on the City's application procedure. This criterion is met.

Section 4.032. Authority of the Planning Commission.

- (.01) *As specified in Chapter 2 of the Wilsonville Code, the Planning Commission sits as an advisory body, making recommendations to the City Council on a variety of land use and transportation policy issues. The Commission also serves as the City's official Committee for Citizen Involvement and shall have the authority to review and make recommendations on the following types of applications or procedures:*

A. *Legislative zone changes and changes to the text of Chapter 4 of this Code;*

Response: Proposed are amendments to Chapter 4 of the City Code. The Planning Commission is the proper authority to review and recommend action on the proposed Development Code text changes. This criterion is met.

Section 4.033. Authority of City Council.

- (.01) *Upon appeal, the City Council shall have final authority to act on all applications filed pursuant to Chapter 4 of the Wilsonville Code, with the exception of applications for expedited land divisions, as specified in Section 4.232. Additionally, the Council shall have final authority to interpret and enforce the procedures and standards set forth in this Chapter and shall have final decision-making authority on the following:*

A. *Applications for zone changes and changes to the text of Chapter 4, as authorized in Section 4.197.*

Response: Following a recommendation from the Planning Commission, the City Council is being requested to review the Public Works Standards – 2006 and the proposed Development Code text amendment. The City Council is the final local authority on this matter. This criterion is met.

Section 4.197. Zone Changes and Amendments To This Code – Procedures.

- (.01) *The following procedure shall be followed in applying for an amendment to the text of this Chapter:*

- A. *The Planning Commission shall conduct a public hearing on the proposed amendment at its earliest practicable meeting after it is proposed and shall, within forty (40) days after concluding the hearing, provide a report and recommendation to the City Council regarding the proposed amendment. The findings and recommendations of the Commission shall be adopted by resolution and shall be signed by the Chair-of the Commission.*
- B. *In recommending approval of a proposed text amendment, the Planning Commission shall, at a minimum, adopt findings relative to the following:*
 1. *That the application was submitted in compliance with the procedures set forth in Section 4.008; and*
 2. *The amendment substantially complies with all applicable goals, policies and objectives set forth in the Comprehensive Plan; and*
 3. *The amendment does not materially conflict with, nor endanger, other provisions of the text of the Code; and*

Response: The application was submitted consistent with the requirements of WC Section 4.008, as demonstrated with this findings report is compliant and supportive of applicable goals, policies and implementation measures of the Comprehensive Plan and does not materially conflict with nor endanger other provision of the Development Code. This criterion is met.

Section 4.260. Improvements - Procedures.

In addition to other requirements, improvements installed by the developer, either as a requirement of these regulations or at the developer's own option, shall conform to the requirements of this Code and improvement standards and specifications of the City. The improvements shall be installed in accordance with the City's Public Works Standards.

Response: The proposed amendments to the Development Code have no impact on improvements or procedures. The revised Public Works Standards – 2006 provide design requirements, material specifications, construction procedures and specifications, detail drawings, testing standards, and acceptance and maintenance requirements for construction of all publicly maintained roadways and pathways, and storm water, sanitary, and water systems to developers, design engineers, and contractors. This criterion is met.

Section 4.262. Improvements - Requirements.

- (.01) *Streets. Streets within or partially within the development shall be graded for the entire right-of-way width, constructed and surfaced in accordance with the Transportation Systems Plan and City Public Works Standards. Existing streets which abut the development shall be graded, constructed, reconstructed, surfaced or repaired as determined by the City Engineer.*
- (.02) *Curbs. Curbs shall be constructed in accordance with standards adopted by the City.*
- (.03) *Sidewalks. Sidewalks shall be constructed in accordance with standards adopted by the City.*

- (.04) Sanitary sewers. When the development is within two hundred (200) feet of an existing public sewer main, sanitary sewers shall be installed to serve each lot or parcel in accordance with standards adopted by the City. When the development is more than two hundred (200) feet from an existing public sewer main, the City Engineer may approve an alternate sewage disposal system.
- (.05) Drainage. Storm drainage, including detention or retention systems, shall be provided as determined by the City Engineer.
- (.06) Underground utility and service facilities. All new utilities shall be subject to the standards of Section 4.300 (Underground Utilities). The developer shall make all necessary arrangements with the serving utility to provide the underground services in conformance with the City's Public Works Standards.
- (.07) Streetlight standards. Streetlight standards shall be installed in accordance with regulations adopted by the City.
- (.08) Street signs. Street name signs shall be installed at all street intersections and dead-end signs at the entrance to all dead-end streets and cul-de-sacs in accordance with standards adopted by the City. Other signs may be required by the City Engineer.
- (.09) Monuments. Monuments shall be placed at all lot and block corners, angle points, points of curves in streets, at intermediate points and shall be of such material, size and length as required by State Law. Any monuments that are disturbed before all improvements are completed by the developer and accepted by the City shall be replaced to conform to the requirements of State Law.
- (.10) Water. Water mains and fire hydrants shall be installed to serve each lot in accordance with City standards.

Response: The proposed amendments to the Development Code transfer specifications and design guidelines from portions of the Code to the revised Standards. It is to the benefit of the City of Wilsonville, developers, design engineers, and contractors to have all specifications and design guidelines related to public works improvements located within a single source of information. The revised Public Works Standards – 2006 provide design requirements, material specifications, construction procedures and specifications, detail drawings, testing standards, and acceptance and maintenance requirements for construction of all publicly maintained roadways and pathways, and storm water, sanitary, and water systems to developers, design engineers, and contractors. This criterion is met.

2003 Transportation Systems Plan

The purposes of the Transportation Systems Plan (TSP) are to:

- *Comply with state mandates for transportation planning as specified by the statewide "Transportation Planning Rule" (TPR). Per OAR (Oregon Administrative Rules) 660-012-0015, the purposes of the TSP is to "establish a system of transportation facilities and services adequate to meet identified local transportation needs consistent with regional TSPs and adopted elements of the State TSP".*
- *Develop standards for the transportation system.*

- *Address current problem areas.*
- *Identify future roadway needs required to support predicted growth over the next 20 years.*
- *Provide guidelines for future transportation planning.*

Response: The revised Public Works Standards – 2006 incorporate the design standards outlined in the TSP and provide the design guidelines, details, and specifications on materials and construction necessary to provide the City with well constructed roadways, pathways, and sidewalks that meet the transportation infrastructure goals outlined in the TSP. This criterion is met.

Storm Water Master Plan – 2001

The purposes of the Storm Water Master Plan are to:

- *Provide an overall plan for managing stormwater runoff quantity and quality within the City's Urban Growth Boundary (UGB) and adjoining planning areas.*
- *Evaluate local hydrology, the stormwater conveyance system, system hydraulics, and the water quality of the City's stormwater, and identifying facilities needed to adequately convey and enhance the quality of the City's surface water.*

Response: In the revised Public Works Standards – 2006, a new chapter has been added to provide the design guidelines, details, and specifications on materials, construction methodology, and system testing necessary to provide the City with properly designed and constructed stormwater conveyance systems. Additional information has been added to provide design guidelines, details, and specifications on materials and construction of stormwater quantity and quality facilities. This criterion is met.

Wastewater Collection System Master Plan – 2001

The purposes of the Wastewater Collection System Master Plan are to:

- *Provide a functioning wastewater conveyance system at a reasonable cost.*

Response: The revised Public Works Standards – 2006 provide the design guidelines, details, and specifications on materials, construction methodology, and system testing necessary to provide the City with properly designed and constructed sanitary sewer conveyance systems. This criterion is met.

Water System Management Plan – 2002

The purposes of the Water System Management Plan are to:

- *Provide recommendations for the long-term development of the City's water system.*
- *Develop planning criteria to be used in evaluating the existing system and future system expansions.*

Response: The revised Public Works Standards – 2006 provide the design guidelines, details, and specifications on materials, construction methodology, and system testing necessary to provide the City with properly designed and constructed water distribution systems. This criterion is met.

CITY OF WILSONVILLE

PUBLIC WORKS STANDARDS – 2006



NOTE: The entire Public Works Standards 2006 Document is located in a separate file. *ALL 5/4/06*

Engineering Department
30000 SW Town Center Loop E
Wilsonville, OR 97070
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