Bay-Friendly Basics - Verification Key



This Bay-Friendly Basics Checklist is for all new construction and renovation of landscapes that are 2,500 square feet of irrigated area or greater and require a permit. The Bay-Friendly Basics represents the 9 required practices from the Bay-Friendly Landscape Scorecard. It is considered a minimum set of practices to improve the environmental performance of the landscape. Projects are recommended to to meet all applicable measures on the checklist. For measures that are not applicable or are not in the project's scope of work, select "N/A" and make a note of why the measure does not apply to the project. For electronic copies of this checklist, and other Bay-Friendly Landscaping resources, visit: www.BayFriendly.org

Verification Instructions

This section is not provided on the Applicant version

Earthwork & Soil Health

Measure & Rec	quirement	Documentation	Verification

1. Mulch

Requirement

All soil on site is protected with a minimum of 3 inches of mulch after construction.

Recommendation

Use recycled or greenwaste mulch instead of landscape fabric. Trees identified for removal are chipped and used on site as mulch, on-site storage space permitting.

Reference

Bay-Friendly Landscape Guidelines, Practice 4.1; Bay-Friendly Guide to Mulch, available at www.BayFriendly.org. Provides sources of recycled mulch and proper application of mulch and information on sheet mulching.

- Submit square footage of planting areas as well as cubic yards required to cover planting areas to a minimum three-inch (3") depth.
- Submit a delivery ticket or receipt of purchased mulch and/or,
- Submit receipts for sheet mulching materials and/or.
- (Optional) Submit photos of trees being chipped for mulch (if applicable).

Review Post Construction:

 Verify delivery tickets/receipts for purchased materials reflect needed amounts of materials.

Verify On-Site:

- Visually verify the type and depth of the mulch (depth can be spot checked with a ruler).
- If sheet mulch is specified, Visually verify the layer of cardboard has been installed.

2. Amend the Soil with Compost Before Planting

Requirement

Compost is specified as the soil amendment, at the rates indicated by a soil analysis to bring the soil organic matter content to a minimum of 3.5% by dry weight or 1 inch of compost. If the imported or site soil meets the organic content of 3.5% or more, then the requirement is waived.

Recommendation

Purchase compost from a producer who participates in the U.S. Composting Council's Standard Testing Assurance(STA) program to ensure quality.

Reference

Bay-Friendly Landscape Guidelines, Practice 4.1; Model Bay-Friendly Soil specifications, at www.BayFriendly.org; U.S. Composting Council Standard Testing Assurance program explanation and list of participating producers can be found at: www.compostingcouncil.org

- Submit the site soil or imported topsoil analysis. No soils analysis is required if 1" of compost is used.
- Submit compost details from construction documents.
- Submit the receipt or delivery ticket for the compost, indicating the amount of the compost delivered/purchased.

If a waiver is requested based on soil organic matter content or the needs of plant palette,

- Submit a completed plant palette with species that need little/no soil organic matter identified, and include the source of information on their soil needs OR
- Submit a soils report that indicates the soil has an organic matter content of 3.5% or greater

Review At Plan Check:

• Verify compost details have been included in construction documents.

Review Post Construction:

- Verify receipts of compost delivered or purchased matches.
- If a waiver is requested based on plant palette, verify plant palette and soil needs (spot check source by looking up soil needs in a plant reference book).
- If a waiver is requested based on adequate soil organic matter content, confirm by reviewing soil analysis.

Version 2.1, December 2011 Page 1 of 4

Measure & Requirement Documentation Verification

Materials

3. Reduce and Recycle Landscape Construction Waste

Requirement

Divert 50% of landscape construction and demolition waste by weight. Verify the local jurisdiction's minimum requirement and reporting procedures for construction and demolition (C&D) recycling.

Reference:

StopWaste.Org, Builders' Guide to Reuse & Recycling: A Directory for Construction and Demolition Materials and sample Waste Management Plan for recycling C&D materials at www.BuildGreenNow.Org.

- State the percent diversion goal in the design documents.
- List specific goals and recycling and reuse requirements in plans and specifications.
- Require contractors to review the waste management plan with subcontractors and to include contract language requiring subcontractors comply with the plan.
- Prior to construction, complete a construction waste management plan. The City should provide a smaple template, or one can be downloaded at www.BuildGreenNow.Org.
- After construction, provide final waste management plan with backup documentation. If materials were sent to a C&D Recycling facility, apply a facility average diversion rate because not all materials can be recycled. Most large C&D facilities have a calculated diversion rate and can provide you with documentation stating the percentage of materials recycled at that facility (typically 50% to 90%).

Review At Plan Check:

• Review the pre-construction waste management plan.

Review Post Construction:

 Verify final waste management plan once completed. Review facility average documentation if materials were sent to mixed recycling center or transfer center.

Verify On-Site:

 Check that materials are being sorted (if applicable) and collected and that contractor is keeping track of waste tags.

Planting

4. Choose & Locate Plants to Grow to Natural Size

Requirement

Species will be selected and plants spaced to allow them to grow to their natural size and shape. Pruning for structural integrity and health of plant is permitted. In addition, plants located in a row or adjacent to buildings, sidewalks or roads will be spaced between their minimum and maximum mature plant spread according to a published reference plant book and still fit into thier planting area without significant overhang. Trees must meet the spacing requirements only when adjacent to buildings, in a row or adjacent to other vertical obstructions. Vines are not subject to spacing requirements.

Reference

Bay-Friendly Landscape Guidelines, Practices 2.1, Bay-Friendly Plant lists are available at www.BayFriendly.org; Bronsetin, Carol, David Fross and Bart O'Brien, California Native Plants for the Garden; East Bay Municipal Utility District, Plants and Landscapes for Summer Dry Climates; Sunset, Western Garden Book.

- Submit plant legend indicating plant species, spacing and mature spread of plant. Indicate the source of information on spacing and spread.
- Submit a statement signed by the Landscape Architect, Designer or Contractor verifying that installed plants meet this requirement.

Review At Plan Check:

• Spot check by verifying mature size of plants of several plant species in a plant reference book and compare the spacing notations in plant legend and /or planting plan.

Review Post Construction:

 Ask the Landscape Architect, Designer or Contractor to submit a signed statement that plants have enough room to reach mature size without regular shearing.

Version 2.1, December 2011 Page 2 of 4

Measure & Requirement Documentation Verification

5. Do Not Plant Invasive Plant Species

Requirement

None of the plant species listed by CAL-IPC's Don't Plant a Pest as invasive in the San-Francisco, Bay Area are included in the planting plan.

Definition

An invasive speices is defined as a species that is non-native (or alien) to the ecosystem under consideration and whose introduction causes or is likeley to cause economic or environmental harm or harm to human health. Federal Executive Order 1311.

Reference

Bay-Friendly Landscape Guielines, Practice 2.1d; Don't Plant A Pestbrochures for trees and plants available at www.cal-ipc.org;

www.cal-ipc.org/ip/inventory/weedlist.php.

- Compare the complete list of plants in the plant palette to the Cal-IPC list of plants that are invasive to the San Francisco Bay-Area.
 Submit the complete plant palette.
- Submit a statement signed by the Landscape Architect, Designer or Contractor confirming that no invasive species were substituted for

specified species.

Review At Plan Check:

• Compare the Cal-IPC list of invasive species with the plant palette to confirm no invasive species have been specified.

Review Post Construction:

 Verify that a statement has been signed by the Landscape Architect, Designer or Contractor that no invasive plants were planted in this project.

6. Grow drought tolerant CA native, Mediterranean or climate adapted plants

Requirement

A minimum of 75% of the total number of plants in non-turf areas must be species that require no or little summer watering once established. Species should be adapted to the climate in which they will be planted, as referenced by a published plant reference. If plants are given a range of water needs from "occasional to moderate" for example, the landscape designer must determine if the plant will require either occasional or moderate watering based on site, soil, and climate conditions and categorize the plant appropriately.

Recommendation

California native or Mediterranean species are strongly recommended.

Reference

Bay-Friendly Landscape Guidelines Practice 4.2; Bornstein, Carol, David Fross and Bart O'Brien, California Native Plants for the Garden; EBMUD, Plants and Landscapes for Summer-Dry Climates; Sunset, Western Garden Book; UCCE, Guide to Estimating Irrigation Water Needs of Landscape Plantings in CA, www.owue.water.ca.gov/docs/wucols00.pdf.

 Submit a plant legend that identifies species, number of plants, irrigation requirements (and reference source of the water requirement), total number of drought tolerant plants and total number of non-turf plants. (download a Bay-Friendly plant legend template to facilitate this process at www.BayFriendly.org).

 Submit a statement signed by the Landscape Architect, Designer or Contractor verifying that installed plants meet this requirement.

Review At Plan Check:

- Verify that a plant legend was submitted with 100% of the plants qualifying.
- Spot check the irrigation requirement identified in the Bay-Friendly Plant legend by comparing it to its source.

Review Post Construction:

 Verify that a statement has been signed by the Landscape Architect, Designer or Contractor verifying that this practice has been met

Version 2.1, December 2011 Page 3 of 4

Measure & Requirement Documentation Verification

7. Minimize the lawn

Requirement

A maximum of 25% of total irrigated area is specified as turf, with sports or multiple use fields exempted

Reference

Bay-Friendly Landscape Guidelines, Practice 4.3; Bay-Friendly Lawn Alternatives plant list at www.BayFriendly.org; Brooklyn Botanic Garden Publications, Easy Lawns, Low Maintenance Native Grasses for Gardeners Everywhere.

- Submit calculations of square feet of turf, excluding sports and multiple use fields, and square feet of total irrigated area.
- Submit planting plans with sports and multiple use fields identified. Include a statement about the purpose of multiple use fields.
- Submit as statement signed by the Landscape Architect, Designer or Contractor that installed turf meets the requirements for this credit.

Review At Plan Check:

- Verify that all the calculations are submitted, compare them to the planting plan and confirm that the percentage of turf meets the criteria for this credit.
- Confirm that the use of sports and multiple use turf areas has been identified.

Review Post Construction:

 Verify that a statement has been submitted and signed by the Landscape Architect, Designer or Contractor verifying that this practice has been met.

Irrigation

8. Specify Weather-Based Irrigation Controllers (automatic, self-adjusting) that Includes a Moisture and/or Rain Sensor Shutoff

Requirement

Weather-based irrigation controllers, soil moisture based controllers or other self-adjusting irrigation controllers, shall be required for all irrigation systems.

Reference

Bay-Friendly Landscape Guidelines, Practice 4.6; EBMUD website has a list of recommended self adjusting controllers at www.ebmud.com.

• Submit the make and model and product sheet of the irrigation controller.

 Provide a statement signed by the Landscape Architect, Designer or Contractor that the installed controller is a self-adjusting model and includes shut off capacity.

Review At Plan Check

 Verify that the product sheet for the controller has self-adjusting capabiliy based on weather condidtions and moisture/ rain sensor shutoff features.

Review Post Construction:

 Verify that a statment has been signed by the Landscape Architect, Designer or Contractor verifying that this practice has been met.

Verify On-Stie:

Visually verify that the installed controlled is the make and model specified.

9. Sprinkler & Spray Heads are Not Specified for Areas Less Than 8 Feet Wide

. Requirement

Sprinkler and spray heads are not specified in areas less than or equal to 8 feet wide to prevent overspray and runoff. Acceptable alternatives include drip, subsurface drip, bubblers or no irrigation. Bubblers shall not exceed 1.5 gallons per minute per bubbler.

 Submit statement signed by the Landscape Architect, Designer or Contractor verifying that irrigation as installed does not have sprinkler or spray heads in planted areas less than 8 feet

Review Post Construction:

 Verify that a signed statement has been signed by Landscape Architect, Designer or Contractor verifying that this practice has been met.

Verify On-Site:

 Spot check that no sprinkler or spray heads have been installed in planted areas less than or equal to 8 feet wide.

Bay-Friendly Basics: Bay-Friendly Basics represents the 9 required practices in the Bay-Friendly Landscape Scorecard. Landscapes that achieve the Bay-Friendly Basics will achieve significant environmental benefits for the project and community as well as taking the first step toward becoming a Bay-Friendly Rated Landscape. If a project is interested in seeking to qualify as a Bay-Friendly Rated Landscape, it must also earn a minimum of 60 points on the Bay-Friendly Landscape Scorecard and be evaluated by a qualified Bay-Friendly Rater. Please visit www.BayFriendlyCoalition.org to learn more about taking this next step in sustainability. The Bay-Friendly Basics is not a substitute for exercising sound judgement in particular circumstances. Rather, the Bay-Friendly Basics is designed to help local governments raise the minimum environmental requirements for landscape projects that require a permit.

This checklist works well with the Small Commercial Green Building Checklist available at www.stopwaste.org/smallcommercial.

Version 2.1, December 2011 Page 4 of 4