CHAPTER 4.0
IMPROVEMENTS REQUIRED WITH DEVELOPMENT

Section 4.0.10 - PURPOSES

This Chapter provides general information regarding improvements required with development. It is intended to clarify timing, extent, and standards for improvements. In addition to the standards in this Chapter, standards for specific situations are contained in Chapter 2.11 - Floodplain Development Permit and Chapters 4.1 - Parking, Loading, and Access Requirements through Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Finally, improvements required with development shall meet construction specification standards established by the City Engineer and amended over time.

Section 4.0.20 - TIMING OF IMPROVEMENTS

a. All improvements required by the standards in this Chapter shall be installed concurrently with development, as follows:

1. Where a Land Division is proposed, each proposed lot shall have required public and franchise utility improvements installed or secured prior to approval of the Final Plat, in accordance with the provisions of Section 2.4.40.08 of Chapter 2.4 - Subdivisions and Major Replats.

2. Where a Land Division is not proposed, the site shall have required public and franchise utility improvements installed or secured prior to occupancy of structures, in accordance with the provisions of Section 2.4.40.12 of Chapter 2.4 - Subdivisions and Major Replats.

b. Where specific approval for a phasing plan has been granted for a Planned Development and/or Subdivision, improvements shall be phased in accordance with that plan.

Section 4.0.30 - PEDESTRIAN REQUIREMENTS

a. Sidewalks shall be required along both sides of all streets, as follows:

1. <u>Sidewalks on Local, Local Connector, and Cul-de-sac Streets</u> - Sidewalks shall be a minimum of five ft. wide on Local, Local Connector, and Cul-de-sac Streets. The sidewalks shall be separated from curbs by a tree planting area that provides at least six ft. of separation between the sidewalk and curb, except that this separated tree planting area shall not be provided adjacent to sidewalks where they are allowed to be located within Natural Resource areas governed by Chapter 4.12 - Significant Vegetation Protection Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions. This separated tree planting area shall also not be provided adjacent to sidewalks where they are allowed to be located within drainageway areas governed by regulations in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions.

2. Sidewalks on Arterial, Collector, and Neighborhood Collector Streets - Sidewalks along Arterial, Collector, and Neighborhood Collector Streets shall be separated from curbs by a planted area. The planted area shall be a minimum of 12 ft. wide and landscaped with trees and plant materials approved by the City. The sidewalks shall be a minimum of five ft. wide. An exception to these provisions is that this separated tree planting area shall not be provided adjacent to sidewalks where they are allowed to be located within Natural Resource areas governed by Chapter 4.12 - Significant Vegetation Protection Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions. This separated tree planting area shall also not be provided adjacent to sidewalks where they are allowed to be located within drainageway areas governed by regulations in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions.

3. Sidewalk Installation Timing - The timing of the installation of sidewalks shall be as follows:

   a) Sidewalks and planted areas along Arterial, Collector, and Neighborhood Collector Streets shall be installed with street improvements.

   b) Except as noted in "c," below, construction of sidewalks along Local, Local Connector, and Cul-de-sac Streets may be deferred until development of the site and reviewed as a component of the Building Permit. However, in no case shall construction of the sidewalks be completed later than three years from the recording of the Final Plat. The obligation to complete sidewalk construction within three years will be outlined in a deed restriction on affected parcels and recorded concurrently with the Final Plat.

   c) Where sidewalks on Local, Local Connector, and Cul-de-sac Streets abut common areas, drainageways, or other publicly owned areas, or where off-site Local, Local Connector, and Cul-de-sac Street extensions are required and sufficient right-of-way exists, the sidewalks and planted areas shall be installed with street improvements.

b. **Safe and Convenient Pedestrian Facilities** - Safe and convenient pedestrian facilities that minimize travel distance to the greatest extent practicable shall be provided in conjunction with new development within and between new Subdivisions, Planned Developments, commercial developments, industrial areas, residential areas, transit stops, and neighborhood activity centers such as schools and parks, as follows:

1. For the purposes of this Section, safe and convenient means pedestrian facilities that are free from hazards and that provide a direct route of travel between destinations.

2. Pedestrian rights-of-way connecting Cul-de-sacs or passing through unusually long or oddly shaped blocks shall be a minimum of 15 ft. wide. When these connections are less than 220 ft. long, measuring both the on-site and the off-site portions of the path, or when they directly serve 10 or fewer on-site dwellings, the paved improvement shall be no less than five ft. wide. Connections that are either longer than 220 ft. or serve more than 10 on-site dwellings shall have wider paving widths as specified in Section 4.0.40.c. Maintenance of the paved improvement shall be the responsibility of adjacent property owners. Additionally, a minimum of five ft. of landscaping shall be provided on either side of these pedestrian facilities, in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Maintenance of the landscaping shall also be the responsibility of adjacent property owners.

3. Internal pedestrian circulation shall be encouraged in new developments by clustering buildings, constructing convenient pedestrian ways, and/or constructing skywalks where appropriate. Pedestrian walkways shall be provided in accordance with the following standards:

   a) To maximize direct pedestrian travel, the on-site pedestrian circulation system shall connect the sidewalk on each abutting street to the main entrance of the primary structure on the site.

   b) Walkways shall be provided to connect the on-site pedestrian circulation system with existing or planned pedestrian facilities that abut the site but are not adjacent to the streets abutting the site. When sidewalks or multi-use paths are provided, such as occurs through Cul-de-sacs or to provide pedestrian connections through areas where vehicles cannot travel, these facilities shall be bordered on both sides by a minimum of five ft. of landscaping. Additionally, solid fencing shall be limited to a maximum height of four ft. along these areas to increase visibility and public safety. Portions of fences above four ft. in height are allowed, provided they are designed and constructed of materials that are open a minimum of 50 percent.

   c) Walkways shall be as direct as possible and avoid unnecessary meandering.

   d) Walkway/driveway crossings shall be minimized, and internal parking lot circulation design shall maintain ease of access for pedestrians from abutting streets, pedestrian facilities, and transit stops.

   e) With the exception of walkway/driveway crossings, walkways shall be separated from vehicle parking or maneuvering areas by grade, different paving material, or landscaping. They shall be constructed in accordance with the sidewalk standards adopted by the City Engineer. This provision does not require a separated walkway system to collect drivers and passengers from cars that have parked on-site unless an unusual parking lot hazard exists.

c. Where a development site is traversed by or adjacent to a future trail linkage identified within either the Corvallis Transportation Plan or the Trails Master Plan, improvement of the trail linkage shall occur concurrently with development. Dedication of the trail to the City shall be provided in accordance with Section 4.0.100.d.

d. To provide for orderly development of an effective pedestrian network, pedestrian facilities installed concurrently with development of a site shall be extended through the site to the edge of adjacent property(ies).

e. To ensure improved access between a development site and an existing developed facility such as a commercial center, school, park, or trail system, the Planning Commission or Director may require off-site pedestrian facility improvements concurrently with development.

f. Prior to development, applicants shall perform a site inspection and identify any Contractor Sidewalk/street Stamps, sidewalk prisms, horse rings, and iron curbs that will be impacted by the development. If such a feature exists, it shall either be left in its current state as part of the existing sidewalk or street, or incorporated into the new sidewalk or street for the development site, as close as possible to its original location and orientation. Iron curbs shall be retained unless required to be removed or modified to comply with mandatory ADA standards. In such instances, the iron curb shall only be removed or modified to the minimum extent necessary to comply with the ADA standards.

g. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.40 - BICYCLE REQUIREMENTS

a. **On-street Bike Lanes** - On-street bike lanes shall be required on all Arterial, Collector, and Neighborhood Collector Streets and constructed at the time of street improvements.

b. **Safe and Convenient Bicycle Facilities** - Safe and convenient bicycle facilities that minimize travel distance to the greatest extent practicable shall be provided in conjunction with new development within and between new Subdivisions, Planned Developments, commercial developments, industrial areas, residential areas, transit stops, and neighborhood activity centers such as schools and parks, as follows:

1. For the purposes of this Section, safe and convenient means bicycle facilities that are free from hazards and provide a direct route of travel between destinations.

2. Bicycle/pedestrian rights-of-way connecting Cul-de-sacs or passing through unusually long or oddly shaped blocks shall be a minimum of 15 ft. wide. Maintenance of the paved improvement shall be the responsibility of adjacent property owners. Additionally, a minimum of five ft. of landscaping shall be provided on either side of these bicycle/pedestrian facilities, in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Maintenance of the landscaping shall also be the responsibility of adjacent property owners.

c. **Widths for Pedestrian/Bicycle Facilities** - Adequate widths for pedestrian/bicycle facilities shall be provided in accordance with the following standards:

1. Where long term bicycle and pedestrian usage is expected to be relatively low, such as in a neighborhood rather than a community-wide facility, multi-use paths shall be eight ft. wide and aligned to ensure adequate sight distance.

2. The standard width for two-way multi-use paths shall be 10 ft.

3. In areas with projected high bicycle volumes or multiple use by bicyclists, pedestrians, and joggers, multi-use paths shall be 12 ft. wide.

d. To provide for orderly development of an effective bicycle network, bicycle facilities installed concurrently with development of a site shall be extended through the site to the edge of adjacent property(ies).

e. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.50 - TRANSIT REQUIREMENTS

a. Development sites located along existing or planned transit routes shall, where appropriate, incorporate transit stops and shelters into the site design. These improvements shall be installed in accordance with the guidelines and standards of the Corvallis Transit System.

b. Development sites at or near existing or planned transit stops shall provide safe, convenient access to the transit system, as follows:

1. All Commercial and Civic Use developments shall provide a prominent entrance oriented toward Arterial, Collector, and Neighborhood Collector Streets, with front setbacks reduced as much as possible to provide access for pedestrians, bicycles, and transit.

2. All developments shall provide safe, convenient pedestrian walkways between the buildings and the transit stop, in accordance with the provisions of Section 4.0.30.b.

c. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.60 - PUBLIC AND PRIVATE STREET REQUIREMENTS

a. Traffic evaluations shall be required of all development proposals in accordance with the following:

1. Any proposal generating 30 or more trips per hour shall include Level of Service (LOS) analyses for the affected intersections. A Traffic Impact Analysis (TIA) is required, if required by the City Engineer. The TIA shall be prepared by a registered professional engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures. The TIA shall be submitted for review to the City Engineer. The proposed TIA shall reflect the magnitude of the project in accordance with accepted traffic engineering practices. The applicant shall complete the evaluation and present the results with an overall site development proposal.

2. If the traffic evaluation identifies Level of Service (LOS) conditions less than the minimum standard established in the Corvallis Transportation Plan, improvements and funding strategies mitigating the problem shall be considered concurrently with a development proposal.

b. Location of new Arterial, Collector, and Neighborhood Collector Streets shall conform to the Corvallis Transportation Plan.

c. Although through-traffic movement on new Local Connector and Local Streets usually is discouraged, this may not be practical for particular neighborhoods. Local Connector or Local Street designations shall be applied in newly developing areas based on review of a street network plan and, in some cases, a traffic study provided with the development application. The decision regarding which of these designations will be applied is based on a number of factors, including density of development, anticipated traffic volumes, and the potential for through traffic.

Street network plans must provide for connectivity within the transportation system to the extent that, generally, both Local Connector and Local Streets will be created within a development. Identified traffic calming techniques, such as bulbed intersections, etc., can reduce traffic speeds and, where included, are to be constructed at the time of development. To further address traffic speeds and volumes on Local Connector and Local Streets, the following street designs, along

with other designs intended to reduce traffic speeds and volumes, shall be considered:

1. Straight segments of Local Connector and Local Streets should be less than .25 mile in length, and include design features such as curves and T intersections.

2. Cul-de-sacs should not exceed 600 ft. nor serve more than 18 dwelling units.

3. Street designs that include traffic calming, where appropriate, are encouraged.

d. Private streets, though discouraged in conjunction with Land Divisions, may be considered within a development site provided all the following conditions are met:

1. Extension of a public street through the development site is not needed for continuation of the existing street network or for future service to adjacent properties;

2. The development site remains in one ownership, or adequate mechanisms are established, such as a homeowners' association with the authority to enforce payment, to ensure that a private street installed with a Land Division will be adequately maintained;

3. Where a private street is installed in conjunction with a Land Division, development standards, including paving standards, consistent with City standards for public streets shall be used to protect the interests of future homeowners; and

4. The private street is located within a separate tract.

e. Development sites shall be provided with access from a public street or a private street that meets the criteria in "d," above, both improved to City standards in accordance with the following:

1. Where a development site abuts an existing public street not improved to City standards, the abutting street shall be improved to City standards along the full frontage of the property concurrently with development. Where a development site abuts an existing private street not improved to City standards, and the private street is allowed per the criteria in "d", above, the abutting street shall meet all the criteria in "d", above and be improved to City standards along the full frontage of the property concurrently with development.

2. Half-width street improvements, as opposed to full-width improvements, are generally not acceptable. However, these may be approved by the Planning Commission or Director where essential to the reasonable development of

the property. Approval for half-width street improvements may be allowed when other standards required for street improvements are met and when the Planning Commission or the Director finds that it will be possible to obtain the dedication and/or improvement of the remainder of the street when property on the other side of the half-width street is developed.

3. To ensure improved access to a development site consistent with policies on orderly urbanization and extension of public facilities, the Planning Commission or Director may require off-site street improvements concurrently with development.

f. To provide for orderly development of adjacent properties, public streets and private streets that meet all the criteria in "d", above, shall be installed concurrently with development of a site and shall be extended through the site to the edge of the adjacent property(ies) in accordance with the following:

1. Temporary dead-ends created by this requirement may be installed without turn-arounds, subject to the approval of the Fire Marshal.

2. Drainage facilities shall be provided to properly manage storm water run-off from temporary dead-ends.

g. The Planning Commission or Director may require the extension of public and private street improvements through a development site to provide for the logical extension of an existing street network or to connect a site with a nearby neighborhood activity center, such as a school or park. Where this creates a Land Division incidental to the development, a land partition shall be completed concurrently with the development, in accordance with Chapter 2.14 - Partitions, Minor Replats, and Property Line Adjustments.

h. Names for new streets shall not duplicate or create confusion with names of existing streets. Street names and numbers shall conform to the established pattern in the surrounding area and are subject to approval of the Director.

i. To provide off-street loading and/or access to parking areas, alleys shall be provided in Commercial and Industrial zones to serve abutting properties unless other permanent provisions are approved by the Planning Commission or Director.

j. Alley standards shall be as follows -

1. <u>Standards for Alleys Serving both Residential and Nonresidential Use Types</u>

a) Alleys serving Residential Use Types shall be privately owned, with the exception of existing publicly owned alleys. Alleys serving nonresidential Use Types may be private, but are strongly encouraged to be public;

b) Alleys shall be concrete and designed consistent with City Engineering Standards;

c) Alleys shall be clearly marked to prohibit parking, unless designed to accommodate it;

d) An alley serving six or more dwelling units shall be contained within a separate, privately owned tract of land, and required setbacks shall be measured from the tract property lines of the alley;

e) Alleys shall be unobstructed at least to their minimum required width. Service areas provided adjacent to alleys shall not encroach into the alleys;

f) Site layouts of alleys may include, but are not limited to, straight alleys, T-shaped alleys, L-shaped alleys, etc.;

g) Although emergency access to structures is provided via streets the majority of the time, in cases where an alley provides required emergency access to a structure(s), the alley shall be a minimum of 20 ft. wide and have adequate turning radii on curves, Ts, and Ls, where needed, to accommodate emergency vehicles;

h) Developments that intend to have garbage pick-up services and/or loading facilities from alleys shall have adequate turning radii on curves, Ts, and Ls, where needed, to accommodate service vehicles and large trucks;

i) Public access easements shall be provided for all private alleys;

j) Private alleys shall be maintained by adjacent property owners, a property owners' association, or through a privately administered arrangement instituted by the developer. Maintenance responsibilities for private alleys shall be identified in deed restrictions filed with the Final Plat or prior to the issuance of final occupancy permits in cases where there is no plat to be filed; and

k) Utilities within alleys shall be placed underground.

2. <u>Additional Standards for Alleys Serving Residential Use Types</u> -

a) One-way alleys shall have a minimum width of 12 ft., and two-way alleys a minimum width of 16 ft. One-way alleys shall be clearly designed as one-way alleys and shall be signed accordingly;

b) Alley segments shall not exceed 350 ft.;

c) Street trees shall be provided on either side of the alley tract, outside the tract, at the rate of one tree per lot, consistent with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Such street trees are also required in cases where the Director approves an exception

to the requirement for the alley to be in a separate tract, for infill developments less than two acres in size;

d) Structures other than garages may be located along the outside boundaries of alleys with no setback required, provided they do not interfere with either the circulation of vehicles into garages or visual clearance;

e) Garages accessed by one-way alleys shall be angled from the alley zero degrees to 45 degrees to assist with vehicle access and assist drivers in determining that the alley is one-way. Garages installed consistent with this requirement may be located along the outside boundaries of one-way alleys with no setback required. See Figure 4.0-1 - Garages Oriented to Alley at 45 Degrees, Thereby Allowing Either a One-way Alley or a Two-way Alley with No Setback Required Between the Alley and the Garage and Figure 4.0-2 - Garages Oriented to Alley at Zero Degrees, Thereby Allowing a One-way Alley or a Two-way Alley with No Setback Required Between the Alley and the Garage; and

f) Garages adjacent to two-way alleys shall be located no closer than 14 ft. from the centerline of the alley unless they are angled from the alley zero degrees to 45 degrees, in which case they may be located along the outside boundaries of the alleys with no setback required. See Figure 4.0-1 - Garages Oriented to Alley at 45 Degrees, Thereby Allowing Either a One-way Alley or a Two-way Alley with No Setback Required Between the Alley and the Garage and Figure 4.0-2 - Garages Oriented to Alley at Zero Degrees, Thereby Allowing a One-way Alley or a Two-way Alley with No Setback Required Between the Alley and the Garage

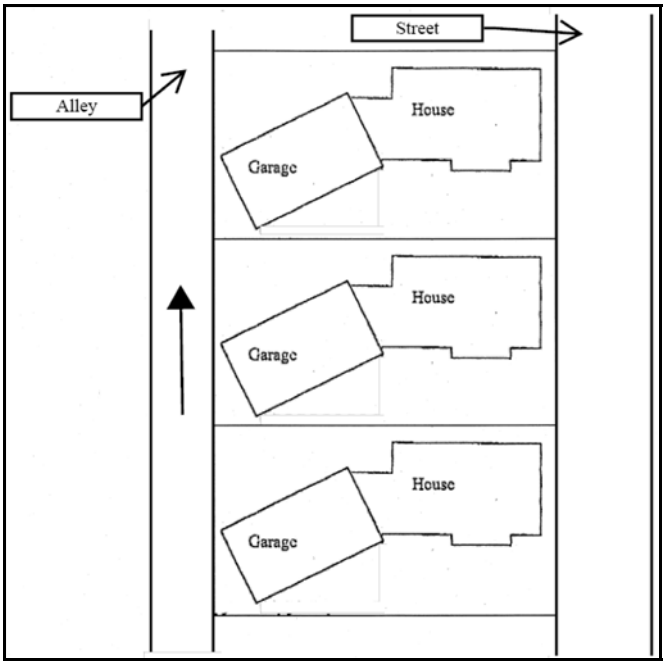

Figure 4.0-1 - Garages Oriented to Alley at 45 Degrees, Thereby Allowing Either a One-way Alley or a Two-way Alley with No Setback Required Between the Alley and the Garage

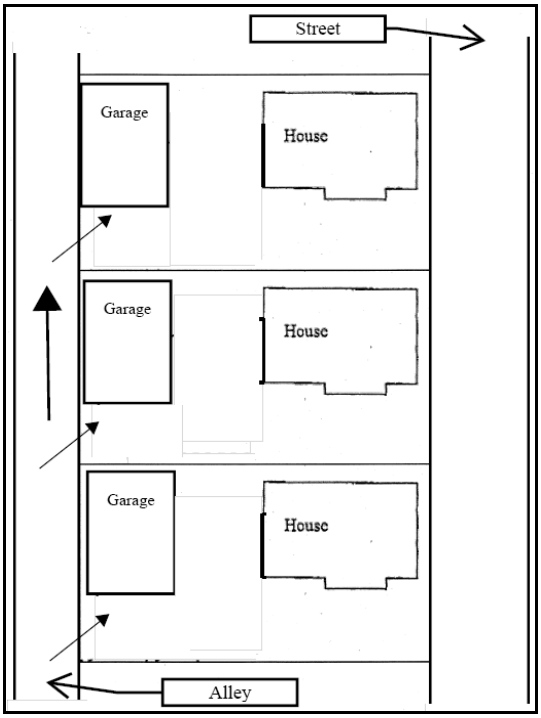

Figure 4.0-2 - Garages Oriented to Alley at Zero Degrees, Thereby Allowing a One-way Alley or a Two-way Alley with No Setback Required Between the Alley and the Garage

3. <u>Additional Standards for Alleys Serving Nonresidential Use Types -Unless Specified Differently By the Underlying Zone</u> -

a) One-way alleys shall have a minimum width of 12 ft., and two-way alleys a minimum width of 20 ft. One-way alleys shall be clearly designed as one-way alleys and shall be signed accordingly;

b) Parking may be provided on one side of an alley, but not on both sides. Where parking is provided on one side of a one-way alley, the alley shall be a minimum width of 14 ft., exclusive of parking;

c) Where parking is provided, it shall not interfere with service areas, utilities, or pedestrian facilities. Such parking may be 45-degree angled parking, parallel parking, or 90-degree parking, provided the parking stalls and related back-up areas are designed consistent with the City's Off-street Parking and Access Standards, established by and available through the City Engineer and amended over time. Rather than widen alleys to allow for adequate back-up areas for 90-degree parking stalls, applicants are encouraged to provide longer parking stalls; and

d) Where alleys provide access to parking lots or parking structures with 15 or more spaces, the alleys shall be a minimum of 20 ft. wide.

k. Location, grades, alignments, and widths for all public and private streets shall be considered in relation to existing and planned streets, topographical conditions, public convenience and safety, and proposed land use. Where topographical conditions present special circumstances, exceptions to these standards may be granted by the City Engineer provided that the safety and capacity of the street network is not adversely effected. The following standards shall apply:

1. Grading plans are required and shall demonstrate that the proposal does not contain any grade changes (cuts or fills) that are inconsistent with the provisions of Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Cut and fill is measured vertically from natural grade. The grading plan shall identify all proposed cuts and fills and the associated grade changes in ft. to demonstrate adherence to this provision. Streets shall be designed along natural contours.

2. Location of streets in a development shall not preclude development of adjacent properties. Streets shall conform to planned street extensions identified in the Corvallis Transportation Plan and/or provide for continuation of the existing street network in the surrounding area.

3. Grades shall not exceed six percent on Arterial Streets, 10 percent on Collector and Neighborhood Collector Streets, and 15 percent on Local, Local Connector, and Cul-de-sac Streets.

4. As far as practicable, Arterial, Collector, and Neighborhood Collector Streets shall be extended in alignment with existing streets by continuation of the street centerline. When staggered street alignments resulting in T intersections are unavoidable, they shall leave a minimum of 200 ft. between the nearest edges of the two rights-of-way.

5. Local street intersections shall be located a minimum of 125 ft. from any other street intersection.

6. Centerline radii of curves shall not be less than 500 ft. on Arterial Streets; 300 ft. on Collector and Neighborhood Collector Streets; and 100 ft. on Local, Local Connector, and Cul-de-sac Streets.

7. Streets shall be designed to intersect at angles as near as practicable to right angles and shall comply with the following:

   a) The intersection of an Arterial, Collector, or Neighborhood Collector Street with another Arterial, Collector, or Neighborhood Collector Street shall have a minimum of 100 ft. of straight (tangent) alignment perpendicular to the intersection;

   b) The intersection of a Local, Local Connector, or Cul-de-sac Street with another street shall have a minimum of 50 ft. of straight (tangent) alignment perpendicular to the intersection;

c) Where right-angle intersections are not possible, exceptions may be granted by the City Engineer provided that intersections have a minimum corner radius of 20 ft. along the right-of-way lines of the acute angle; and

d) All intersections shall have a minimum curb corner radius of 20 ft.

8. Right-of-way and improvement widths shall be as specified in the Transportation Plan and Table 4.0-1 - Street Functional Classification System.

9. Where streets must cross protected Natural Resources or Natural Hazards, street widths shall be minimized by providing no on-street parking and no planting strips between the curb and the sidewalk on either side of the street. Parking bays may be allowed, provided they do not exceed one space per dwelling unit and provided they do not cause the development to exceed the amount of development allowed by the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

I. Where standards do not exist to address unusual situations, the Planning Commission or Director may require special design standards recommended by the City Engineer as Conditions of development Approval.

Table 4.0-1- Street Functional Classification System[1]

	Arterial Highway	Arterial	Collector	Neighborhood Collector	Local Connector	Local
Auto amenities (lane widths)[2]	2-5 Lanes (11 - 14 ft.)	2-5 Lanes (12 ft.)	2-3 Lanes (11 ft.)	2 Lanes (10 ft.)	2 Lanes (10 ft.)	Shared Surface
Bike amenities[3]	2 Lanes (6 ft.)	2 Lanes (6 ft.)	2 Lanes (6 ft.)	2 Lanes (6 ft.)	Shared Surface	Shared Surface
Pedestrian amenities	2 Sidewalks (6 ft.) Ped. Islands	2 Sidewalks (5 ft.) Ped. Islands	2 Sidewalks (5 ft.)	2 Sidewalks (5 ft.)	2 Sidewalks (5 ft.)	2 Sidewalks (5 ft.)
Transit	Typical	Typical	Typical	Typical	Permissible/not typical	Permissible/not typical
Managed speed[4]	20 mph - 55 mph	25 mph - 45 mph	25 mph - 35 mph	25 mph	25 mph	15-20 mph
Curb-to-curb width[5] (two way)						
No on-street parking	34 ft - 84 ft.*	34 ft.-72 ft.	34 ft.-45 ft.	32 ft.	20 ft.*	20 ft.*
Parking one side	42 ft. - 84 ft.	NA	NA	40 ft.	28 ft.	25 ft.*
Parking both sides	50 ft. - 84 ft.	NA	NA	48 ft.	28-34 ft.	28 ft.
Traffic calming[6]		No	Permissible/ not typical	Typical	Permissible	Permissible
Preferred adjacent land use	High Intensity	High Intensity	Med. to High Intensity	Medium Intensity	Med. to Low Intensity	Low Intensity
Access control	Yes	Yes	Some	No	No	No
Turn lanes		Continuous and/or medians with ped. islands	Typical at intersections with Arterials or Collectors	Not typical	Not typical	Not typical
Planting strips[7&8]	Two - 12 ft. Except across areas of Natural Features	Two - 12 ft. Except across areas of Natural Features	Two - 12 ft. Except across areas of Natural Features	Two - 12 ft. Except across areas of Natural Features	Two - 6 ft. Except across areas of Natural Features	Two - 6 ft.[7] Except across areas of Natural Features[7&8]
Through-traffic connectivity		Primary function	Typical function	Typical function	Permissible function	Permissible function

1. These standards do not preclude the flexibility currently allowed through the Planned Development process in Chapter 2.5 - Planned Development.

2. Lane widths shown are the preferred construction standards that apply to existing routes adjacent to areas of new development, and to newly constructed routes. On Arterial and Collector roadways, an absolute minimum for safety concerns is 10 ft. Such minimums are expected to occur only in locations where existing development along an established sub-standard route or other severe physical constraints preclude construction of the preferred facility width.

3. An absolute minimum width for safety concerns is five ft., which is expected to occur only in locations where existing development along an established sub-standard route or other severe physical constraints preclude construction of the preferred facility width. Parallel multi-use paths in lieu of bike lanes are not appropriate along the Arterial-Collector system due to the multiple conflicts created for bicycles at driveway and sidewalk intersections. In rare instances, separated (but not adjacent) facilities may provide a proper function.

4. Arterial Highway speeds in the Central Business or other Commercial zones in urban areas may be 20-25 mph. Traffic calming techniques, signal timing, and other efforts will be used to keep traffic within the desired managed speed ranges. Design of a corridor's vertical and horizontal alignment will focus on providing an enhanced degree of safety for the managed speed.

5. Street design for each development shall provide for emergency and fire vehicle access. Street widths of less than 28 ft. shall be applied as a development condition through the Subdivision process in Chapter 2.4 - Subdivisions and Major Replats and/or the Planned Development process in Chapter 2.5 - Planned Development. The condition may require the developer to choose between improving the street to the 28-ft. standard or constructing the narrower streets with parking bays placed intermittently along the street length. The condition may require fire-suppressive sprinkler systems for any dwelling unit more than 150 ft. from a secondary access point. * To be applied in RS-9 and lesser zones.

6. Traffic calming includes such measures as bulbed intersections, speed humps, raised planted medians, mid-block curb extensions, traffic circles, signage, and varied paving materials and is addressed in the Transportation Plan.

7. Through the Planned Development Review Process, the planting strip along Local Streets and around the bulbs of Cul-de-sacs may be reduced or eliminated.

8. Where streets must cross protected Natural Features, street widths shall be minimized by providing no on-street parking and no planting strips between the curb and the sidewalk on either side of the street.

m. Designated Shopping Streets associated with Minor and Major Neighborhood Centers shall adhere to the following standards -

1. Prior to designation of a Shopping Street, the applicant shall submit a traffic analysis of the proposal in accordance with the requirements of Section 4.0.60.a and the City Engineer.

2. Shopping Streets may include streets falling within the categories in "a," and "b," below. See also Table 4.0-2 - Shopping Street Standards for specific elements required with Shopping Streets.

   a) City Streets - Functional classifications as follows:

1)	Local	existing or proposed
2)	Local Connector	existing or proposed
3)	Neighborhood Collector	existing or proposed
4)	Collector	existing or proposed
5)	Arterial (for Neighborhood Center Zones developed prior to December 31, 2006)	existing

   b) Private Streets - Designed to City street standards for either the Local or Local Connector and for Shopping Streets as provided by this Section. For purposes of other development standards, such as setback requirements, private Shopping Streets shall provide the same features as required for public streets. However, the City shall not be responsible for maintenance of private Shopping Streets, and the applicant and/or owner shall be responsible for construction of the private Shopping Street and its maintenance in accordance with the standards herein. Private streets as provided by this Section shall have public access easements recorded and shall be platted in a separate tract per Section 4.0.60.d.4 .

3. Street Connectivity - Designated Shopping Streets, whether City streets or private streets, shall provide direct connections to adjacent public and private streets and neighborhoods where practicable.

4. The following development and design standards shall apply to streets designated as Shopping Streets:

   a) Auto Amenities - Auto lane widths shall comply with Table 4.0-1 - Street Functional Classification System and Table 4.0-2 - Shopping Street Standards. Shopping Streets should not include more than two travel lanes, excluding turn lanes as required or consistent with Section 4.0.60. However, applicants or the City may propose Shopping Street designations for streets with more than two travel lanes as part of Master Site Plans for Neighborhood Centers.

b) Length of Shopping Streets - A Shopping Street should be no more than two blocks in length in accordance with the Block Perimeter requirements in Section 4.0.60.n and Chapter 4.10 - Pedestrian Oriented Design Standards.

c) Bike Amenities - Shared surface with auto traffic lanes is acceptable on Local and Local Connector Streets. Bike lanes shall be required on new Neighborhood Collector, Collector, and Arterial Streets except on Neighborhood Collectors where angled parking has been allowed.

d) Transit - Transit amenities consistent with the Corvallis Transit Master Plan are encouraged along Shopping Streets.

e) Managed Speed - Speeds along Shopping Streets shall be in conformance with Table 4.0-1 - Street Functional Classification System, and generally should be no greater than 25 mph. In situations where limitations of site development warrant, streets with higher established speed limits may be designated as Shopping Streets.

f) On-street Parking - On-street parking is required along newly constructed Shopping Streets and shall be maintained where already existing. Parallel parking is required where on-street bike lanes are provided or required. Angled parking is typical on Local and Local Connector Streets and allowed on Neighborhood Collector Streets designated as Shopping Streets where bicycle safety is ensured through lower traffic volumes or speeds. On-street handicapped parking spaces may be designed as 90 degree spaces for better accessibility.

An exception to the requirement for on-street parking along newly constructed Shopping Streets is allowed in specific areas where a pedestrian park or plaza extends into the area that would otherwise be required to be on-street parking, provided the pedestrian park or plaza meets or exceeds all the thresholds in Sections 4.10.70.05.a.3(a-e) and Section 4.10.70.05.a.4. In this situation, the on-street parking would continue to be located on parts of the Shopping Street where the described pedestrian park or plaza was not present.

g) Curb-to-curb Width - Curb-to-curb widths shall be consistent with Table 4.0-1 - Street Functional Classification System, and shall be determined on a case-by-case basis with an emphasis on the minimum width necessary to accommodate transportation needs and on the creation of a quality pedestrian environment.

h) Traffic Calming - Bulbed intersections on Shopping Streets are required. Other traffic calming measures, including speed humps, raised planted medians, mid-block curb extensions, traffic circles, signage, and varied paving materials are encouraged when shown to be appropriate in a traffic evaluation. Any traffic calming shall be approved by the City Engineer and City Fire Chief.

i) Access Control - Access control shall be required, consistent with Table 4.0-1 - Street Functional Classification System.

j) Planting Strips/Street Trees - Planting strips are discouraged along Shopping Streets. Street tree wells shall be provided and placed at a minimum of every 20 ft. in conformance with requirements in Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Street trees at maturity shall be pruned to awning height, with tree canopies extending above awnings.

Table 4.0- 2 - Shopping Street Standards				
		Collector	**Neighborhood Collector**	**Local and Local Connector**
New Development	**On-street Parking**	Required	Required	Required
	Angled Parking	Not allowed	Permissible	Required per Section 4.0.60.m.4(f)
	Bike Lanes	Required	Required, if no angled parking	Shared Street
	Curb Extensions	Required	Required	Required
	Mid-block Crossings	Required	Required	Required
	Other Traffic Calming	Permissible, but not required	Required	Required
	Managed Speed (mph)	25	20-25	15-20
	Pedestrian Facilities	Wide sidewalks	Wide sidewalks	Wide sidewalks
Redevelopment	**On-street Parking**	Allowed	Required	Required
	Angled Parking	Not allowed	Permissible, if no existing bike lanes	Required per Section 4.0.60.m.4(f)
	Bike Lanes	Required	Required, except where angled parking is allowed	Shared street
	Curb Extensions	Required	Required	Required
	Mid-block Crossings	Required	Required	Required
	Other Traffic Calming	Permissible, but not required	Required	Required
	Managed Speed (mph)	25	20-25	15-20
	Pedestrian Facilities	Wide Sidewalks	Wide Sidewalks	Wide Sidewalks

k) Sidewalk Width - Sidewalks along Shopping Streets shall be a minimum width of 12 ft.

l) Pedestrian Oriented Intersections - Street intersections along Shopping Streets shall contain:

1) Crosswalks that are clearly marked with contrasting paving materials. Raised crosswalks or raised intersections may be required as traffic calming measures, subject to standards specified by the City Engineer;

2) Bulbed intersections; and

3) Other pedestrian amenities approved by the City Engineer.

m) Facades - Ground-floor facades that face Shopping Streets shall comply with Chapter 4.10 - Pedestrian Oriented Design Standards.

5. An exception to the requirements of this Section may be granted if, through a Planned Development process consistent with Chapter 2.5 - Planned Development, or a legislative process consistent with or 2.0 - Public Hearings, a site is determined to appropriately provide mixed use opportunities and services to the affected Comprehensive Neighborhood.

n. Block Perimeter Standards - The following Block Perimeter requirements apply to all development projects. Exceptions to these requirements may be approved for development that is smaller than one acre and situated in areas where the street patterns are established and do not require connections to the development.

1. Residential Standards -

a) Complete Blocks - Developments shall create a series of complete blocks bound by a connecting network of public or private streets with sidewalks. When necessary to minimize impacts to a designated wetland, to slopes greater than 15 percent, to parks dedicated to the public, and/or to Significant Natural Features, blocks may be bound by walkways without streets.

b) Maximum Block Perimeter - The maximum Block Perimeter shall be 1,200 ft. Block faces greater than 300 ft. shall have a through-block pedestrian connection.

c) Variations Allowed Outright - Variations of up to 30 percent to these block distances may be allowed outright to minimize impacts to a designated wetland, to slopes greater than 15 percent, to parks dedicated to the public, to Significant Natural Features, to existing street patterns, and/or to existing development.

2. Commercial, Industrial and Civic Standards -

a) Complete Blocks - Commercial developments shall create a series of complete blocks bound by a connecting network of public or private streets with sidewalks. When necessary to minimize impacts to a designated wetland, to slopes greater than 15 percent, to parks dedicated to the public, and/or to Significant Natural Features, blocks may be bound by walkways without streets.

b) Maximum Block Perimeter - The maximum Block Perimeter shall be as follows:

Neighborhood Center and Professional and Administrative Office Zones	1,200 ft.	Block faces greater than 250 ft. shall have a pedestrian through-connection
Other Commercial Zones and Limited Industrial-Office Zone	1,500 ft.	Block faces greater than 400 ft. shall have a pedestrian through-connection
Mixed Use Employment and Mixed Use Transitional Zones	1,800 ft.	Block faces greater than 400 ft. shall have a pedestrian through-connection

c) Variations Allowed Outright - Variations of up to 30 percent to these block distances may be allowed outright to minimize impacts to a designated wetland, to slopes greater than 15 percent, to parks dedicated to the public, to Significant Natural Features, to existing street patterns, and/or to existing development.

o. Direct access to Highway 20/34 shall be restricted to maintain the Highway's carrying capacity and enhance its safety levels. This shall be achieved through the following requirements:

1. New or expanded development shall comply with the City's Transportation and Access Strategy until adoption of the final version of the Oregon Department of Transportation's Highway 20/34 Corridor Plan;

2. New or expanded development on sites within 0.25-mile of Highway 20/34 shall have direct access to a Local, Collector, and/or Neighborhood Collector Street, wherever practicable;

3. Collector and/or Neighborhood Collector Streets, rather than Local Streets or direct access from individual properties, should be used to access Highway 20/34. Access from Local Streets onto Highway 20/34 may be allowed where no connection to a Collector or Neighborhood Collector Street is available;

4. New or existing Local Street access to Highway 20/34 shall be restricted or eliminated where possible;

5. Full-street access points should be consolidated and spaced at no closer than 0.25-mile intervals along Highway 20/34;

6. Roadway connections between West Hills Road and Country Club Drive shall be provided consistent with the West Corvallis Access Strategy, which is outlined in the Corvallis Transportation Plan; and

7. New or expanded development shall comply with state highway access regulations and other accepted traffic engineering standards.

p. Multiple accesses to properties along Highway 20/34 and to related major streets shall be consolidated when:

1. Land uses develop, expand, intensify, and/or change;

2. Properties are consolidated and/or divided; and

3. Lot lines are adjusted.

q. Development shall include underground electric services, light standards, wiring and lamps for streetlights according to the specifications and standards of the City Engineer. The developer shall be responsible for installation of underground conduit for street lighting along all public streets improved in conjunction with such development in accordance with the following:

1. The developer shall coordinate with the City Engineer to determine the location of future street light poles.

2. The streetlight plan shall be designed to provide illumination meeting standards set by the City Engineer.

3. The standard street light installation is a wood pole.

The developer shall install such facilities and make the necessary arrangements with the serving electric utility for the City-owned and operated street lighting system to be served at the lowest applicable rate available to the City. Upon City's acceptance of such development improvements, the street lighting system, exclusive of utility-owned service lines, shall be and become the property of the City.

Section 4.0.70 - PUBLIC UTILITY REQUIREMENTS (OR INSTALLATIONS)

a. All development sites shall be provided with public water, sanitary sewer, storm drainage, and street lights.

b. Where necessary to serve property as specified in "a" above, required public utility installations shall be constructed concurrently with development.

c. Off-site public utility extensions necessary to fully serve a development site and adjacent properties shall be constructed concurrently with development.

d. To provide for orderly development of adjacent properties, public utilities installed concurrently with development of a site shall be extended through the site to the edge of adjacent property(ies).

e. All required public utility installations shall conform to the City's adopted facilities master plans.

f. Private on-site sanitary sewer and storm drainage facilities may be allowed, provided all the following conditions exist:

1. Extension of a public facility through the site is not necessary for the future orderly development of adjacent properties;

2. The development site remains in one ownership and Land Division does not occur, with the exception of Land Divisions that may occur under the provisions of Section 4.0.60.d, above; and

3. The facilities are designed and constructed in accordance with the Uniform Plumbing Code and other applicable codes, and permits are obtained from the Development Assistance Center prior to commencement of work.

g. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.80 - PUBLIC IMPROVEMENT PROCEDURES

It is in the best interests of the community to ensure that public improvements installed in conjunction with development are constructed in accordance with all applicable City policies, standards, procedures, and ordinances. Therefore, before installing public water, sanitary sewer, storm drainage, streetlights, street, transit, bicycle, or pedestrian improvements, developers shall contact the City Engineer for information regarding adopted procedures governing plan submittal, plan review and approval, permit requirements, inspection and testing requirements, progress of the work, and provision of easements, dedications, and as-built drawings for installation of public improvements.

Whenever any work is done contrary to the provisions of this Code, the Director may order the work stopped via a written notice served on the persons performing the work or otherwise in charge of the work. The work shall stop until the Director authorizes that it proceed or authorizes corrective action to remedy existing substandard work.

Section 4.0.90 - FRANCHISE UTILITY INSTALLATIONS

These standards are intended to supplement, not replace or supersede, requirements contained within individual franchise agreements that the City has with providers of electrical power, telecommunication, cable television, and natural gas services, hereafter referred to as Franchise Utilities.

a. Where a Land Division is proposed, the developer shall provide Franchise Utilities to the development site. Each lot in a Subdivision shall have an individual service available or secured prior to approval of the Final Plat, in accordance with Section 2.4.40 of Chapter 2.4 - Subdivisions and Major Replats.

b. Where necessary and in the judgement of the Director, Franchise Utilities shall be extended through the site to the edge of adjacent property(ies) to provide for orderly development of adjacent properties.

c. **The developer shall have the option of choosing whether to provide natural gas or cable television service to the development site, provided that all of the following conditions exist:**

1. Extension of Franchise Utilities through the site is not necessary for the future orderly development of adjacent property(ies);

2. The development site remains in one ownership and Land Division does not occur, with the exception of Land Divisions that may occur under the provisions of Section 4.0.60.d, above; and

3. The development is nonresidential.

d. Where a Land Division is not proposed, the site shall be provided with Franchise Utilities prior to occupancy of structures as required by this Section and in accordance with the provisions of Section 2.4.40.12 of Chapter 2.4 - Subdivisions and Major Replats.

e. All Franchise Utility distribution facilities installed to serve new development shall be placed underground except as provided below.

1. Poles for traffic signals, pedestals for police and fire system communications and alarms, pad-mounted transformers, pedestals, pedestal-mounted terminal boxes and meter cabinets, concealed ducts, substations, or facilities used to carry voltage higher than 35,000 volts; and

2. Overhead utility distribution lines may be permitted upon approval of the City Engineer when unusual terrain, soil, or other conditions make underground installation impracticable. Location of such overhead utilities shall follow rear or side lot lines wherever feasible.

f. The developer shall be responsible for making necessary arrangements with Franchise Utility providers for provision of plans, timing of installation, and payment for services

installed. Plans for Franchise Utility installations and plans for public improvements shall be submitted together to facilitate review by the City Engineer.

g. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.100 - LAND FOR PUBLIC PURPOSES

a. Easements for public sanitary sewer, water, storm drain, streetlight, transit, pedestrian and bicycle facilities shall be provided whenever these facilities are located outside a public right-of-way. The minimum easement width for a single utility is 15 ft. The minimum easement width for two adjacent utilities is 20 ft. The easement width shall be centered on the utility to the greatest extent practicable. Wider easements may be required for unusually deep facilities.

b. Utility easements with a minimum width of seven ft. shall be granted to the public adjacent to all street rights-of-way for franchise utility installations.

c. Where a development site is traversed by a drainageway or water course, improvements shall be in accordance with the Corvallis Storm Water Master Plan and the Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

d. Where a development site is traversed by, or adjacent to, a future trail linkage identified in the Corvallis Transportation Plan or the Trails Master Plan, dedications of suitable width to accommodate the trail linkage shall be provided. This width shall be determined by the City Engineer, based on the appropriate standard for the type of trail facility involved.

e. Where street, trail, utility, or other rights-of-way and/or easements in or adjacent to development sites are nonexistent or of insufficient width, dedications may be required. The need for and widths of those dedications shall be determined by the City Engineer.

f. Easements or dedications required in conjunction with Land Divisions shall be recorded on the Final Plat. For developments not involving a Land Division, easements and/or dedications shall be recorded on standard forms provided by the City Engineer.

g. Environmental assessments shall be provided by the developer (grantor) for all lands to be dedicated to the public or City. An environmental assessment shall include information necessary for the City to evaluate potential liability for environmental hazards, contamination, or required waste cleanups related to the dedicated land. An environmental assessment shall be completed prior to the acceptance of dedicated lands, in accordance with the following:

1. The initial environmental assessment shall detail the history of ownership and general use of the land by past owners. Upon review of this information, as well as any site investigation by the City, the Director will determine if the risks of potential contamination warrant further investigation. If further site investigation is warranted, a Level I Environmental Assessment shall be provided by the grantor, as described in “2," below.

2. Level I Environmental Assessments shall include data collection, site reconnaissance, and report preparation. Data collection shall include review of Oregon Department of Environmental Quality records, City and County fire department records, interviews with agency personnel regarding citations or enforcement actions issued for the site or surrounding sites that may impact the site, review of available historic aerial photographs and maps, interviews with current and available past owners of the site, and other data as appropriate.

   Site reconnaissance shall include a walking reconnaissance of the site to check for physical evidence of potentially hazardous materials that may impact the site. Report preparation shall summarize data collection and site reconnaissance, assess existing and future potential for contamination of the site with hazardous materials, and recommend additional testing if there are indications of potential site contamination. Level I Environmental Assessment reports shall be signed by a registered professional engineer.

3. If a Level I Environmental Assessment concludes that additional environmental studies or site remediation are needed, no construction permits shall be issued until those studies are submitted and any required remediation is completed by the developer and/or owner. Additional environmental studies and/or required remediation shall be at the sole expense of the developer and/or owner. The City reserves the right to refuse acceptance of land identified for dedication to public purposes if risk of liability from previous contamination is found.

h. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.110 - MAIL DELIVERY FACILITIES

a. Placement of mail delivery facilities shall consider locations of sidewalks, bikeways, intersections, existing or future driveways, existing or future utilities, right-of-way and street width, and vehicle, bicycle and pedestrian movements. Where mail delivery facilities are being installed in conjunction with a Land Division, their placement shall be indicated on the plans for public improvements and meet the approval of the City Engineer and the U.S. Post Office.

b. Where mail delivery facilities are proposed for installation in areas with an existing or future curbside sidewalk, a sidewalk transition shall be provided that maintains the required design width of the sidewalk around the mail delivery facility. If the right-of-way width will not accommodate the sidewalk transition, a sidewalk easement shall be provided adjacent to the right-of-way.

c. Mail delivery facilities and associated sidewalk transitions, when sidewalk transitions are necessary, around these facilities shall conform with the City's standard construction specifications. Mailboxes shall conform with the U.S. Post Office standards for mail delivery facilities.

d. Installation of mail delivery facilities is the obligation of the developer. These facilities shall be installed concurrently with the public improvements. Where development of a site does not require public improvements, mail delivery facilities shall be installed concurrently with private site improvements.

Section 4.0.120 - PONDING AREAS AND FLOOD HAZARDS

Ponding and flood hazards inside Special Flood Hazard Areas shall comply with the provisions in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions. For ponding or flood hazards outside Special Flood Hazard Areas, the following shall apply:

a. Areas subject to ponding of surface water or flooding shall not be developed until necessary measures have been taken to mitigate the situation. Such measures may be required by the Planning Commission or the Director as conditions of development approval.

b. The developer shall submit proposed mitigation measures to the City Engineer for review. The City Engineer shall report to the Planning Commission or the Director on the adequacy of the proposed mitigation measures.

c. Existence of a ponding area or flood hazard may be cause for revision of the development proposal or denial of the requested development.

4.0.130 - STORM WATER MANAGEMENT MEASURES

a. To reduce the risk of causing downstream properties to become flooded and to help maintain or restore the Properly Functioning Conditions of receiving waters, new development, expansions to existing development, or redevelopment shall be required to provide storm water detention and retention in accordance with “b,” of this Section.

b. When Detention and/or Retention are Required - See also Section 4.2.50.04 of Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.

1. New development projects that create impervious surfaces in excess of 25,000 sq. ft. are required to implement storm water detention and/or retention measures as specified in the Corvallis Design Criteria Manual. Impervious surfaces include such elements as roads, driveways, parking lots, walks, patios, and roofs, etc. Detention facilities shall be designed to maximize storm water infiltration. Detention or retention facilities shall be located outside the 10-year Floodplain or the riparian easement area, whichever is greater. The riparian easement area is identified in Section 4.13.70 of Chapter 4.13 - Riparian Corridor and Wetland Provisions, and this standard shall apply regardless of whether or not an easement has been granted.

2. Expansion and Redevelopment -

   a) Development projects that create new or redeveloped impervious area totaling at least 10,000 sq. ft. and resulting in at least 25,000 sq. ft. of post-development impervious area are required to implement storm water detention and/or retention measures for the new and redeveloped impervious area as specified in the Corvallis Design Criteria Manual. Redeveloped impervious area consists of roof area and replaced impervious area, minus any reduction in overall impervious area, associated with substantial improvement or replacement of structures.

   b) Detention facilities shall be designed to maximize storm water infiltration. Detention or retention facilities shall be located outside the 10-year Floodplain or the riparian easement area, whichever is greater. The riparian easement area is identified in Section 4.13.70 and this standard shall apply regardless of whether or not an easement has been granted.

   c) Pre-developed runoff conditions for redeveloped impervious area shall assume a runoff pattern based on good condition grass and the corresponding native hydrologic soil group for the site. Detention shall not be required beyond the point at which gravity flow to the existing abutting storm drainage system cannot be feasibly maintained, as determined during development plan review.

3. Exemptions to Storm Water Detention Requirements -

   a) Properties east of the Marys River and south of Highway 20/34 are exempt from detention requirements because of their proximity to the Marys River and the need for quick dispersion of storm water.

b) Properties subject to Section 4.0.130.b.2, above, may subtract the square footage of underground parking or of each level of structured parking from the square footage subject to detention requirements.

4. Storm water facilities south of Goodnight Avenue shall be constructed in accordance with the requirements of the South Corvallis Drainage Master Plan.

c. Use of water quality features shall be consistent with the Corvallis Design Criteria Manual. Water quality features within the regulated Riparian Corridor shall be located outside of the applicable riparian easement area. The riparian easement shall be re-vegetated consistent with Sections 4.13.50.d.1 and 4.13.50.d.2 of Chapter 4.13 - Riparian Corridor and Wetland Provisions.

d. Use of infiltration systems is allowed consistent with the Corvallis Design Criteria Manual.

Section 4.0.140 - ROUGH PROPORTIONALITY

If an applicant intends to assert that it cannot legally be required, as a condition of Building Permit or development approval, to provide easements, dedications, or improvements at the level otherwise required by this Code, the Building Permit or site plan review application shall include a rough proportionality report in accordance with the provisions of Section 1.2.120 of Chapter 1.2 - Legal Framework.