

Landscape Plan Checklist

(Submit with Building Permit and/or Improvement Plan Construction Documents)

Project Name: _____

“PLN” Number (Bldg. Permit) or Tract Number (Improvement Plan): _____

Landscape Architect & Firm: _____

CA License Number: _____ **Phone Number:** _____

Submit the following checklist with First Plan Submittal. Check boxes as they apply.

Complete	Incomplete	Not Applicable
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A. GENERAL PROJECT AND SUBMITTAL INFORMATION REQUIRED:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Plans are prepared on accurately surveyed site plan(s) to appropriate scale.
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Reference: FMC 18.235, CDG (Design Development)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Plans include north arrow, graphic and written scale, property lines, street names, and accurate right of way.
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Reference: FMC 18.235, CDG (Design Development)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Plans show existing and proposed features.
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Requirement:

- Plans show existing and proposed buildings, trees, structures, walls, fences, utilities, meters, paved areas, and other site improvements.
- Plans show location of all existing and proposed landscape and street trees including a complete keyed plant list showing quantities, container sizes, and correct botanical designations of all landscape materials.
- Plans include design details for landscape architectural features such as walls, fences, lighting, paving types, arbors, benches, fountains and other features; and complete irrigation plans.

References: FMC 18.70.060 and 18.235

Checklist Legend:

LSD: City Landscape Standard Detail
C.3: NPDES Regional Permit

WELO: State Water Efficient Landscape Ordinance
BFL: Qualifies for Bay-Friendly Landscape

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4. Plans and calculations are prepared by a Landscape Architect.

Requirement: Plans are stamped electronically or otherwise with a valid State of California Landscape Architect's license/stamp including registration number and expiration. Signature required on final set at time of permit issuance.

Reference: FMC 18.205.110. State Business and Professions Code

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B. SITE LAYOUT REQUIREMENTS:

- | | | | |
|---|---|---|---|
| <input type="checkbox"/> Complete
<input type="checkbox"/> Incomplete
<input type="checkbox"/> Not Applicable | <input type="checkbox"/> Complete
<input type="checkbox"/> Incomplete
<input type="checkbox"/> Not Applicable | <input type="checkbox"/> Complete
<input type="checkbox"/> Incomplete
<input type="checkbox"/> Not Applicable | <p>1. Parking lot trees – interior.</p> <p>Requirement: The plans show one large canopy tree for every 10 parking stalls. Trees shall be evenly distributed throughout the internal field of the parking lot. Large canopy trees can be substituted with medium sized canopy trees if spaced every 6 parking stalls to meet the intent of shading the parking lot.
<i>Note: See LSD-6 and Planting Requirements for definition of “large” and “medium” trees.</i>
Reference: FMC 18.183.110, CDG 3.81G</p> <p>2. Parking lot trees – perimeter.</p> <p>Requirement: The plans show one (1) screen or canopy tree for every three (3) parking stalls between the parking lot and property line, when those stalls are adjacent to the property perimeter.
Reference: FMC 18.183.110, CDG 3.81G</p> <p>3. Parking lot – screening from street.</p> <p>Requirement: Parking areas within 50 feet of a public street are screened with one of the following: (CHECK ONE OR MORE):</p> <ul style="list-style-type: none"> <input type="checkbox"/> three (3) foot tall masonry wall, <input type="checkbox"/> three (3) foot tall berm, or <input type="checkbox"/> a continuous shrub planting of 5 gallon plants that will grow to a minimum three (3) feet tall. <p><i>Note: Downtown and other urban districts and settings may be governed by different requirements.</i>
Reference: FMC 18.183.110</p> <p>4. Access & circulation, linkages/paving & amenities.</p> <p>Requirement: Durable decorative paving shall be used at crosswalks within a project and when paved areas serve multiple purposes such as when walks or recreational amenities coincide with driving areas. The path of travel from the street, sidewalk, parking areas and bus stops to the building entrances and key areas within the site shall be easily identifiable.
Reference: CDG 3.7R through 3.11R</p> <p>5. Minimize hardscape.</p> <p>Requirement: Minimize hardscape to reduce heat gain and reduce stormwater runoff. Consider use of permeable pavers in areas with good drainage.
Reference: CDG 2.1R, 2.4R</p> |
|---|---|---|---|

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6. Tree planters – minimum size.

Requirement: Tree planters shall be maximum size feasible to benefit tree growth and provide separation from infrastructure and adjacent paving, curbs, walls, etc. Minimum planter size for trees shall have an interior dimension of six feet in any direction and have no less than 48 square feet of soil surface area overall, which is free of any inorganic material such as utilities, fire hydrants, light poles, signs, subterranean vaults, etc. (hint: an inside planter dimension of 6'x8' is 48 square feet and will fit between two parking stalls.)

Note: Urban tree grate installations are exempt and are governed by LSD-2.

Reference: FMC 18.183.110, CDG 3.77R

7. Play area design complies with the Consumer Product Safety Commission (CPSC) guidelines and American Society for Testing And Materials (ASTM).

Requirement:

- Plans identify safety protection zone(s),
- Plans identify manufacturer and model numbers
- Plans include a note requiring contractor to submit a letter prepared by a Certified Playground Inspector certifying that the installed play area is in compliance with ASTM 1487 and CPSC guidelines. The letter shall confirm the manner in which the assembly and installation of playground equipment complies with the requirements.

8. Pedestrian links between buildings and street provided.

Requirement: Visually distinct pedestrian walkways shall be provided that link buildings to other buildings, and buildings to street sidewalks.

Reference: CDG 3.9R

9. Wetband firebreak provided adjacent to fire areas.

Requirement: For projects in hillside fire areas adjacent to open space or undeveloped land a wetband is required as follows:

- A labeled and dimensioned 30-foot wide irrigated or paved protection zone between structure and open space along rear of property.
- Minimum planting is low growing fire-resistant groundcover or grass.
- High canopy trees may not be closer than 10 feet to any other mature canopy or structure.
- Hardscape surfaces and pools may be in Wetband.
- Large understory shrubs and auxiliary structures are not allowed.

Reference: FMC Fire Code

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C. PLANTING REQUIREMENTS:

- | | | | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <p>1. Street trees required.</p> <p>Requirement: Street trees are shown at 24 inch box size and planted within the right of way in front of the each parcel. Street tree placement complies with spacing requirements and distance from utilities as identified in City Standard Detail, LSD-5. Compliance with planting requirements identified in City Standard Details, LSD-1 and LSD-2 is required.
Reference: CDG 2.50R, 2.53R, 3.77R, LSD</p> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <p>2. Bark mulch required to three inch depth.</p> <p>Requirement: Include a note on plans that three inches of shredded (walk-on) bark mulch is required for all non-sod planting areas. Shredded bark mulch is required in stormwater treatment areas; however, recycled, painted, or dyed mulch is prohibited in stormwater treatment areas.
<i>Note: "Gorilla hair" mulch is prohibited. Mulch is not a substitute for landscape planting.</i>
Reference: WELO, BFL, LSD</p> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <p>3. Compost incorporated at a minimum of four cubic yards per 1,000 square feet.</p> <p>Requirement: Soil amendments shall be incorporated according to recommendations of the soil report. On engineered slopes, only amended planting holes require amendment. Soils with greater than six percent organic matter in the top six inches of soil are exempt from adding compost.
Reference: BFL, WELO</p> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <p>4. Trees meet minimum spacing from buildings and utilities.</p> <p>Requirement: Plans show trees with the following minimum clearances to buildings or other built features:</p> <ul style="list-style-type: none"> • Small trees (to 15 feet tall) and columnar trees (to 12' wide) no closer than 6 feet from building or 2 feet from paving, curbs, or walls with a minimum planting area 5 feet wide. • Medium trees (to 35 feet tall) no closer than 10 feet from building or 3 feet from paving, curbs, or walls with a minimum planting area 6 feet wide. • Large trees (above 35 feet tall) no closer than 15 feet from building or 3 feet from paving, curbs, or walls with a minimum planting area 6 feet wide, <u>preferably 8 feet wide.</u> [LSD-6] • Refer to City Standard Detail LSD-5 for required spacing from utilities. <p>Reference: LSD, CDG 3.77R</p> |

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5. Plants meet minimum size requirements.

Requirement: All plants meet the following minimum size standards:

- Trees are 15 gallon or larger, except street trees, which are minimum 24 inch box.
- Shrubs and groundcover plants are minimum 1 gallon size. Forty percent of all shrubs and groundcover must be 5 gallon size or larger.

Reference: FMC 18.50.050(E), 18.183.110 & 18.215.080

6. City standards for work in right of way or public property.

Requirement: All landscape work shown in City right of way or City owned property/easements comply with City of Fremont Landscape Standard Details.

Reference: LSD

7. Restrictions on the use of turf.

- **Requirement:** Turf is limited to no more than 25 percent of the total planted area on the project, as long as the water budget is met.
Note: Use of turf is strongly discouraged to promote water conservation.
Reference: WELO, BFL
- **Requirement:** Turf is prohibited in medians.
Reference: WELO
- **Requirement:** Turf is not used on slopes greater than 4:1
Reference: WELO

8. Select water conserving plants and turf species.

Requirement: Plant List (table/legend) shown on plans shall include the Water Use Classification of Landscape Species (WUCOLS) designation or designation from horticultural researchers with academic or professional associations for the selected species, the spacing for shrub and groundcover species, and the quantity of each plant used.

Note: Use of medium and high water plants is strongly discouraged to promoted water conservation.

Reference: WELO

9. Choose and locate plants to grow to natural size and avoid shearing.

Requirement: No plant species will require shearing. Select species and spacing to allow plants to grow to natural size and shape without shearing at any point in the lifespan of the plant, excluding structural and regular maintenance pruning. Plant spacing shall not allow plants to grow into adjacent buildings, sidewalks, roadways, or adjacent landscape areas.

Reference: Bay-Friendly Scorecard item E.1.a, City Council Resolution 2012-34.

10. Do not plant invasive plant species.

Requirement: None of the plant species listed by CA-IPC as invasive in the San Francisco Bay Area are included in the planting design.

Reference: Bay-Friendly Scorecard item E.2.a, City Council Resolution 2012-34.

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Complete
Incomplete
Not Applicable

D. TREE PRESERVATION REQUIREMENTS [FMC 18.215.120]

1. Tree survey meets minimum plan standards.

Requirement: Plans include a Tree Survey showing the following:

- Existing and proposed site features, including but not limited to buildings, walls, paving, grading, etc.
- Tree(s) with six inch DBH (trunk diameter at 4.5 feet above ground level) and larger are located on plan by a licensed surveyor. Tree trunks must be represented with an accurately scaled dot to show the true bulk of the DBH. Tree canopies must be accurately delineated.
- Trees are labeled by number on the plan and tagged on-site per ISA standards.
- Tree Survey Plan includes a summary table identifying botanical designation, DBH, and elevation of each tree at ground level.

Note: Tree Survey information may be incorporated into a topographic survey or other project plan, provided all the required information is included. If no trees exist on site, provide a statement by the civil engineer, landscape architect or surveyor indicating this, in lieu of the required tree survey.

Reference: FMC 18.215.120

Sample Plan: See the sample Tree Survey on page 24.

2. Tree survey is incorporated into other plans.

Project plans clearly show which trees are proposed for preservation and which trees are proposed for removal. Trees for removal and preservation are shown on ALL the following project (construction) plans:

- Show trees for removal and preservation on the following plans:
 - Grading Plan
 - Demolition Plan
- Show trees for preservation (only) on the following plans:
 - Planting Plan
 - Irrigation Plan
 - Underground Utility Plans and Joint Trench Plan

3. Tree protection fencing shown on plans.

Requirement: Trees designated for preservation comply with City of Fremont Standard Detail: "Tree Protection Fencing," LSD-9, or other tree specific City approved tree protection measures prepared by a International Society of Arboriculture (ISA) Certified Arborist or American Society of Consulting Arborist (ASCA) member in good standing.

Reference: LSD

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E. IRRIGATION REQUIREMENTS:

- | | | | |
|---|---|---|--|
| <input type="checkbox"/> Complete
<input type="checkbox"/> Incomplete
<input type="checkbox"/> Not Applicable | <input type="checkbox"/> Complete
<input type="checkbox"/> Incomplete
<input type="checkbox"/> Not Applicable | <input type="checkbox"/> Complete
<input type="checkbox"/> Incomplete
<input type="checkbox"/> Not Applicable | <p>1. Meters and valves.</p> <p>Requirement: Plans show location and size of all meters and submeters, points of connection, pumps, isolation valves and remote control valves. Irrigation must be on a dedicated meter or submeter for non-residential projects 1,000 square feet and greater and residential projects 5,000 square feet and greater.
Reference: WELO</p> <p>2. Master shut-off valves.</p> <p>Requirement: Plans show locations and types of all master shut-off valves. Landscapes that make use of technologies that allow for the individual control of sprinklers that are individually pressurized in a system equipped with low pressure shut down features are excepted.
Reference: WELO</p> <p>3. Flow sensors.</p> <p>Requirement: Plans show flow sensors that detect high flow conditions created by system damage for all non-residential landscapes and residential landscapes of 5,000 square feet and larger.
Reference: WELO</p> <p>4. Operating pressure and GPM.</p> <p>Requirement: Maximum GPM (Gallons Per Minute) demand and minimum operating pressure for each point of connection is clearly shown on plan along with the GPM demand for each valve. If the water pressure is below or exceeds the recommended pressure of the specified devices, the installation of a pressure regulating device is required.
Reference: WELO, BFL</p> <p>5. Pipes and sleeves.</p> <p>Requirement: Plans show size and location of all pipes including sleeves for the irrigation system
The following minimum requirements are shown on the plans:</p> <ul style="list-style-type: none"> • All lateral lines shall have 12" cover. • All main lines shall have 18" cover. • All main lines and wiring under pavement shall be sleeved with 24" cover. • All lateral lines under pavement shall be sleeved with 18" cover. |
|---|---|---|--|

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6. Hose bibs and quick couplers.

Requirement: Plans show location and type of all hose bibs and quick couplers.
Reference: WELO

7. Weather-based controller.

Requirement: Plans show location and type of weather-based controller, which relies on soil moisture sensor, rain gauge or other weather-based controlling device.
Reference: WELO, BFL

8. Backflow prevention device.

Requirement: A Reduced Pressure Backflow Prevention Device (with enclosure) of the same size as the meter shall be installed at every irrigation meter on the project. The model and installation of the Backflow Prevention Unit is subject to approval from the Alameda County Water District. A weather blanket shall be installed on all backflow prevention devices. Use LSD-16 and LSD-17 for irrigation on City of Fremont property and rights-of-way.
Reference: WELO

9. Design details included.

Requirement: Irrigation installation details shall be shown on plans to demonstrate compliance with these irrigation requirements. Use City of Fremont irrigation Landscape Standard Details (LSDs) for areas on City property or rights-of-way.

10. All irrigation equipment must meet ANSI and ASABE/ICC802-2014 standards.

Requirement: All irrigation equipment must meet American National Standards Institute (ANSI), American Society of Agricultural and Biological Engineers/ International Code Council (ASABE/ICC)802-2014. "Landscape Irrigation Sprinkler and Emitter Standard. All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of .65 or higher using the protocol defined in ASABE/ICC 802-2014.
Reference: WELO

11. Irrigate trees separately.

Requirement: All trees are irrigated by individual bubblers on an irrigation circuit isolated from the main system by a remote control valve.
Reference: WELO

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12. Limits on use of spray irrigation.

Requirement: Areas less than 10 feet wide shall not use spray irrigation.

Note: Sustainable drip irrigation or bubbler irrigation systems are encouraged and should be designed with rigid subsurface lateral system for durability. Above ground polyethylene piping is not permitted as a long term solution to irrigation.

Reference: WELO

13. No irrigation run-off allowed.

Requirement: Irrigation system (including spray irrigation) is designed for zero run-off onto paved surfaces unless that surface drains to another landscape area (e.g. walkway with landscape on two sides). Spray irrigation must be placed two (2) feet away from impervious surfaces unless that surface drains to another landscape area.

Reference: WELO

14. WELO forms, report, and Hydrozone Plan required.

Requirement: Compliance with the State of California, Water Efficient Landscape Ordinance (WELO) is required for:

- a. New construction projects with total landscape area equal to or greater than 500 feet in size.
- b. Rehabilitated landscape projects with total landscape area of 2,500 square feet or larger.

The following plans, forms and reports are required with the development application. Note: Provide forms in separate 8.5"x 11" format (or other appropriate format) with plans, and do not place forms (except Hydrozone Table) or reports on plans.

- Soil Management Report in compliance with section 492.5 of WELO
- Hydrozone Plan and Information Table.
Sample Plan: See sample Hydrozone Plan on page 23.
- Water Efficient Landscape Worksheet (provide to Alameda County Water District, ACWD), *Form A:* See required form on page 17.

Reference: WELO

15. Alternative Prescriptive Compliance method.

Requirement: The Prescriptive Compliance Requirements may be used as a compliance option to WELO for landscapes with total landscape area of 500 sf to 2,500 sf. Compliance with the entire list, Form C, is mandatory and must be documented on a landscape plan in order to use the prescriptive compliance option. Submit completed Form C with landscape plan. Pages 21-22.

Reference: WELO

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- 16. Separated irrigation system required for City property, easements, and Homeowner Association managed common areas.

Requirement: Back-up landscape or any landscape that will be maintained or owned by the City has a separate meter, backflow prevention device and controller compliant with City Standard Details.

Reference: WELO, LSD

- 17. Include a note on the plans requiring submittal of the Certificates of Completion and Installation and all related documents (Irrigation Scheduling, Schedule of Landscape and Irrigation Maintenance, Landscape Irrigation Audit Report, and Soil Management Report) upon completion of construction, prior to project acceptance.

Requirement: Completion and installation of WELO-compliant landscape and irrigation must be documented via the WELO/LDRP forms. Forms must be signed by the property owner, landscape contractor, and the project landscape architect. Forms are described below.

Reference: WELO, LSD

- 18. Post construction signoff by project landscape architect and owner.

Requirement: The following documents and certifications are required before final occupancy from the Building Official during construction to comply with WELO. Provide forms in separate 8.5" by 11" format (or other appropriate format) with plans. Do not place forms on plans.

Note: The Project Landscape Architect should anticipate inspection during construction to support separate written certifications from him or her, that the installed and completed project complies with the City of Fremont Approved Plans, and complies with the WELO requirements as documented in the plans.

- Certificate of Completion signed by property owner,
Form B, Part 1: See required form, page 19.
- Certificate of Installation signed by the Project Landscape Architect, AND the Project (Licensed) Landscape Contractor.
Form B, Part 2: See required form, page 20.
- Irrigation Scheduling
Form B, Part 3: See required attachment, page 20.
- Schedule of Landscape and Irrigation Maintenance,
Form B, Part 4: See required attachment, page 20.
- Landscape Irrigation Audit Report,
Form B, Part 5: See required attachment, page 20.
- Soil Management Report,
Form B, Part 6: See required attachment, page 20.
- Prescriptive Compliance Checklist,
Form C: See required form, pages 21-22.
Form B, Parts 1, 2, 3, 4, and 6: See required forms, pages 19-20.

Reference: WELO

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F. STORMWATER (LANDSCAPE-BASED) REQUIREMENTS:

1. Design of landscape-based stormwater treatment complies with City Standards.

Requirement: The design of stormwater treatment in the right of way complies with City Landscape Standard Details and the Municipal Regional National Pollution Discharge Elimination System Permit Provision C.3 requirements. The City details show options that include a tree well filter and a stormwater planter for use in the right of way. Trash Capture Devices are required upstream of planter with treatment soil in the right of way.

Note: The handbook is available on the Alameda Countywide Clean Water Program website at: http://www.cleanwaterprogram.org/businesses_developers.htm, and City of Fremont Stormwater requirements at <http://fremont.gov/stormwaterdevelopment>.

Reference: LSD, C.3

2. Plans show specifications for treatment soil.

Requirement: Plans show soil specifications in compliance with the Alameda Countywide Clean Water Program C.3 Technical Guide when treatment soil is used on projects.

Reference: C.3, BFL

3. Plans delineate treatment areas.

Requirement: Plans clearly delineate where landscape based stormwater design features are located throughout the site. Place curb or header around landscape-based stormwater features for easy identification when combined with or adjacent to non-stormwater landscape.

Reference: C.3

~ End of Landscape Plan Checklist ~

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