

**DRAFT
LAKE FOREST PARK
CHAPTER 18.72
LOW IMPACT DEVELOPMENT (LID)**

Sections:

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- 18.72.080 Native soil protection and amendment.
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- 18.72.110 Lot dimensions and development standards.
- 18.72.120 Project entitlement.
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[Establishes the purpose of the LID Chapter.]

18.72.010 Purpose.

The purpose of this chapter is to establish the development guidelines, requirements, and standards that encourage development proposals to incorporate low impact development (LID) planning and design techniques into project development by providing incentives for the use of LID techniques.

The goal of LID is to conserve and use existing natural site features, to integrate distributed, small-scale stormwater controls, and to prevent measurable harm to streams, lakes, wetlands, and other natural aquatic systems from commercial or multi-family residential development sites by maintaining a more hydrologically functional landscape.

As part of meeting these purposes and goals, this chapter is intended to fulfill the following purposes:

- A. Manage stormwater through a land development strategy that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to mimic more closely predevelopment hydrologic conditions.
- B. Encourage creative and coordinated site planning, minimizing effective impervious surfaces, the conservation of natural conditions and features, the use of appropriate new technologies and techniques, and the efficient layout of utility networks and other public improvements.
- C. Further the goals and the implementation of the policies of the comprehensive land use plan.

This chapter does not replace any federal, state or local stormwater flow control and water quality treatment regulations. While some LID techniques encouraged by this chapter may also be eligible for stormwater credits under applicable stormwater flow control and water quality treatment regulations, some LID techniques designed pursuant to this chapter may

not qualify for stormwater credits. Applicants are responsible for ensuring that their project proposal complies with all applicable regulations.

[Discusses the applicability and process for projects using LID incentives]

18.72.020 Applicability and process.

- A. Applicability: LID is an optional site development alternative for new commercial and multi-family residential developments. Follow the process in LFPMC 18.72.020(B)(2) to incorporate the preferred LID techniques described in LFPMC 18.72.040 into project design and accumulate sufficient technique points to use for the incentives identified in LFPMC 18.72.050.

- B. Process: In order to be considered an LID project eligible for the incentives found in LFPMC 18.72.050 , the project must follow these steps for review and approval:
 - 1. The applicant shall follow the design and development standards in LFPMC 18.72.030.

 - 2. Once the requirements of LFPMC 18.72.030 are complete; the applicant may use LID practice points found in LFPMC 18.72.040 to buy incentives in LFPMC 18.72.050 to use on their project.

 - 3. Follow the general LID requirements in this chapter found in LFPMC 18.72.060 through LFPMC 18.72.130.

[Outlines the first steps in the LID project design and review process]

18.72.030 Design and development standards.

- A. LID Consultation with the City.
 - 1. Prior to site design for a project using LID, the applicant shall meet with the City to identify opportunities to incorporate preferred LID techniques into the site’s design. The applicant shall bring the following materials to the meeting:
 - a. Geotechnical report with soil information;

 - b. A survey of the site which includes topography, critical areas, and existing vegetation, including tree sizes and species; and

 - c. Photographs of the site.

 - 2. The City will bring to the meeting any relevant environmental information it has readily available concerning the site, which may include groundwater depths, habitat maps, and other information.

- B. Review. In evaluating the feasibility of a project using LID techniques, the director shall have the authority to request additional technical information prepared by a certified professional to:
 - 1. Determine whether the development proposal is consistent with this chapter;

2. Determine if a proposed approach is consistent with the standards of the latest adopted version of the KCSWDM, the most current edition of the LID Technical Guidance Manual for Puget Sound, or other suitable reference, as determined by the director;
 3. Determine whether the proposed combination of LID techniques adequately work together toward meeting the goals of this chapter;
 4. Determine if the monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public benefit, health, safety, and welfare, consistent with this chapter; and
 5. Determine that the proposed LID techniques shall function as intended.
- C. Health and Safety. Approval of all proposed LID technique and incentives grants shall be subject to the review of the director to determine that the proposed project using LID techniques does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site and is consistent with the general purposes of this chapter and the public interest.
- D. Adjustments.
1. Minor. When reviewing and issuing construction permits for an approved development, the director may allow minor adjustments in the approved approaches and incentives used by a project using LID techniques involving the location and site-specific approaches or incentives.
 2. Major. Changes to a development proposal that result in significant adjustments to the project shall require resubmittal of the development proposal pursuant to LFPMC 18.72.020(B). Significant adjustments include, but are not limited to, elimination of proposed LID techniques, increases in the number of dwelling units generated, or additional reduction of proposed parking lot improvements.

[Discussed how LID practice points are earned]

18.72.040 LID practice points.

The following list identifies preferred LID techniques that may be proposed within any multi-family or commercial zoning designation and the LID practice points associated with the successful use of each technique. Whether the implementation of any LID technique is sufficient to earn LID practice points, shall be subject to the review and approval of the director.

TABLE 18.72.040-1: LID Techniques and LID Practice Points		
LID Technique	Number of LID Practice Points	Notes and Conditions
Increased Width of Critical Area Buffer	8	The width of a critical area buffer required under Title 16 LFPMC – Environmental Protection shall be increased by thirty-five percent.

TABLE 18.72.040-1: LID Techniques and LID Practice Points

LID Technique	Number of LID Practice Points	Notes and Conditions
		<p>with latest adopted version of the <i>KCSWDM</i> or the most current version of the <i>LID Technical Guidance Manual for Puget Sound</i>; and</p> <p>b. Reviewed and approved by the City engineer.</p>
Reforestation	6	<p>1. The site shall be reforested;</p> <p>2. Reforestation shall consist of:</p> <p>a. A minimum of three trees planted per 1,000 square feet of the site area;</p> <p>b. Trees shall be native to the coastal Pacific Northwest. On planting, deciduous trees shall have a minimum caliper of two inches and coniferous and broadleaf evergreen trees shall be at least six feet in height.</p>
Reduced Effective Impervious Surface	6	The total effective impervious surface area of a project shall be twenty percent less than the applicable maximum allowable effective impervious surface area pursuant to LFPMP 18.72.090.
Drought-Tolerant Landscaping	2u	Ninety percent of required street landscaping, recreation tracts and open space tracts shall be landscaped with drought-resistant vegetation native to Western Washington. Such vegetation shall be maintained as required for plant health.
Vegetated Roofs	1 to 20	<p>1. A roof area shall be considered a vegetated roof if:</p> <p>a. The roof area is fully covered with vegetation;</p> <p>b. It meets the definition of a vegetated roof set forth in the latest adopted version of the <i>KCSWDM</i> or the most current version of the <i>LID Technical Guidance Manual for Puget Sound</i>; and</p> <p>c. It is designed and maintained in accordance with latest adopted version of the <i>KCSWDM</i> or the most current version</p>

TABLE 18.72.040-1: LID Techniques and LID Practice Points		
LID Technique	Number of LID Practice Points	Notes and Conditions
		<p>of the <i>LID Technical Guidance Manual for Puget Sound</i>.</p> <ol style="list-style-type: none"> 2. One technique point shall be awarded per 1,000 square feet of vegetated roof area up to a maximum of 20 total points; 3. Compliance with this LID technique shall require review and approval by the building official.
Open Space	10	<p>Twenty percent of the total site area shall be retained and restored to a permanent open space tract as defined in LFPMP 18.08.520;</p> <ol style="list-style-type: none"> a. Limited clearing/grading within 20 percent of the open space tract shall be permitted solely to allow for the installation of passive recreation uses, including but not limited to soft surface trails, benches, and picnic tables; b. Open space tracts shall be located outside of critical areas and critical area buffers.
Soil Amendments	2	<p>On qualifying sites, four inches of soil amendments may be tilled into the top 12 inches of the site areas to be used for landscaping, including but not limited to proposed landscaping and recreation areas. Soil amendments:</p> <ol style="list-style-type: none"> 1. Shall be added during soil preparation for permanent landscaping and prior to final building inspection; and 2. Shall consist of compost that complies with City standards as of the date of submittal.

[Incentives for using LID techniques]

18.72.050 Incentives.

- A. For multi-family residential LID projects, refer to Table LFPMP 18.72.050-1 for incentives available for the use of LID.
- B. LID techniques to minimize stormwater runoff impacts are encouraged in multi-family residential zones. Appropriate strategies include, but are not limited to, vegetation

restoration, pervious pavement, covered parking, vegetated roofs, rainfall re-use, and bioretention facilities.

- C. LID practice points earned by installing one or more of the preferred LID techniques described in LFPMP 18.72.040. The LID practice points may be used to obtain the following LID incentives. Technique points are cumulative and may be combined to gain the use of one or more incentives below. Technique points may only be used for obtaining incentives for the development proposal that generates the points and may not be used for other development proposals. Except as otherwise noted in this section, technique points may only be used once.

These incentives are completely separate from any credits for the use of LID techniques that may be granted to the applicant under applicable stormwater flow control and water quality treatment regulations. In certain cases, a LID technique that qualifies for the incentives described in this section may not qualify for credits under the stormwater regulations. The maximum increase in square footage or site coverage shall not exceed 15% singly or in combination.

TABLE 18.72.050-1: Multi-Family Development Incentives		
Incentive	Number of LID Practice Points Required	Notes
Twenty Percent Increased Density	20	Subject to compliance with the provisions of Title 16 LFPMP. Provided that increasing the site's density will not negatively impact any critical areas or critical area buffers on the site or adjacent to the site, this density incentive may be used to increase the site density permitted under Title 18 LFPMP, as applicable, by up to 20 percent.
Building Height Incentive	20	Subject to compliance with the provisions of Title 16 LFPMP. Provided that increasing building height will not negatively impact any critical areas or critical area buffers on the site or adjacent to the site, the applicant may increase the maximum building height by up to 15 feet.
Recognition	24	The applicant may request that the City generate a featured LID development article in the City newsletter covering the development that has earned the technique points. Technique points used for this incentive may be reused to obtain additional incentives.

- D. For commercial LID projects, refer to Table LFPMP 18.72.050-2 for incentives available for the use of LID.

- E. LID techniques to minimize stormwater runoff impacts are encouraged in the TC Zone. Appropriate strategies include, but are not limited to, vegetation restoration, pervious pavement, covered parking, vegetated roofs, rainfall re-use, and bioretention facilities.

TABLE 18.72.050-2: Commercial Development Incentives		
Incentive	Number of LID Practice Points	Notes
Floor Area Ratio (FAR) Bonus	20	Subject to compliance with the provisions of Title 16 LFPMC. Provided that increasing building height will not negatively affect any critical areas or critical area buffers on the site or adjacent to the site, the applicant may increase the Floor Area Ratio (FAR) for commercial projects by 1.0 FAR.
Building Height Incentive (Mixed Use)	20	Subject to compliance with the provisions of Title 16 LFPMC. Provided that increasing building height will not negatively impact any critical areas or critical area buffers on the site or adjacent to the site, the applicant may increase the maximum building height by up to 15 feet, if an additional story of retail or business office or uses is included.
Increased Signage	12	The applicant may increase the allowed signage pursuant to Chapter 18.52 LFPMC by: <ol style="list-style-type: none"> 1. Adding one additional monument sign; or 2. Increasing the size of the allowed sign by 10 percent.
Recognition	24	The applicant may request that the City generate a featured LID development article in the City newsletter covering the development that has earned the technique points. Technique points used for this incentive may be reused to obtain additional incentives.

18.72.060 General design criteria.

- A. The location of all streets, buildings, parking areas, pedestrian, bicycle and vehicular ways, and utility easements shall be designed to promote public safety, compatibility of uses, minimize effective impervious surface, preserve forested open space, and complement predevelopment site characteristics such as topography, soils, hydrology, and other natural features.
- B. All LID projects shall record a legal instrument acceptable to the City against the land title to ensure that the LID features are protected and maintained.

[Maintenance requirements established.]

- C. All LID projects shall provide a maintenance plan/program to the City that has been approved by the City, including source control BMPs.
1. The maintenance plan/program shall address the following:
 - a. How all of the elements of the LID system will be maintained, including
 - i. Structural and drainage maintenance;
 - ii. Vegetation management; and
 - iii. Establishment and appropriate long-term irrigation.
 - b. The schedule for ongoing maintenance of all LID project facilities.
 - c. The responsible party for ongoing maintenance of all LID project facilities.
 2. The agreement must include wording that if all or part of any LID approach ceases to function or is removed, equivalent LID approach(es) must be installed and all other stormwater management requirements met, prior to removal.
 3. Declaration that failure to maintain all LID project facilities as established in the maintenance plan/program may result in the City performing the necessary maintenance and billing the responsible property owner(s) subject to Chapter 18.71 LFPMC.

[Need to evaluate the next section to be compatible with the tree preservation ordinance in Chapter 16.14 LFP 18.72MC and the existing landscaping requirements in Chapter 18.62 LFPMC]

18.72.070 Native vegetation areas.

- A. Applicants using LID shall provide native vegetation areas in accordance with Chapter 18.62 LFPMC.

[Need to evaluate the next section to be compatible with the fill and grade ordinance in Chapter 16.08 LFPMC]

18.72.080 Native soil protection and amendment.

- A. Applicants using LID shall provide native soil protection and amendment in accordance with Chapter 18.62 LFPMC.

[Effective impervious surfaces and proposed percentages]

18.72.090 Effective impervious surface.

- A. The maximum effective impervious surface allowed in commercial and multi-family zones for LID projects shall be based on Table LFPMC 18.72.090-1: Maximum Effective Impervious Surface Percentage.

TABLE 18.72.090-1: Maximum Effective Impervious Surface Percentage	
Zoning District	Maximum Effective Impervious Surface %
RM-3600 Residential Multifamily	70%
RM-2400 Residential Multifamily	70%
RM-1800 Residential Multifamily	70%
RM-900 Residential Multifamily	70%
CC Corridor Commercial	80%
Town Center	80%

- B. Effective impervious surface includes all surface areas that create a barrier to or retard the entry of water into the soil in comparison with natural conditions prior to development, including but not limited to buildings, parking areas, driveways, roads, sidewalks, patios, packed earth, and oiled surfaces.

Open, uncovered retention/detention facilities, green roofs, and permeable surfacing materials shall not be considered effective impervious surfaces. Roof surfaces are also considered 'pervious' when 110% of the annual average roof runoff is captured and reused on-site for irrigation or approved interior uses.

- C. To limit effective impervious surface, alternative surfacing materials may be used. Alternative surfacing includes, but is not limited to paving blocks, turf block, pervious concrete, and porous asphalt. Other similar approved materials are encouraged. Alternative surfacing methods may be approved for parking areas, emergency parking areas, private roads, fire lanes, road shoulders, bike paths, walkways, patios, driveways, and easement service roads unless site constraints make use of such materials detrimental to water quality. Utilization of alternative surfacing methods shall be subject to review and approval by the City Public Works Department and Fire Marshal for compliance with other applicable regulations and development standards.

[Next three sections affirm that this chapter does not change the underlying code sections]

18.72.100 Permitted uses.

Uses allowed in a LID project shall include permitted, accessory and conditional uses allowed in and subject to the conditions of the underlying zone district(s).

18.72.110 Lot dimension and development standards.

All developments will need to conform to the requirements of the appropriate chapter in Title 18 LFPMC.

18.72.120 Project entitlement.

Commercial and multi-family residential projects conforming to the design criteria of this chapter shall be reviewed in accordance with the appropriate development review process outlined in the LFPMC.

[Is Chapter 18.71 LFPMC the appropriate chapter to use to support enforcement?]

18.72.130 Enforcement.

The director is authorized to enforce the provisions of this chapter pursuant to the enforcement and penalty provisions of the code enforcement provisions of Chapter 18.71 LFPMC.