

## Chapter 16.64

### SUBDIVISIONS – DESIGN STANDARDS

#### Sections:

- 16.64.010 Streets.
- 16.64.015 Access.
- 16.64.020 Blocks.
- 16.64.030 Easements.
- 16.64.040 Lots.
- 16.64.050 Public open spaces.
- 16.64.060 Grading of building sites.
- 16.64.070 Improvements.
- 16.64.080 Low Impact Development Incentives

#### 16.64.010 Streets.

A. Generally. The location, width and grade of streets shall be considered in relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation pattern with intersection angles, grades, tangents, and curves appropriate for the traffic to be carried. Where location is not shown in a development plan, the arrangement of streets shall either:

1. Provide for the continuation or appropriate projection of existing principal streets in surrounding areas; or
2. Conform to a plan for the neighborhood approved or adopted by the commission to meet a particular situation where topographical or other conditions make continuance of conformance to existing street patterns impractical;
3. Minimum right-of-way and roadway width shall follow the requirements of the Canby Public Works Design Standards;
4. Consider opportunities to incrementally extend and connect local streets to provide for safe and convenient bike and pedestrian circulation.

B. Permeable Surfaces. Permeable surfacing alternatives and on-site stormwater management facilities, are encouraged for street improvements. Permeable surfacing and LID stormwater management facilities shall be constructed in accordance with the Canby Public Works Design Standards and the manufacturer's recommendations. Permeable surfacing includes, but is no limited to: paving blocks, turf block, pervious concrete, porous asphalt, and other similar approved materials. Alternative surfacing

methods may be approved for public and private roads, road shoulders, pedestrian ways, driveways, and easement service roads unless site constraints make use of such materials detrimental to water quality. Use of permeable surfacing methods shall meet the imposed load requirements for fire apparatus, and shall be subject to review and approval by the Canby Public Works Department.

**C. Reserve Strips.** Reserve strips or street plugs controlling the access to streets will not be approved unless such strips are necessary for the protection of the public welfare or of substantial property rights, or both, and in no case unless the control and disposal of the land composing such strips is placed within the jurisdiction of the city, under conditions approved by the commission.

**D. Alignment.** All streets other than minor streets or cul-de-sacs, shall, as far as possible, be in alignment with the existing streets by continuations of the center lines thereof. Jogs creating "T" intersections shall have centerline offsets of not less than one hundred fifty feet, unless it is found that community benefits of such an alignment outweigh its disadvantages.

**E. Future Extension of Streets.** Where a subdivision adjoins unplatted acreage, streets which in the opinion of the commission should be continued in the event of the subdivision of the acreage, will be required to be provided through to the boundary lines of the tract. Reserve strips, street plugs and temporary turnaround areas may be required to preserve the objectives of street extensions. Reserve strips and street plugs shall be deeded to the city prior to final plat approval. The Planning Commission may require that the costs of title insurance and recordation fees, if any, for such areas be borne by the subdivider. If, in the opinion of the city engineer, a traffic pedestrian, or safety hazard temporarily exists by the construction of a dead-end street, he may direct that a barricade of adequate design be installed at the developer's expense as one of the required improvement items for the subdivision.

**F. Intersection Angles.** Streets shall intersect one another at an angle as near to a right angle as possible, and no intersections of streets at angles of less than thirty degrees will be approved unless necessitated by topographic conditions. When intersections of other than ninety degrees are unavoidable, the right-of-way lines along the acute angle shall have a minimum corner radius of twelve feet. All right-of-way lines at intersections with arterial streets shall have a corner radius of not less than twelve feet.

**G. Existing Streets.** Whenever existing streets, adjacent to or within a tract, are of inadequate width, dedication of additional right-of-way shall be provided at the time of subdivision.

**H. Half Streets.** Half streets, while generally not acceptable, may be approved where essential to the reasonable development of the subdivision, when in conformity with the other requirements of these regulations, and when the commission finds it will be practical to require the dedication of the other half when the adjoining property is subdivided. Whenever a half street is adjacent to a tract to be subdivided, the other

half of the street shall be platted within such tract. Reserve strips, street plugs, special signs and barricades may be required to preserve the objectives of half streets.

**I. Cul-de-sacs.** A cul-de-sac shall only be allowed when environmental or topographical constraints, existing development patterns, or compliance with other standards in this code preclude street extension and through circulation. When cul-de-sacs are provided, all of the following shall be met:

1. The cul-de-sac shall not exceed a length of 400 feet. Length of the cul-de-sac shall be measured along the centerline of the roadway from the near side of the intersecting street to the farthest point of the cul-de-sac;
2. The cul-de-sac shall be designed in accordance with the Canby Public Works Design Standards.
3. The cul-de-sac may have a vegetated center island that will serve to treat stormwater runoff generated by the cul-de-sac. Specifications for cul-de-sac design are located in the Public Works Design Standards.
4. The cul-de-sac shall provide a pedestrian connection between it and adjacent streets, access ways, parks, or other right-of-way. Such pedestrian ways shall conform to Section 16.64.030(C).

**J. Marginal Access Streets.** Where a subdivision abuts or contains an existing or proposed arterial street, the commission may require marginal access streets, through lots with suitable depth, screen planting contained in a nonaccess reservation along the rear property line, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.

**K. Alleys.**

1. Alleys shall be provided to commercial and industrial districts, unless other permanent provisions for access to off-street parking and loading facilities are made as approved by the commission.
2. Alleys shall be provided within residential subdivisions when streets are designed to meet the narrow “green” street standards in the Canby Public Works Design Standards. Visitor parking areas may be required by the city to mitigate the lack of on-street parking.
3. When alleys are provided as part of a new residential subdivision, streets shall be designed in accordance with the narrow “green” street standards in the Canby Public Works Design Standards. Visitor parking areas may be required by the city to mitigate the lack of on-street parking.
4. Alley intersection corners shall have a minimum radius of ten feet.

**L. Street Names.** No street name shall be used which will duplicate or be confused with the name of existing streets except for extensions of existing streets. Street names and numbers shall conform to the established pattern in the city and the surrounding area and shall be subject to the approval of the commission.

**M. Planting Easements.** The Planning Commission may require additional easements for planting street trees or shrubs.

**N. Grades and Curbs.** Grades shall not exceed seven percent on arterials, ten percent on collector streets, or fifteen percent on any other street. In flat areas allowance shall be made for finished street grades having a minimum slope of .5 percent. Centerline radii of curves shall not be less than three hundred feet on major arterials, two hundred feet on secondary arterials, or one hundred feet on other streets, unless specifically approved by the City, and shall be to an even ten feet.

**O. Streets Adjacent to Highway 99-E or Railroad Right-of-Way.** Wherever the proposed subdivision contains or is adjacent to a railroad right-of-way or Highway 99-E, provisions may be required for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land between the streets and the railroad or Highway 99-E. The distances shall be determined with due consideration of cross streets at a minimum distance required for approach grades to a future grade separation and to provide sufficient depth to allow screen planting along the railroad right-of-way. (Ord. 740 section 10.4.40(C)(1), 1984; Ord. 1043 section 3, 2000; Ord 1237, 2007; Ord. 1338, 2010)

#### **16.64.015 Access**

**A.** Any application that involves access to the State Highway System shall be reviewed by the Oregon Department of Transportation for conformance with state access management standards (See appendix G of the Transportation System Plan).

**B.** All proposed roads shall follow the natural topography and preserve natural features of the site as much as possible. Alignments shall be planned to minimize grading.

**C.** Access shall be properly placed in relation to sight distance, driveway spacing, and other related considerations, including opportunities for joint and cross access.

**D.** The road system shall provide adequate access to buildings for residents, visitors, deliveries, emergency vehicles, and garbage collection.

**E.** Streets shall have sidewalks on both sides. Pedestrian linkages should also be provided to the peripheral street system.

**F.** Access shall be consistent with the access management standards adopted in the Transportation System Plan. (Ord. 1043 section 3, 2000)

**16.64.020 Blocks.**

**A. Generally.** The lengths, widths and shapes of blocks shall be designed with due regard to providing adequate building sites suitable to the special needs of the type of use contemplated, needs for access, circulation, control and safety of street traffic and limitations and opportunities of topography.

**B. Sizes.** Block length shall be limited to 300 feet in the C-1 zone, 400 feet in residential zones, 600 feet in all other zones, except for 1,000 feet on arterials. Exceptions to this prescribed block standard shall be permitted where topography, barriers such as railroads or arterial roads, or environmental constraints prevent street extension. The block depth shall be sufficient to provide two lot depths appropriate to the sizes required by Division III. (Ord. 740 section 10.4.40(C)(2), 1984; Ord. 1043 section 3, 2000; Ord. 1076, 2001; Ord. 1338, 2010)

**16.64.030 Easements.**

**A. Utility Lines.** Easements for electric lines or other public utilities are required, subject to the recommendations of the utility providing agency. Utility easements twelve feet in width shall be required along all street lot lines unless specifically waived. The commission may also require utility easements along side or rear lot lines when required for utility provision. The construction of buildings or other improvements on such easements shall not be permitted unless specifically allowed by the affected utility providing agency.

**B. Watercourses.** Where a subdivision is traversed by a watercourse, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of such watercourse, and such further width as will be adequate for the purpose of assuring adequate flood control. Streets parallel to watercourses may be required.

**C. Pedestrian Ways.** In any block over six hundred feet in length, a pedestrian way or combination pedestrian way and utility easement shall be provided through the middle of the block. If unusual conditions require blocks longer than one thousand two hundred feet, two pedestrian ways may be required. When essential for public convenience, such ways may be required to connect to cul-de-sacs, or between streets and other public or semipublic lands or through green way systems. Sidewalks to city standards may be required in easements where insufficient right-of-way exists for the full street surface and the sidewalk. All pedestrian ways shall address the following standards to provide for the safety of users:

1. Length should be kept to a minimum and normally not in excess of two hundred feet;
2. Width should be maximized and shall not be below ten feet. For pathways over one hundred feet long, pathway width shall increase above the minimum by one foot for every twenty feet of length;

3. A minimum of three foot-candles illumination shall be provided. Lighting shall minimize glare on adjacent uses consistent with the outdoor lighting provisions in section 16.43 of this code;

4. Landscaping, grade differences, and other obstructions should not hinder visibility into the pedestrian way from adjacent streets and properties. Fencing along public pedestrian ways shall conform with the standards in Section 16.08.110;

5. Surrounding land uses should be designed to provide surveillance opportunities from those uses into the pedestrian way, such as with the placement of windows;

6. Exits shall be designed to maximize safety of users and traffic on adjacent streets; and

7. Use of permeable surfacing materials for pedestrian ways and sidewalks is encouraged whenever site and soil conditions make permeable surfacing feasible. Permeable surfacing includes, but is not limited to: paving blocks, turf block, pervious concrete, and porous asphalt. All permeable surfacing shall be designed, constructed, and maintained in accordance with the Canby Public Works Design Standards and the manufacturer's recommendations. Maintenance of permeable surfacing materials located on private property are the responsibility of the property owner.

D. Developments that abut the Molalla Forest Road multi-use path shall provide a pedestrian/bicycle access to the path. The city may determine the development to be exempt from this standard if there is an existing or planned access to the path within 300 feet of the development.

E. Solar Easements. Subdividers shall be encouraged to establish solar easements and utilize appropriate solar design in their development proposals. Solar easements shall be shown on the final plat and in the deed restrictions of the subdivision. The Planning Commission may require the recordation of special easements or other documents intended to protect solar access. (Ord. 740 section 10.4.40(C)(3), 1984; Ord. 1043 section 3, 2000; Ord 1237, 2007; Ord. 1338, 2010; Ord. 1340, 2011)

#### **16.64.040 Lots.**

A. Size and Shape. The lot size, width, shape and orientation shall be appropriate for the location of the subdivision and for the type of development and use contemplated. To provide for proper site design and prevent the creation of irregularly shaped parcels, the depth of any lot or parcel shall not exceed three times its width (or four times its width in rural areas) unless there is a topographical or environmental constraint or an existing man-made feature such as a railroad line.

**B. Minimum Lot Sizes:**

1. Lot sizes shall conform with requirements of Division III unless the applicant chooses to use an alternative lot layout per subsection (3) below to accommodate interconnected and continuous open space and or other natural resources. In this case, the average minimum lot size may be reduced by 5,000 square feet after subtracting access tracts. Overall development densities shall comply with the underlying maximum density allowed by the zone.

2. In areas that cannot be connected to sewer trunk lines, minimum lot sizes shall be greater than the minimum herein specified if necessary because of adverse soil structure for sewage disposal by septic systems. Such lot sizes shall conform to the requirements of Clackamas County for sewage disposal unless provisions are made for sanitary sewers.

3. Alternative lot layout. Applicants may deviate from standard lot setbacks and dimensions to accommodate dedicated interconnected open space or other natural areas. Clustered housing, lot-size averaging, and a mixture of approaches where building lots can be grouped into a smaller portion of the total development, reserving the remainder for open space or other natural areas. Alternative development layouts shall not exceed the underlying maximum density allowed by the zone.

4. When using the alternative lot layout option, the following must be met:

a. The arrangement of the alternative lot layout shall be designed to avoid development forms commonly known as linear, straight-line or highway strip patterns.

b. To the maximum extent possible, open space and natural areas, where used, shall be continuous, interconnected, and concentrated in large usable areas.

c. Where possible, open space shall be connected to adjacent off-site open space areas.

d. Open space and natural areas shall be maintained permanently by the property owner or the property owner's association.

**C. Lot Frontage.** All lots shall meet the requirements specified in Division III for frontage on a public street, except that the Planning Commission may allow the creation of flag lots, cul-de-sac lots and other such unique designs upon findings that access and building areas are adequate. Lots that front on more than one major street shall be required to locate motor vehicle accesses on the street with the lower functional classification.

**D. Double Frontage.** Double frontage or through lots should be avoided except where essential to provide separation of residential development from traffic arteries or to overcome specific disadvantages of topography and orientation.

**E. Lot Side Lines.** The side lines of lots shall run at right angles to the street upon which the lots face, or on curved streets they shall be radial to the curve, unless there is some recognizable advantage to a different design.

**F. Resubdivision.** In subdividing tracts into large lots which at some future time are likely to be resubdivided, the location of lot lines and other details of the layout shall be such that resubdivision may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of building locations in relationship to future street rights-of-way shall be made a matter of record if the commission considers it necessary.

**G. Building Lines.** If special building setback lines are to be established in the subdivision plat, they shall be shown on the subdivision plat or included in the deed restrictions. This includes lots where common wall construction is to be permitted between two single-family dwellings.

**H. Potentially Hazardous Lots or Parcels.** The commission shall utilize its prerogative to modify or deny a tentative plat or partition map where it is found that a proposed lot or parcel is potentially hazardous due to flooding or soil instability.

**I. Flag Lots or Panhandle-shaped Lots.** The commission may allow the creation of flag lots provided that the following standards are met:

1. Not more than one flag lot shall be created to the rear of any conventional lot and having frontage on the same street unless it is found that access will be adequate and that multiple flag lots are the only reasonable method to allow for development of the site. Every flag lot shall have access to a public street.

2. The access strip is to be a minimum of twenty feet in width and shall be paved for its full width from its connection with the public street to the main body of the lot. Except, however, that the width requirement may be reduced to twelve feet, for accessing a single flag lot, where the total length of the access strip does not exceed one hundred feet. Access strips not less than ten feet in width may be permitted where two such drives abut and are provided with reciprocal easements for use. For drives accessing more than two flag lots, the access strip shall be a minimum of twenty feet with reciprocal access and maintenance agreements for all lots.

3. For residential flag lots, a minimum building setback of five feet from the access strip shall be maintained where such buildings exist prior to the creation of the flag lot.

4. Design and locations of buildings on flag lots shall be such that normal traffic will have sufficient area to turn around, rather than necessitating backing motions down the access strip. The commission may establish special setback requirements at the time of approving the creation of flag lots.

5. Flag lots shall not be permitted when the result would be to increase the number of properties requiring direct and individual access connections to the State Highway System or other arterials.

6. The area of a panhandle shaped or flag lot shall be considered to be the rear or buildable portion of the lot and shall not include the driveway or access strip.

7. For the purposes of defining setbacks, flag lots shall have three side yards and one rear yard. The rear yard may be placed on any side of the main dwelling.

J. Designation of Lots as 'Infill Home' Sites. The Planning Commission may require that homes built on one or more lots adjacent to existing development be subject to any or all of the requirements of 16.21.050 - Infill Homes. Furthermore, for subdivisions where the parent parcel(s) is less than two acres in size, the Planning Commission may require that all homes built on lots in the subdivision be subject to any or all of the requirements of 16.21.050. These requirements are to be shown on the subdivision plat or included in the deed restrictions. (Ord. 740 section 10.3.05(F) and 10.4.40(C)(4), 1984; Ord. 890 section 54, 1993; Ord. 1043 section 3, 2000; Ord. 1107, 2002; Ord. 1111 section 6, 2003; Ord. 1338, 2010)

**16.64.050 Parks and recreation.**

Subdivisions shall meet the requirements for park, open space and recreation as specified in Division VI.

**16.64.060 Grading of building sites.**

The commission may impose bonding requirements, similar to those described in section 16.64.070, for the purpose of ensuring that grading work will create no public hazard nor endanger public facilities where either steep slopes or unstable soil conditions are known to exist. (Ord. 740 section 10.4.40(C)(6), 1984)

**16.64.070 Improvements.**

A. Improvement Procedures. In addition to other requirements, improvements installed by a land divider either as a requirement of these regulations, or at his own option, shall conform to the requirements of these regulations and improvement standards and specifications followed by the city, and shall be installed in accordance with the following procedure:

1. Improvement work shall not be commenced until plans have been checked for adequacy and approved by the city. To the extent necessary for evaluation of the proposal, the plans may be required before approval of the tentative plat of a subdivision or partition. No work shall commence until the developer has signed

the necessary certificates and paid the subdivision development fees specified elsewhere in this division.

**2.** Improvement work shall not commence until after the city is notified, and if work is discontinued for any reason it shall not be resumed until after the city is notified.

**3.** Improvements shall be constructed under the inspection and to the satisfaction of the City. The city may require changes in typical sections and details in the public interest if unusual conditions arise during construction which warrant the change.

**4.** Underground utilities, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed to a length obviating the necessity for disturbing the street improvements when service connections are made.

**5.** A map showing public improvements "as built" shall be filed with the city engineer within sixty days of the completion of the improvements.

**B.** The following improvements shall be installed at the expense of the subdivider unless specifically exempted by the Planning Commission:

**1.** Streets, including drainage and street trees;

**2.** Complete sanitary sewer system;

**3.** Water distribution lines and fire hydrants;

**4.** Sidewalks and any special pedestrian ways;

**5.** Street name and traffic-control signs;

**6.** Streetlights;

**7.** Lot, street and perimeter monumentation;

**8.** Underground power lines and related facilities;

**9.** Underground telephone lines, CATV lines, natural gas lines, and related facilities;

**10.** Where dedicated or undedicated open space is proposed or provided, it shall be the subdivider's responsibility to provide standard public improvements to and through that open space.

11. If fencing is being proposed as part of subdivision development, the subdivider shall be responsible for installing fencing along public streets and pedestrian ways. Fencing shall be constructed in accordance with the standards in Section 16.08.10

**C. Streets.**

1. All streets, including alleys, within the subdivision and streets adjoining, but only partially within the subdivision shall be improved.

2. All public and private streets shall be constructed to city standards for permanent street and alley construction. LID alternatives, such as permeable surfacing and integrated stormwater management facilities, are required where site and soil conditions make it a feasible alternative. Upon completion of the street improvement, monuments shall be reestablished and protected in monument boxes at every street intersection and all points of curvature and points of tangency of street centerlines as required by Oregon Revised Statutes Chapter 92.

3. Street Trees. Street trees shall be provided consistent with the provisions of Chapter 12.32.

4. Prior to city approval of the final subdivision plat, all perimeter and back lot line monumentation shall be installed and the installation of the front lot monumentation (along and within street rights-of-way) shall be guaranteed. Any monuments destroyed during improvement installation shall be replaced at the developer's expense.

5. If any lot abuts a street right-of-way that does not conform to the design specifications of this ordinance, the owner may be required to dedicate up to one-half of the total right-of-way width required by this ordinance.

6. The proposed use shall not impose an undue burden on the transportation system. The City may require the applicant to provide adequate information, such as a traffic impact study, to demonstrate the level of impact to the surrounding street system. The developer shall be required to mitigate impacts attributable to the project.

7. The determination of impact or effect and the scope of the impact study should be coordinated with the provider of the affected transportation facility.

8. Dedication of land for streets, transit facilities, sidewalks, bikeways, paths, or access ways shall be required where the existing transportation system will be impacted by or is inadequate to handle the additional burden caused by the proposed use.

9. Improvements such as paving, curbing, installation or contribution to traffic signals, construction of sidewalks, bikeways, access ways, paths, or streets that serve the proposed use where the existing transportation system may be burdened by the proposed use.

**D. Surface Drainage and Storm Sewer System.**

1. Drainage facilities shall be provided within the subdivision and to connect the subdivision to drainage ways or storm sewers outside the subdivision, if necessary, as determined by the City.

2. Stormwater Management through Low Impact Development (LID). Low impact development is a stormwater management approach aimed at emulating predevelopment hydrologic conditions using a combination of site design and stormwater integrated management practices. This approach focuses on minimizing impervious surfaces, promoting rainfall evaporation and uptake by plants, and maximizing stormwater infiltration. Specific LID strategies and integrated management practices include:

- a. Protection and restoration of native vegetation and soils,
- b. Minimizing impervious surface area through use of pervious materials (e.g. pavers and pervious concrete).
- c. Vegetated roofs,
- d. Rainfall reuse,
- e. Stormwater dispersion and bioretention (recharge).

3. All new subdivisions in Canby are required to treat stormwater on site. Stormwater management using LID practices is required where feasible, pursuant to requirements of this chapter and other applicable sections of this code. LID facilities shall be constructed in accordance with Canby Public Works Design Standards.

4. A conceptual stormwater management report must be submitted with the subdivision application. The report must demonstrate how and where stormwater will be managed on site at the subdivision. Where LID practices are not used, the applicant must demonstrate why LID is not feasible. The report will be reviewed by the Canby Public Works Department and shall be consistent with the Public Works Design Standards. Generally, the stormwater management plan must include the following:

- a. A description of existing conditions including a map;
- b. A description of the proposed stormwater system including a map;
- c. An estimate of existing storm water run off;
- d. An estimate of proposed storm water run off;

- e. The detention/retention requirements; and
- f. The discharge location, treatment method and sizing, and if discharging to the ground, the expected infiltration rates based upon soils mapping data.

5. Responsibility for maintenance of LID facilities shall be as follows:

- a. The Canby Public Works Department shall be responsible for maintaining all LID facilities located within the public right-of-way, and for providing for the safety of the public as related to LID facilities,
- b. Private property owners shall be responsible for maintaining all LID facilities on their property. The city reserves the right to inspect such facilities at any time. Upon written notice by the city to the owner that the facility has been compromised to the point where the design capacity is no longer available or the facility is not functioning as designed and approved, the owner shall correct the problem. If the owner fails to respond to the written notice within 15 days, the city may undertake the work and bill all time and material to the owner.
- c. For LID facilities that are not located in the public right-of-way and serve multiple private residential properties, a public easement for the LID facility shall be established and the Canby Public Works Department shall be responsible for maintenance of the facility. All property owners served by the facility shall pay a stormwater maintenance fee to the city to cover the cost of maintenance of the facility.

**E. Sanitary Sewers.** Sanitary sewers shall be installed to serve the subdivision and to connect the subdivision to existing mains. In the event it is impractical to connect the subdivision to the city sewer system, the commission may authorize the use of septic tanks if lot areas are adequate, considering the physical characteristics of the area. The commission may require the subdivider to install and seal sewer lines to allow for future connection to the city system.

**F. Water System.** Water lines and fire hydrants serving the subdivision and connecting the subdivision to city mains shall be installed to the satisfaction of the supervisor of the water department and the Fire Marshal.

**G. Sidewalks.** Sidewalks shall be required on both sides of a public street and in any special pedestrian way within the subdivision, except that in the case of identified arterials, or industrial districts, the commission may approve a subdivision without sidewalks if alternative pedestrian routes are available. Sidewalk construction may be postponed until the actual construction of buildings on the lots, provided that adequate assurance is given that such sidewalks will be installed. Where LID practices are implemented in subdivision street design, alternative sidewalk design may be permitted with the approval from the city. Alternative sidewalk design resulting from LID best management practices may include, but not limited to: flat curbs, LID

bioretention areas incorporated in conjunction with required landscaping, and alternative sidewalk widths. LID best management practices shall be designed in accordance with the Canby Public Works Design Standards.

**H. Bicycle Routes.** If appropriate to the extension of a system of bicycle routes, existing or planned, the commission may require the installation of bicycle lanes within streets or the construction of separate bicycle paths.

**I. Street Name Signs.** Street name signs shall be installed at all intersections according to city standards or deposit made with the city of an amount equal to the cost of installation.

**J. Street Lighting System.** Streetlights shall be required to the satisfaction of the manager of the Canby Utility Board.

**K. Other Improvements.**

1. Curb cuts and driveway installation are not required of the subdivider but, if installed, shall be according to city standards.

2. Street tree planting is required of the subdivider and shall be according to city requirements. (Ord. 899 section 4, 1993)

3. The developer shall make necessary arrangements with utility companies or other persons or corporations affected, for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground, unless overhead installation has been specifically approved by the commission because of unique circumstances at the site.

4. Developments along existing rail lines may be required to provide barrier fences or walls if necessary ensure safety for development occupants. City may also require noise mitigation such as sound walls, or triple-pane windows in order to reduce the health impacts of train noises. Noise mitigation requirements shall be based on measured db levels when trains are in the vicinity and specific building construction features.

**L. Improvements in Areas of Flood or Slope Hazard.**

1. Any public utility or facility associated with a subdivision or partition within an area subject to flooding shall be designed, located, and constructed so as to minimize or mitigate flood damage and shall not result in raising the water elevation in a designated floodway beyond the limits prescribed by the Federal Flood Insurance Program.

2. A new or replacement water supply system shall be designed, located and constructed to minimize or eliminate infiltration of flood waters into the system.

3. A new or replacement sanitary sewage system shall be designed, located and constructed to minimize or eliminate infiltration of flood waters into the system.
4. An on-site septic tank system or other individual waste disposal shall be located to avoid impairment or contamination during flooding.
5. Any public utility or facility, including streets, associated with a subdivision or partition within an area which is subject to flooding or slope instability shall be designed, located and constructed so as to amply protect such public utility or facility from damage due to such natural hazards. Adverse impacts upon fish, wildlife, and open space resources shall also be considered in the design and construction of such facilities. The commission and council shall consider the potential repair or maintenance costs to be borne by the public when reviewing the proposed design, location, and construction of such public utilities or facilities.

**M. Survey Accuracy and Requirements.** In addition to meeting the requirements as set forth in Oregon Revised Statutes relative to required lot, street and perimeter monumentation, the following shall be required:

1. An accuracy ratio of subdivision plat boundary line closure of one in ten thousand (.0001) feet as found in the field.
2. Two primary perimeter monuments (one of which can be the initial point) having the same physical characteristics as the initial point. The monuments are to be on a common line visible, if possible, one to the other at time of approval and preferably at angle points in the perimeter. They shall be points as far apart as practicable. A survey monument witness sign of a design acceptable to the city engineer shall be placed within eighteen inches of both monuments. The position for the initial point and other primary perimeter monuments shall be selected with due consideration to possible damage during construction and desirability of witness sign location.
3. Street centerline monumentation shall consist of a two-inch diameter brass cap set in a concrete base within and separate from a standard monument box with cover (standard city details applicable) at locations specified by the city engineer (generally at intersections with centerline of arterial or collector streets and within streets proposed to be greatly extended into adjacent future subdivisions). All other street centerline points (intersections, points of tangent intersections, cul-de-sac center lines, cul-de-sac off-set points) shall be monumented with a five-eighths-inch diameter steel rod thirty inches long with an approved metal cap driven over the rod and set visible just below the finish surface of the street. If any points of tangent intersection fall outside of a paved section street, the above monumentation will be required at point of curvature and point of tangency of the curve. All centerline monuments are to be accurately placed after street construction is complete.

**N. Agreement for Improvements.** Before commission approval of a subdivision plat or partition map, the land divider shall either install required improvements and repair existing streets and other public facilities damaged in the development of the property, or execute and file with the city engineer, an agreement specifying the period within which required improvements and repairs shall be completed and provided that, if the work is not completed within the period specified, the city may complete the work and recover the full cost and expense, together with court costs and reasonable attorney fees necessary to collect the amounts from the land divider. The agreement shall also provide for reimbursement to the city for the cost of inspection by the city which shall not exceed ten percent of the improvements to be installed.

**O. Bond.**

1. The land divider shall file with the agreement, to assure his full and faithful performance thereof, one of the following:

a. A surety bond executed by a surety company authorized to transact business in the state in a form approved by the City Attorney;

b. A personal bond cosigned by at least one additional person, together with evidence of financial responsibility and resources of those signing the bond, sufficient to provide reasonable assurance of ability to proceed in accordance with the agreement;

c. Cash.

2. Such assurance of full and faithful performance shall be for a sum approved by the city engineer as sufficient to cover the cost of the improvements and repairs, including related engineering and incidental expenses, and to cover the cost of the city inspection.

3. If the land divider fails to carry out provisions of the agreement and the city has unreimbursed costs or expenses resulting from such failure, the city shall call on the bond or cash deposit for reimbursement. If the cost of expense incurred by the city exceeds the amount of the bond or cash deposit, the land divider shall be liable to the city for the difference.

**P. Guarantee.** All improvements installed by the subdivider shall be guaranteed as to workmanship and materials for a period of one year following written notice of acceptance by the city to the developer.

**Q. Large Scale or Solar Efficient Development.** The standards and requirements of this division may be modified by the commission in the case of a plan and program for a complete community, a neighborhood unit, a solar efficient design, a large scale shopping center, or large industrial development, which in the judgment of the commission provides adequate public spaces and improvements for the circulation, recreation, light, air and service needs of the developed tract and its relation to

adjacent areas, and which also provides such covenants or other legal provisions as will assure conformity to and achievement of the intents and purposes of the Comprehensive Plan. (See Division V for information regarding a planned unit development.)

**R.** No fence/wall shall be constructed throughout a subdivision where the effect or purpose is to wall said project off from the rest of the community unless reviewed and approved by the Planning Commission. (Ord. 740 section 10.4.40(C)(7), 1984; Ord. 955 sections 28 & 29, 1996; Ord. 1043 section 3, 2000; Ord 1237, 2007; Ord. 1338, 2010; Ord. 1340, 2011)

### **16.64.80 Low Impact Development Incentives**

The purpose of this section is to encourage the use of certain low impact development (LID) practices in subdivision development beyond the minimum requirements of this code. The provisions in this section are voluntary and are not required of new subdivisions. These provisions are applicable only when an applicant elects to utilize the incentives provided in this section. Only one incentive is permitted at a time. For example, an applicant cannot utilize a height bonus and density bonus in the same subdivision application.

**A.** Building height bonus. A building height bonus will be allowed for subdivision proposals that include one of the following:

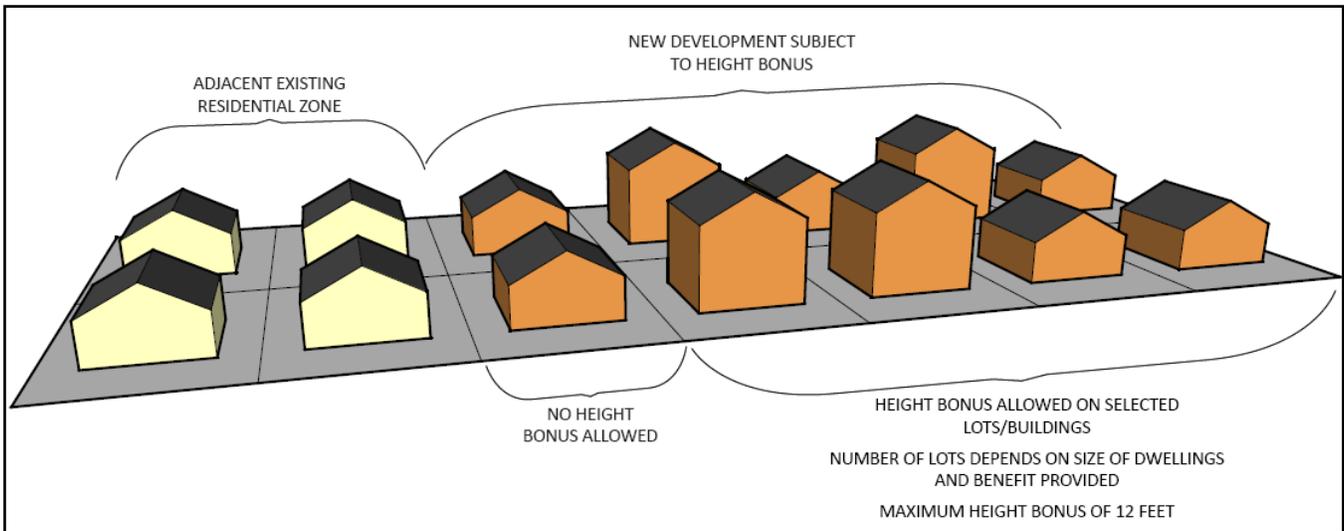
1. Additional park land beyond what is required in Chapter 16.120.
2. The use of pervious surfacing materials such as pavers or pervious concrete.
3. Provision of a rain garden that provides on-site stormwater management for all or part of the subdivision.
4. Mitigation of tree removal by replanting.

**B.** Standards for building height bonus (see Figure 16.64.1 for illustration). Proposals that utilize the building height bonus shall comply with the following:

1. A proposal that includes one of the LID practices listed in A(1-4) above may request an increase in building height up to 12 feet within the building footprint.
2. The square footage of the building footprint allowed to receive the height increase shall be calculated using the following ratios:
  - a.** For park land, the ratio is 1:1 square feet of additional park land to square feet of building footprint. For example, if 1,000 square feet of additional park land are provided, the height increase may be applied to 1,000 square feet of the building footprint.

- b. For pervious surfacing, the ratio is 1:0.5. For example, if 1,000 square feet of pervious surfacing are provided, the height increase may be applied to 500 square feet of the building footprint.
  - c. For rain gardens, the ratio is 1:0.75.
  - d. For mitigation of tree removal, the ratio is 10 caliper-inches to 1,000 square feet of building footprint. For example, if five 4-inch caliper mitigation trees are planted, the height increase may be applied to 2,000 square feet of building footprint. Caliper inches are measured by diameter at breast height (DBH). Tree mitigation must comply with Subsection (C) below.
3. The building height increase shall not result in buildings that exceed 12 feet of height above the maximum building height standard of the underlying zone.
  4. The building(s) receiving the height increase shall be located within the same subdivision where the LID benefit is being provided.
  5. The height bonus may not be used on buildings that are directly adjacent to an existing lot in a residential zone (R-1, R-1.5 or R-2).
  6. Additional park land provided to utilize the height bonus shall be consistent with all applicable standards and regulations of Chapter 16.120.

**Figure 16.64.1: Height Bonus Diagram**



**C.** Standards for mitigation of tree removal. Proposals that mitigate tree removal in order to utilize the height bonus shall comply with the following:

1. Only mitigation for removal of existing, healthy trees over six-inch caliper DBH shall be counted toward the height or density bonus.
2. Trees planted as mitigation for tree removal shall be at least two-inch caliper DBH and must be approved by the city arborist.
3. The subdivision application must show the location, size and species of exiting trees that will be removed and the location, size and species of trees to be planted as mitigation.
4. Trees planted to comply with the street tree requirements in Chapter 12.32 may not be counted toward the height or density bonus.

**D. Density bonus.** A density bonus will be allowed for subdivision proposals that provide additional park land beyond what is required in Chapter 16.120. Proposals that utilize the density bonus shall comply with the following:

1. To qualify for the density bonus, a proposal must provide at least 110% of the park land required in Chapter 16.120. For example, if Chapter 16.120 requires 1,000 square feet of park land, the proposal must provide at least 1,100 square feet of park land to qualify.
2. The percent density bonus allowed will be as follows:
  - a. For provision of park land between 110 – 120% of the minimum requirement, a 5% density bonus will be allowed.
  - b. For provision of park land between 121 – 130% of the minimum requirement, a 10% density bonus will be allowed.
  - c. For provision of park land between 131 – 140% of the minimum requirement, a 15% density bonus will be allowed.
  - d. For provision of park land over 140% of the minimum requirement, a 20% density bonus will be allowed.
3. No subdivision will be allowed to exceed 120% of the density standard for the underlying zone.
4. Additional park land provided to utilize the density bonus shall be consistent with all applicable standards and regulations of Chapter 16.120. (Ord. 1338, 2010)