

Oregon State Landscape Architect Board Special Rules Advisory Committee – Meeting #2

Agenda

Tuesday, December 5, 2017

9:00 a.m. – 12:00 p.m.

Portland State Office Building, Conf. Room 1C (1st floor), 800 NE Oregon St, Portland, OR

Purpose of Meeting

- Resume discussion on defining “construction details and specifications”
- Begin discussion to address stormwater management & related activities

Agenda Items

9:00am	Introductions and Agenda Review Welcome and approve November 13, 2017 SRAC meeting summary.	Michael O'Brien, Oregon State Landscape Architect Board, SRAC Chair
9:10am	Construction Details and Specifications: Part 2 Review SRAC input from Meeting 1 on what constitutes “construction details and specifications.” Review example definitions and notes compiled by OSLAB staff and SRAC members, discuss/refine as a group.	Christine Valentine, OSLAB Sylvia Ciborowski, JLA Public Involvement All
10:30am	BREAK	
10:45am	Defining Activities Related to Stormwater Management Review statute and rules related to stormwater management and related activities. Review SRAC input from Meeting 1 and continue discussion to clarify issues related to these activities.	Christine Valentine Sylvia Ciborowski All
11:45am	Public Comments	Sylvia Ciborowski
11:55am	Next Steps	Christine Valentine
12:00pm	Meeting Adjourns	Michael O'Brien

Meeting Packet:

- Meeting Agenda
- November 17, 2017 SRAC meeting summary
- Construction details and specifications chart from November 17, 2017 SRAC meeting
- Draft example definitions and notes regarding construction details and specifications
- Example “Permitted Practices in California” list from California LA Technical Committee

OREGON STATE LANDSCAPE ARCHITECT BOARD

SPECIAL RULES ADVISORY COMMITTEE – MEETING 1 SUMMARY

November 13th, 2017

9:00 AM – 12:00 PM

Portland State Office Building

800 NE Oregon St., Portland OR – Conference Room 1E

ATTENDEES

Marilyn Alexander, *Association of Professional Landscape Designers – Oregon Chapter*

Hal Beighley, *Oregon State Landscape Architect Board – Non Board Member*

Elizabeth Brewster, *Portland Community College – Landscape Technology Department*

April Chastain, *Clackamas Community College – Horticulture Department*

Craig Kiest, *Registered Landscape Architect – At large*

Molly McDowell-Dunston, *Oregon Landscape Contractors Board – Licensed Board Member*

Michael O'Brien, SRAC Chair, *Oregon State Landscape Architect Board – Registered Board Member*

Jean Senechal-Biggs, *American Society of Landscape Architects – Oregon Chapter*

Angie Snell, *Oregon Landscape Contractors Association*

Susan Smith, *Oregon State Landscape Architect Board – Public Board Member*

Amy Whitworth, *Association of Northwest Landscape Designers*

STAFF

Christine Valentine, *Oregon State Landscape Architect Board – Board Administrator*

Sylvia Ciborowski (facilitator), *JLA Public Involvement*

Hannah Mills (scribe), *JLA Public Involvement*

WELCOME & AGENDA

Michael O'Brien, SRAC Chair, opened the meeting at 9:03 AM and welcomed the committee members, thanking them for their participation. He highlighted the importance of this opportunity and asked the members to introduce themselves.

Sylvia Ciborowski, facilitator with JLA Public Involvement, reviewed the agenda. The agenda was as follows:

1. Special Rules Advisory Committee (SRAC) Purpose & Meeting Protocols
2. Background Presentation
3. Defining Our Process & Success
4. Activity & Discussion
5. Public Comment
6. Next Steps & Closing

SRAC PURPOSE & MEETING PROTOCOLS

The purpose of the meeting was to:

- Review the purpose and charge of the SRAC
- Gain an understanding of the rules and statute that regulate the landscape architecture field
- Begin the discussion of defining “specifications” and “details”

Sylvia referred the committee to the handout illustrating the operating protocols for the meetings. She explained that silence would be interpreted as acceptance and asked the committee members to bring up any issues they have during the meetings. Committee members will designate an alternate that can be present if they are unable to attend a meeting. Sylvia asked that the members limit communication with each other between meetings; however they are encouraged to talk with their constituents about the content and discussions. Christine Valentine, Board Administrator, pointed out that the meetings would follow Public Meeting Law, therefore meetings will be open to the public and all documentation will be made public record.

Sylvia explained that the goal of the group is to reach consensus, with a fallback of a 2/3rds majority vote. She reminded the committee that consensus on a recommendation does not mean that it is their first choice, but that all members can accept it as best for the group. If the group cannot reach consensus or a 2/3rds majority vote, documentation of the committee’s discussion will be provided to the Oregon State Landscape Architect Board (OSLAB) to help inform their decision. There were no objections to this decision making approach. Michael explained that it is not required for the committee to make a recommendation, but that it is the intent.

BACKGROUND PRESENTATION

Christine used a PowerPoint to give a brief presentation on the Oregon Landscape Architecture statute and rules, beginning with an explanation how Oregon courts interpret statutory language.

A **statute** is a law passed by the Oregon Legislature that grants subject matter authority and the authority to act. A statute can only be modified by the Oregon Legislature; however, a State agency can request a legislative change with the Governor’s approval.

A **rule** is a directive, standard, regulation, or statement of general applicability that implements, interprets, or prescribes law or policy, or describes the procedure or practice requirements of an agency. A rule has the force of law once it is adopted, and therefore must be followed. Rules must be consistent with the statute that authorized the agency to adopt it, and provide a standardized process for adoption and amendment.

When interpreting statutory language, Oregon courts consider three elements:

1. Actual words and phrases:
 - The ordinary meaning of words/phrases
 - Assumption that every word has meaning

- Assumption of consistency
- Grammar, syntax, and punctuation
- Rules of interpretation per ORS 174.010 & 174.020

2. Legislative history:

- “To assist the court in the construction of a statute, a party may offer the legislative history of the statute... A court shall give the weight to the legislative history that the court considers appropriate.” – ORS 174.020(1)(b), (3)

3. Canons of Construction:

- Techniques of statutory construction that have been used so often they have become “formalized” into “canons” that the court may consider.

Judicial review of a rule uses the same interpretation elements as for a statute. In addition the review of a rule also considers:

- Plausible interpretation of the text
- No conflict with other relevant source of law
- Degree of deference statute provided to Board
- Intentions of Board and rulemaking history

Christine then reviewed what is included in the statute that governs the practice of landscape architecture. The Oregon Landscape Architecture Statute (ORS 671.321) specifies that landscape designers can:

- (1)(e) Engage in making plans or drawings for the selection, placement or use of plants or other site features unless plans or drawings are for the purpose of providing construction details and specifications not otherwise exempted.
- (1)(f) Use the title “landscape designer” in connection with the activities described under paragraph (e) of this subsection.
- (1)(h) Provide recommendations or written specifications for soil amendments or planting mediums if the recommendations or specifications are solely for the purposes of plant installation and so not significantly alter the stability of the soil profile or surface drainage patterns.

Christine explained that there is nothing currently in the Landscape Architect rules (OAR Chapter 804) to address landscape design vs. landscape architecture. The rules only address landscape architecture practice via a code of professional conduct and related expectations for Board registrants.

The committee was then given a legislative history of ORS 671.321.

Christine explained that, when the courts look at what a statute means they consider any legislative history from development of the statute. Legislative history is made up of:

- Comments in committee hearings
- Statements in floor debates
- Testimony of non-legislator witnesses

- Statements of committee counsel or other staff
- Amendment history
- Law commission reports

The legislative intent of the effort in 2001 resolved that:

- With respect to landscape design activities, the focus of discussion during consideration of HB 2196 was focused on the type of plans or drawings landscape designers could prepare.
- The final amended language of “construction details and specification not otherwise exempted” as found in ORS 671.321(1)(e) reflected input from landscape designer, landscape architect, and landscape contractor representatives engaged in the legislative process.

Christine pulled specific quotes from the document in the handout about the legislative history and intent of exemptions for landscape design activities:

- *“...conceptual design as being not significantly affecting the public health, safety, and welfare”* (J. Figurski, OSLAB)
- *“...prepare drawings that would represent those elements in terms of the scale and relationship of items within a site. [Landscape designers] could do any sort of drawing that they needed to communicate the idea. Where that individual would cross the line would be at the point they recommend specific installation [and] construction techniques.”* (J. Figurski, OSLAB)
- *“...intent was to ‘restrict landscape designers from preparing detailed construction drawings, grading plans, hardscape specifications (size of lumber, type of screws, etc.), and things along those lines. It is not intended to limit their ability to provide detailed planting plans, or to prepare final drawings with specificity about site features (location, size, suggested materials, etc.).’”* (B Laux)

Despite the lack of definitions for: plans, drawings, and construction details and specifications, “site features” is defined in another statute. ORS 671.310(8) states:

“Site features’ means constructed surfaces, steps, retaining walls, fences, arbors, trellises, benches, decks, fountains, ponds, waterways, pools, or other physical elements constructed or proposed for construction in the landscape.”

Christine noted that there are opportunities to define several terms in the statue through this SRAC process. OSLAB has concerns that the term “plans and drawings” may be too broad to easily define, but they believe there is an opportunity to define “construction details and specifications.” The committee was encouraged to seek clarity and brevity when drafting the definitions to make it easy for OSLAB, practitioners, and the public to understand the language. Christine also noted her appreciation for the presence of the different educators on the committee which will help prepare those who are entering the practice of landscape design.

DEFINING OUR PROCESS AND SUCCESS

Sylvia explained that prior to this first meeting with the SRAC, she talked to all members by phone to identify key issues that they would like to discuss through the SRAC process. She asked members to refer to the *Key Topic Areas for Discussion by OSLAB SRAC* handout, which lists the main themes from these conversations.

She explained that the top issues to discuss as identified by members are:

- Define Construction details and specifications.
- Water management: discuss role of designers in water management, green infrastructure, and grading and drainage work.
- Discuss scale of projects, and whether there is a certain scale of project that could be exempt from the rules.

Discussion & Questions

Sylvia asked members whether there is interest in discussing any additional issues not identified in the handout. Members made the following comments:

- It was noted that “health, safety, and welfare” in regards to water management is a key concern for landscape architects and may need more clarification. There are many components that are critical to protecting the public. It’s important to regulate who is performing this work that affects human health, safety and welfare. Mike noted that health, safety, and welfare was the key component of the Board’s statutory mission. Christine said this was generally true of all licensure boards in Oregon.
- Sylvia asked the committee if there was interest in defining the term “plans and drawing.”
 - It was noted that there have been attempts in the past to establish these definitions. In a previous effort, defining “concept plan” proved difficult due to the loose nature of the term, and it was difficult to shape the language in a way that was defensible. It may be more effective to spend time defining “specifications” and “details.”
 - It was suggested that it may be beneficial to look at the language used by the Contractors Board that defines the term “plan.”
- There was interest in discussing the logistics of who is allowed to sell designs as it pertains to landscape designers vs. contractors vs. landscape architects.
 - If a landscape designer sells a design without details or specifications and a contractor prepares the construction details and installs the work, there are no issues about responsibilities.
 - Over the years, OSLAB and OLCB have discussed concerns about contractors selling designs without installation and what these means for consumer protection if a design is flawed. These conversations were partially related to debate over language in OLCB statutes about “plan and install” and what that meant. The general expectation in the industries is that contractors will generally plan and install—not sell designs only.

- Some committee members were interested in connections between the committee's work and OLCB licensure. For example, it was noted that students at PCC and CCC programs often look towards eventually obtaining a license from OLCB.

ACTIVITY & DISCUSSION: CONSTRUCTION SPECIFICATIONS AND DETAILS

There are some elements of a plan that are clearly "specifications and details" and fall into the domain of landscape architecture. Alternatively, there are some elements more adequately described as "notes" that designers put in their plans to provide design intent. Then there are elements that fall into more of a "gray area" and need more discussion to determine their designation. Sylvia explained that the goal of this discussion would be to shrink that "gray area" and clarify what kinds of elements landscape designers can include in their plans without stepping into the field of landscape architecture.

Committee members were asked to individually brainstorm and write down the elements they thought fall into each category, one element per sheet. Sylvia collected the sheets and arranged them on the wall according to each category and asked members to give a brief explanation and discuss with the committee. Below are the lists of comments and discussion relating to each category:

YES – "CONSTRUCTION DETAILS & SPECIFICATIONS"

- Detailed descriptions of materials for installation. Landscape designers have to be more vague in their descriptions which can be difficult for a contractor when trying to prepare bids.
- Section drawings, specifications, and written directives that provide enough information to construct an element
- Paving specifications – how a structure is constructed.
- Irrigation component specifications.
- Installation details (can build from a plan)
- Specifications written directives
- Structural engineering – how a deck or freestanding structure is put together (joints, attachments).
- Specifying fasteners for a deck
- Retaining wall section
- Grading plans and movement of earth.
- Grading plan
- Footings
- Material types:
 - Lumber type
 - Base preparation
 - Strength or compaction of the stone
 - Structure, hardware, connections – choosing lumber size appropriate for holding up the structure
 - How the posts are connected

GRAY AREA (NOT SURE IF THIS FALLS INTO “CONSTRUCTION DETAIL & SPECIFICATIONS”)

Material descriptions (Where is the line between what it is and how it goes together?):

- Landscape designers can describe a material, but only landscape architects should be able to identify material details that impact construction. It is important for the protection of health, safety, and welfare to ensure materials are appropriate for construction.
- It is difficult to get accurate comparative bids on a project without being able to describe materials.
- Landscape designers need to be able to identify materials in order to ensure integrity of their aesthetic intent.
- One person asked whether it would be appropriate for a landscape designer to make reference in a plan to the manufacturer for installation standards.
 - Participants were split on whether this is appropriate or not. Some noted that intuitively that seems reasonable; however, it's important that the landscape designer is not risking themselves in the process. If a homeowner is doing the installation, there's no guarantee they will understand the site and know the best application of the manufacturer's standards. If an installation fails due to homeowner error using manufacturer instructions at the direction of a landscape designer, the designer could be liable. Referencing designs and specifications would not guarantee successful installation.
 - Contractors (installers) are required to have a license and be insured. Landscape designers do not have similar requirements.
- It was suggested that cost to a client be considered a part of “welfare.”
- Paving materials: Participants discussed to what extent “paving materials” details should be considered construction details.
 - A landscape designer should be able to identify the aesthetic intent. It seems like designer should be able to designate the surface treatment as an aesthetic detail (type of material, color, or cut or natural edges, for example).
 - Contractors need to ensure the success of installation in regards to strength, compaction, and safety of the homeowner.
 - Specifying edging material for a gravel path.

Grading, drainage, and water management:

- Stormwater:
 - Stormwater conveyance – how stormwater is moving through a site. This needs more specificity as to how it can be addressed in a landscape plan by a landscape designer. Is water that is moving over the ground more of a landscape design consideration? Is this a matter of scale and site details?
 - Placement and flow through of stormwater planters in regards to infiltration.
 - Landscape designers can often design a sitting or retaining wall in terms of specifying height, but it can become an issue for the direction of stormwater depending on grade and amount of water on a site.

- Specifically in Bend with the drastically increasing population and development, contractors are encountering problems with landscape designers adding features, such as decks or impervious surfaces, to the plan once the architect has submitted the building plans. This has caused issues that weren't addressed by the architect relating to stormwater management. Even the slightest change in grade can cause issues for those living down slope in that ecoregion.
 - Creating language aimed at addressing an issue that is specific to only one jurisdiction would have statewide impacts. Jurisdictions can have their own rules that override the state rules.
 - The American Society of Landscape Architects has a summary of legislation from states across the country, mostly in regards to exceptions for landscape designers.
- Indicating where to keep stormwater on site.
- Reducing impervious surface area or improving onsite infiltration such as through placement of site features or cutting the concrete surface flow.
- Could there be distinctions based on % slopes, volume of earth movement, whether water management is on-site vs. offsite, or new land development vs. preexisting development?
- What are cities in Oregon requiring for stormwater management and should this inform the committee discussion?
- Rain garden:
 - Directing a downspout to a rain garden.
 - Specifying planting medium for a rain garden.
 - Rain garden sizing and placement.
 - Water quality, and berm and swale selection.

Construction:

- Construction notes as opposed to specifications and details.
- Comparing bids:
 - Landscape designers can advise their clients when they are comparing bids for construction by guiding them to ask the right questions in regards to cost – client advocacy.
 - The line gets blurred when determining whether landscape designers can provide construction administration and observation. Often homeowner consultation with contractors can be dealt with more successfully by landscape designers.
 - Is it appropriate for landscape designers to provide additional construction details at the request of a contractor for bidding purposes?
- It would be helpful to determine the difference between written vs. verbal direction.
- Specifying the size of posts for a pergola could be an aesthetic or structural consideration.
- Elements that require permits – who can design?
- Construction of patio covers.

Drawings:

- Could a designer provide boilerplate or online drawings of things like irrigation or lighting to a client?
- Sections? (to scale)
- Elevation? (to scale)

NOT “CONSTRUCTION DETAILS & SPECIFICATIONS”

Structures and design elements:

- Deck size and placement of steps and landings
- Patio layout plan
- Paving layout
- Raised vegetable beds
- Soil amendments
- Design intent
- Aesthetic detail
- Illustrative drawings (to scale, show site elements)
- Perspective drawing to convey design intent
- Plan dimensions: Patio size, radius curve, path width
- Elevation drawings
- Sitting walls height, thickness (mass), cap detail – overhang or not
- Size of lumber for a proposed structure
- Low voltage fixture selection
- Information not involving construction

Material types:

- Color, size, manufacturer, source
- Type of finish (surface treatment)
- Aesthetic description
- Post size (for aesthetic reasons)

Other

- Preparation of plans using Sketch-up

PUBLIC COMMENT

Three members of the public were present at the committee meeting. Below is a summary of the comments they provided.

- Catherine Trzybinski: Asked about the term “rain garden” and whether it was considered a site feature. It is a term that could have many different meanings and would be hard to define. Other states may have boilerplate language regarding landscape designers. If found, the language will be submitted to Christine for the committee to review.

- Barbara Simon: Requested that the committee provide clarity on details that landscape designers get involved in such as sitting vs. retaining walls, fences and gates, walkways, etc. (Committee members responded that these are all important discussion topics, but with the amount this committee has to go through, it's possible that there won't be enough time to cover everything.)
- Bethany Rydmark: Expressed appreciation for this process to better define the rules, and felt that the current ambiguity has been doing a disservice to those working in the field.

NEXT STEPS & CLOSING

Sylvia asked that two or three committee members develop their own definitions of “construction details and specifications” and bring them to the next meeting for discussion. If possible, these will be emailed to committee members prior to the meeting. Committee members were given the plans that were brought as examples for them to review. Michael expressed that he was encouraged by the discussion and looked forward to further robust conversations. He thanked the committee for their participation and closed the meeting at 12:00 PM.

Initial thoughts on what is and is not considered “construction specifications and details” (from 11/13/17 OSLAB SRAC Meeting)

Constructions Details and Specifications	Gray Area/Not Sure	No – Not Details and Specifications
<ul style="list-style-type: none"> • Structural engineering – how a deck or structure is put together (joints, attachments, fasteners) • Drawing with enough information to construct or install the elements • Paving specifications • Retaining wall section • Footings • Material descriptions: <ul style="list-style-type: none"> ○ Lumber type ○ Base preparation ○ Strength or compaction of the stone ○ Structure, hardware, connections – choosing lumber size appropriate for holding up the structure ○ How posts are connected 	<ul style="list-style-type: none"> • Contractor consultation: providing more information to a contractor for bidding purposes, at contractor request • Patio covers • Construction “notes” • Retaining walls • Wall heights (non-retaining or retaining) • Section and elevation drawings that are to scale • Elements that require permits • Specifying the size of posts for a pergola • Boilerplate drawings • Material descriptions <ul style="list-style-type: none"> ○ Material descriptions (1 = ok, 2 or more = details?) ○ Label materials ○ Paving material types ○ Specifying edging material for a gravel path 	<ul style="list-style-type: none"> • Illustrative or perspective drawings that communicate aesthetic/design intent • Surface treatment for aesthetic purposes ((cut or natural edges, for ex.) • Information not involving construction • Soil amendments • Patio/Deck size and placement of steps and landings • Patio layout plan • Paving layout • Use of Sketch-up • Raised vegetable beds • Plan dimensions: Patio size, Radius curve • Sitting walls (height, thickness (mass), cap detail – overhang or not) • Size of lumber for a proposed structure • Low voltage fixture selection • Material descriptions: <ul style="list-style-type: none"> ○ Color, size, manufacturer, source ○ Type of finish (surface treatment) ○ Aesthetic description ○ Post size (for aesthetic reasons)

Elements pertaining to Grading, Drainage, and Water Mitigation (may be best addressed through a different definition, separate from “construction specifications and details”)

<ul style="list-style-type: none"> • Grading plan • Irrigation plans 	<ul style="list-style-type: none"> • Stormwater-related details, such as: <ul style="list-style-type: none"> ○ Indicating where to keep stormwater on site ○ Placement of flow through planter – no infiltration ○ Reducing impervious area – direction of patio/cutting concrete surface flow ○ Surface drainage changes – that remain on the property ○ Directing a downspout to a rain garden ○ Stormwater detention area ○ Stormwater conveyance (how is stormwater moving through the site) • Rain garden <ul style="list-style-type: none"> ○ Specifying planting medium for a rain garden ○ Rain garden sizing ○ Berms and swales • Water quality swale section 	
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***Following are generic definitions for construction details pulled from various sources (as noted.)
These are shared for discussion purposes.***

DETAILS:

1. A drawing, at relatively large scale, of a part of a building, machine, etc., with dimensions or other information for use in construction.

<http://www.dictionary.com/browse/detail-drawing>

2. Detail drawings show a small part of the construction at a larger scale, to show how the component parts fit together. They are also used to show small surface details, for example decorative elements. Section drawings at large scale are a standard way of showing building construction details, typically showing complex junctions (such as floor to wall junction, window openings, eaves and roof apex) that cannot be clearly shown on a drawing that includes the full height of the building. A full set of construction details needs to show plan details as well as vertical section details. One detail is seldom produced in isolation: a set of details shows the information needed to understand the construction in three dimensions. Typical scales for details are 1/10, 1/5 and full size.

https://en.wikipedia.org/wiki/Architectural_drawing

3. Detail drawings provide a detailed description of the geometric form of a part of an object such as a building, bridge, tunnel, machine, plant and so on. They tend to be large-scale drawings that show in detail parts that may be included in less detail on general arrangement drawings.

Detail drawings may be used to demonstrate compliance with regulations and other requirements, to provide information about assembly and the junctions between components, to show construction details, detailed form and so on, that would not be possible to include on more general drawings.

They may include dimensions, tolerances, notation, symbols and specification information, but this should not duplicate information included in separate specifications as this can become contradictory and may cause confusion.

They may consist of 2 dimensional orthogonal projections showing plans, sections and elevations and may be drawn to scale by hand, or prepared using Computer Aided Design (CAD) software. However, increasingly, building information modelling (BIM) is being used to create detailed 3 dimensional representations of buildings and their components.

Detail drawings may be confused with 'detailed design drawings' which might describe the drawings produced during the detailed design stage, (sometimes referred to as 'developed design' or 'definition'). Detailed design is the process developing the design so that it is dimensionally correct and coordinated, describing all the main components of the building and how they fit together. Not all drawings produced during this stage will necessarily be detail drawings.

They are also distinct from the definition of 'working drawings' which provide dimensioned, graphical information that can be used by a contractor to construct the works, by suppliers to

fabricate components of the works or to assemble or install components. Again, not all working drawings will necessarily be detail drawings.

https://www.designingbuildings.co.uk/wiki/Detail_drawing

Following are generic definitions for specifications pulled from various sources (as noted.) These are shared for discussion purposes.

SPECIFICATIONS:

1. Specifications are “that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services,” according to AIA Document A201-2007, the General Conditions of the Contract for Construction. The technical specifications sections (Divisions 02 through 49) are a written description of the materials, products, and workmanship used to construct a building. The General Requirements, Division 01, are the requirements for administering and performing the work of constructing the building.

<http://www.specificationsdenver.com/>

2. Specifications in North America form part of the contract documents that accompany and govern the construction of building and infrastructure projects. Specifications describe the quality and performance of building materials, using code citations and published standards, whereas the drawings or Building Information Model (BIM) illustrates quantity and location of materials.

[https://en.wikipedia.org/wiki/Specification_\(technical_standard\)](https://en.wikipedia.org/wiki/Specification_(technical_standard))

3. According to the Shorter Oxford English Dictionary a specification is "a detailed description of the dimensions, construction, workmanship, materials etc., of work done or to be done, prepared by an architect, engineer, etc."

A specification is a document that describes in words what cannot be visualized or explained on a drawing or model. This document can be incredibly wide-ranging - covering the establishment of the site, the type of contract to be used, the performance criteria of the asset, the quality of the systems and products, which standards are applicable and how they should be executed, and even the products to be used.

Specifications do not include information on cost, quantity or drawn / visualized information so need to be read in conjunction with documents detailing quantities, schedules and drawings.

<https://www.thenbs.com/knowledge/what-is-a-specification-for-construction>

Notes on Construction Details

DISCLAIMER: The following ideas are provide for discussion purposes. Some of this content may ultimately be suitable for a rule definition. However, this is not presented as a final draft of a rule definition. Further Committee input is needed to help shape a rule definition.

Construction Details:

(1) A drawing or set of drawings containing dimensions, technical details, and other information of sufficient detail for use in construction or installation, where the drawings provide direction on how to accurately construct all landscape elements and site features. Construction details may include elevation and section drawings. Construction details facilitate construction in a manner compliant with applicable regulations and protective of public health, safety and welfare.

(2) Construction Details do not include:

(a) A drawing or set of drawings intended for presentation or orientation purposes and lacking sufficient details to use for construction or installation purposes, where the drawing or set of drawings may show:

(i) The general placement of plantings and site features in a landscape, drawn to scale to show the proposed size or placement of objects as part of an overall site design

(ii) Site dimensions to illustrate design intent such as placement, size, or scale of site features such as but not limited to:

- deck/patio size,
- deck/patio railing style,
- path width,
- sitting wall height,
- sitting wall thickness,
- steps or landings
- garden beds
- arbors
- trellises
- seating
- fences
- landscape edging
- low-voltage lighting fixtures

TO BE DETERMINED

- retaining walls (location, other aspects) ?
- stormwater features (rain gardens, downspout changes, reducing impervious flow, etc.) ?
- ornamental water features ?
- outdoor kitchens, ovens or fire pits ?
- other design details not related to construction ?

(3) In addition to applying stamp and signature, a Registered Landscape Architect must clearly mark a final drawing or set of drawings containing construction details as for construction purposes.

Notes on Specifications

DISCLAIMER: The following ideas are provide for discussion purposes. Some of this content may ultimately be suitable for a rule definition. However, this is not presented as a final draft of a rule definition. Further Committee input is needed to help shape a rule definition.

Specifications:

(1) Written or printed detailed descriptions of construction requirements for materials, equipment, systems, standards and work performance that are generally included as part of landscape architectural contract documents. Specifications provide details such as material requirements, mode of construction, installation instructions, and other elements about a landscape architectural design that are not visualized in the drawing or set of drawings providing construction details. Specifications generally need to be read in conjunction with construction details.

(2) Specifications do not include:

- General descriptions of plant materials suggested for a site.
- General descriptions of materials included solely to convey information on design and aesthetic intent for site features such as size, type, color, finish and brand.
- Recommendations for soil amendments or planting mediums not involving grading and drainage changes to the site.
- General guidance about design intent provided in writing or verbally to assist a property owner with obtaining or reviewing bids for construction or installation.

TO BE DETERMINED

- Written references to technical designs or standards developed and provided by another public or private organization where clearly described and labelled as such ?
- Provision of general industry specifications with an advisory to consult a professional for installation ?

(3) In addition to applying stamp and signature, a Registered Landscape Architect must clearly mark final specifications as for construction purposes.

PERMITTED PRACTICES IN CALIFORNIA
Permitted Practice for Professionals, Practitioners, and Unlicensed Persons

This document has been prepared by the Landscape Architects Technical Committee (LATC), the licensing and regulatory agency for the practice of landscape architecture in California. The purpose of this document is to provide a quick reference regarding the various professionals, practitioners, and unlicensed persons who may offer landscape design services and the permitted scope and/or limitations that pertain to each. Please note that a licensed professional is required when the scope of a particular project demands the applicable professional services. While every effort has been made to ensure the accuracy of this document, it does not have legal effect. Should any difference or error occur, the law will take precedence. For more information, contact the LATC at (916) 575-7230 or latc@dca.ca.gov, or visit www.latc.ca.gov.

LANDSCAPE ARCHITECTS

Hold a professional license to practice landscape architecture

May perform professional services for the purpose of landscape preservation, development, and enhancement, such as consultation, investigation, reconnaissance, research, planning, design, preparation of drawings, construction documents and specifications, and responsible construction observation

APPLICABLE STATUTE: Section 5615 of the Business and Professions Code (BPC)

ARCHITECTS

Hold a professional license to practice architecture

May offer, perform, or be in responsible control of, professional services which require the skills of an architect in the planning of sites

APPLICABLE STATUTES: Sections 5500.1 and 5641.3 of the BPC

PROFESSIONAL ENGINEERS

Hold professional registration to practice professional engineering

May perform professional services, as defined under BPC 5615, as long as the work is incidental to an engineering project

APPLICABLE STATUTES: Sections 5615, 5641.3, and 6701 et seq. of the BPC

LANDSCAPE CONTRACTORS

Hold a C-27 (landscaping contractor) license

May design systems and facilities for work to be performed and supervised by that contractor

APPLICABLE REGULATION/STATUTES: Section 832.27 of the California Code of Regulations, Title 16, Division 8 and Section 5641.4 and 7027.5 of the BPC

NURSERYPERSONS

Hold a license to sell nursery stock

May prepare planting plans or drawings as an adjunct to merchandizing nursery stock and related products

APPLICABLE STATUTES: Section 5641.2 of the BPC and Section 6721 et seq. of the Food and Agriculture Code

UNLICENSED PERSONS

Landscape/Garden Designers, etc.

May prepare plans, drawings, and specifications for the selection, placement, or use of plants for single family dwellings

May prepare drawings for the conceptual design and placement of tangible objects and landscape features

May NOT prepare construction documents, details, or specifications for tangible landscape objects or landscape features

May NOT prepare grading and drainage plans for the alteration of sites

Personal Property Owners

May prepare any plans, drawings, or specifications for any property owned by that person

Golf Course Architects

May engage in the practice of, or offer to practice as, a golf course architect

May perform professional services, such as consultation, investigation, reconnaissance, research, design, preparation of drawings and specifications and responsible supervision, where the dominant purpose of such services is the design of a golf course, in accordance with accepted professional standards of public health and safety

Irrigation Consultants

May engage in the practice of, or offer to practice as, an irrigation consultant

May perform professional services, such as consultation, investigation, reconnaissance, research, design, preparation of drawings and specifications and responsible supervision, where the dominant purpose of such service is the design of landscape irrigation, in accordance with accepted professional standards of public health and safety

APPLICABLE STATUTES: Sections 5641, 5641.1, 5641.5, 5641.6 of the BPC



Oregon State Landscape Architect Board

Special Rules Advisory Committee

2017-2018

Meeting 2, Dec. 5, 2017

Today's Agenda

- ▶ Welcome and Introductions
- ▶ Recap Purpose/Defining Success
- ▶ Review - Outcomes from Meeting 1
 - ▶ Areas of Potential Agreement
 - ▶ The Gray Zone
 - ▶ Stormwater management, grading/drainage, & related activities
- ▶ Definitions - Construction Details & Specifications
 - ▶ Generic examples
 - ▶ Draft ideas for committee consideration



Desired Outcomes for Today's Meeting

- ▶ Confirm areas of agreement
- ▶ Complete deeper dive into gray zone - identify points of agreement or direction that committee can provide
- ▶ Obtain feedback on preliminary ideas for definitions
 - ▶ Possible approaches to rule definitions
 - ▶ Rules vs. guidelines



Potential Agreement - Construction Details & Specifications

YES

Structural engineering - how a structure is put together
Paving specifications
Retaining wall section
Footings
Material descriptions:
Lumber type
Base preparation
Strength or compaction of the stone
Structure, hardware, connections - choosing lumber size appropriate
How posts are connected

NO

Material descriptions: (color, size, manufacturer, source, finish, surface treatment, post size, aesthetics)
Soil amendments
Patio/deck size, layout plan
Placement of steps and landings
Paving layout
Use of Sketch-up
Raised vegetable beds
Plan dimensions
Sitting walls (height, thickness, cap detail)
Size of lumber for desired aesthetic look
Low voltage fixture selection

Drawing with enough information to construct or install the elements

Illustrative / perspective drawings that communicate aesthetic/ design intent, not involving construction

The Gray Zone

Construction Details & Specifications

- Contractor consultation: providing more information to a contractor for bidding purposes, at contractor request
- Patio covers
- Construction "notes"
- Retaining walls
- Wall heights (non-retaining or retaining)
- Section and elevation drawings that are to scale
- Elements that require permits
- Specifying the size of posts for a pergola
- Boilerplate drawings
- Material descriptions
- o Material descriptions (1 = ok, 2 or more = details?)
- o Label materials
- o Paving material types
- o Specifying edging material for a gravel path

+ elements related to:

- Stormwater/water quality features
- grading & drainage



Review of Preliminary Ideas for Definitions



“Food for Thought”

Generic Definitions

Pulled from various sources

None is ready to go “off the shelf”!

Definitions offer some ideas for ways to think about possible rule language

Notes Based on SRAC Input

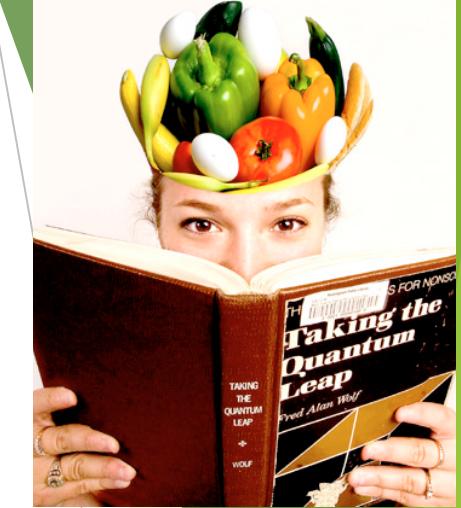
Based on input from 11/13 meeting & ideas pulled from generic definitions

Language “brain dump” to provide a starting point, needs work!

What needs to be in rule?

What might be better as associated guidance?

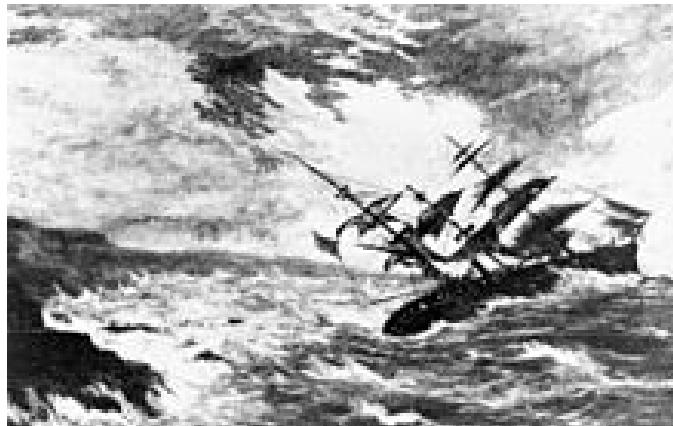
How should rule definitions be structured?



Safe Harbor Approach



- ▶ A “safe harbor” rule is a rule specifying that certain conduct will be deemed NOT to violate a given statute or rule. It is usually adopted in connection with a vaguer, overall rule standard.
- ▶ A safe harbor rule may not answer all questions for all situations but could potentially capture key elements of a landscape plan that are NOT construction details or types of notes that are NOT specifications.



Safe Harbor Rule Approach

Construction Details

- ▶ Construction details defined broadly in a few sentences.
- ▶ Clarify that for construction purposes and relationship to protection of HSW.
- ▶ Related rule listing items that would NOT be deemed construction details by OSLAB.

Rules would guide OSLAB review of practice interpretation questions and complaints.

Specifications

- ▶ Specifications defined broadly in a few sentences.
- ▶ Clarify that for construction purposes & read in conjunction with construction details.
- ▶ Related rule listing items that would NOT be deemed specifications by OSLAB.



What's in the LA Statutes for Grading/Drainage?



ORS 671.310 (6) “Landscape preservation, development and enhancement” includes:

- (6)(b) The location and construction of.... other improvements for natural drainage and erosion control;**
- (6)(c) Design for...grading and drainage and other site features;**
- (6)(h) Production of...plans for grading, drainage, ...and related construction details;**

Activities NOT Considered the Practice of Landscape Architecture

ORS 671.321(1)(e)

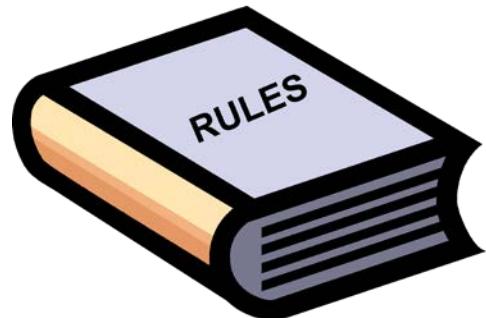
Engage in making plans or drawings for the selection, placement or use of plants or other site features unless the plans or drawings are for the purpose of providing construction details and specifications not otherwise exempted;

Activities NOT Considered the Practice of Landscape Architecture

ORS 671.321(1)(h)

Provide recommendations or written specifications for soil amendments or planting mediums if the recommendations or specifications are solely for purposes of plant installation and do not significantly alter the stability of the soil profile or surface drainage patterns.;

What's in the LA Rules for Grading/Drainage?



See OAR Chapter 804

Continuing Education Rules

OAR 804-025-0020(c) "Health, safety, and welfare (HSW)"

— any issue related to the practice of landscape architecture exemplified by the examination required for registration or that is otherwise related to safeguarding of public HSW as related to proper evaluation, planning, design, construction and utilization of the natural and built environment.

- ▶ HSW issues listed in this rule include erosion control methods, stormwater management and grading and drainage.
- ▶ This reflects the Board's view about the nexus between stormwater, water quality and grading/drainage work and LA responsibility to protect HSW.

Other Rule Provisions of Potential Interest to the SRAC Conversation

804-050-0005 (4) A Registered Landscape Architect must not knowingly prepare or stamp construction documents which are in violation of any codes, laws, or regulations.

804-050-0010 (7) A Registered Landscape Architect must perform professional services only when he or she is qualified by education, training, or experience in the specific areas involved.

804-050-0010 (8) A Registered Landscape Architect must only sign or seal drawings, specifications, reports, or other professional work for which the Registered Landscape Architect is in responsible charge.

804-050-0010 (9) A Registered Landscape Architect must apply technical knowledge and skills for clients in a manner that meets the standard of technical knowledge and skills applied by Registered Landscape Architects in good standing practicing in the State of Oregon.

What's in the LA Exam for Grading/Drainage?



Landscape Architect Registration Exam (LARE)

The national LARE is the Board's exam standard. The national exam is a multi-part exam designed to determine whether applicants for landscape architectural licensure possess sufficient knowledge, skills and abilities to provide services without endangering the health, safety and welfare of the public.

The LARE is currently made up of the following sections:

Section 1: Project and Construction Management

Section 2: Inventory and Analysis

Section 3: Design

Section 4: Grading, Drainage and Construction Documentation

LARE Section 4-Grading, Drainage & Construction Documentation

- ▶ **Site Preparation Plans: 20%**

Demolition, Existing Conditions, Soil Boring Location, Stormwater Pollution Prevention, Site Protection, & Mitigation Plans

- ▶ **General Plans and Details: 40%**

Layout, Grading and Drainage, Planting, Materials, and Site Infrastructure Plans, Construction Details, Sections, Elevations, Code Requirements, General Notes, Summary of Quantities

- ▶ **Specialty Plans: 25%**

Phasing, Irrigation, Lighting, Site Furnishings, Signage and Wayfinding, Traffic Control, Emergency Access, and Stormwater Management Plans

- ▶ **Specifications: 15%**

Develop Technical Specifications, Prepare Bid Forms/Schedules, Develop Project Manual/Front End Specifications



Next Meeting **2018**

- ▶ Take-a ways from today's meeting / input from Committee
- ▶ Focus on finalizing definitions and/or related guidance
- ▶ Check on readiness for Committee recommendation

Thank you!

The Watershed Approach To Landscaping

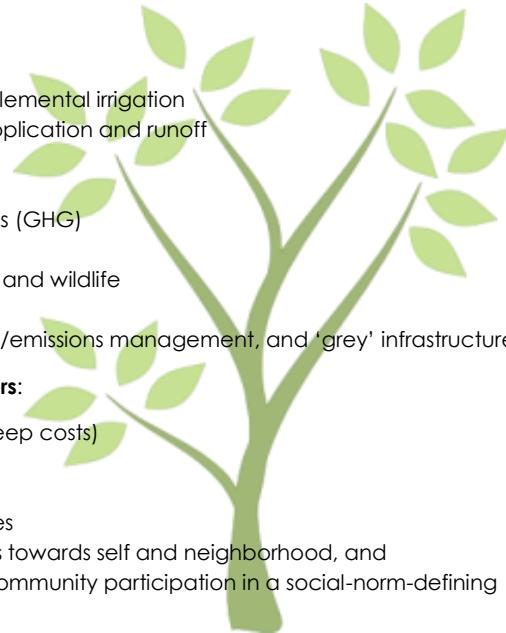
Introduction

The watershed approach is a natural approach to integrated and site-specific landscape design, construction, and maintenance that transcends water-use efficiency to address the related benefits of rainwater capture and use; reduction of pollution, green house gases, and green waste; energy and cost savings; and human and wildlife habitat improvements.

California's landscapes provide essential functions throughout our urban environment. They are where we recreate; capture and clean rainwater; recharge groundwater; shade and cool our buildings; enhance property values; provide wildlife habitat; create space to grow food locally; provide a sense of place and much more. The optimal design, installation, and management of these spaces is critical to enhancing California's quality of life while protecting our limited natural resources, capitalizing on associated economic benefits, and complying with existing and pending regulation.

The transition to the watershed approach will be a system-wide upgrade to the urban environment. In addition to reducing outdoor irrigation in these **critical drought times**, the transformation promotes multiple **environmental and economic benefits for municipalities**:

- Increased rainwater capture, storage, and use
- Decreased use of potable water for landscaping
- Decreased stormwater runoff, flooding, and stream erosion
- Increased opportunities for graywater as sparingly-used supplemental irrigation
- Significantly reduced or eliminated pesticide and fertilizer application and runoff
- Reduced "green waste" production
- Increased soil health and water retention capacity
- Reduced energy consumption and greenhouse gas emissions (GHG)
- Increased GHG capture and improved air quality
- Increased food production and habitat for beneficial insects and wildlife
- Restored native flora and fauna biodiversity
- Reduced public expenditures on water supply/quality, waste/emissions management, and 'grey' infrastructure



The transformation also promotes **benefits for individual property owners**:

- Increased cost savings (lower water bills and landscape upkeep costs)
- Reduced landscaping maintenance
- Healthier neighborhoods and communities
- Increased sense of place and appreciation for local resources
- Improved stewardship ethics and associated positive feelings towards self and neighborhood, and
- Increased shared values between neighbors via increased community participation in a social-norm-defining transformation.

Central Watershed Approach Components

The following list offers a cursory glance at three key facets of the watershed approach:

1) Living Soils

- Compost integration – improves soil health, productivity, water retention capacity, and carbon sequestration value
- Mulch top-layer – limits water lost to evaporation
- Fertilizer/pesticide reduction or elimination – allows critical soil microbes to reproduce and thrive, limits human and animal exposure to harmful chemicals entering landscapes, cuts landscape input costs
- Soil de-compaction – allows subsurface air and water flow, plant growth, and water storage

2) Water Conservation & Supply Augmentation

- Landscape permeability – cleans and absorbs water, recharges groundwater, limits need for supplemental irrigation
- Rainwater capture and retention – limits need for supplemental irrigation
- Graywater use – limits need for supplemental irrigation, reduces wastewater flow
- Minimized, efficient, and climate-sensitive supplemental irrigation – augments natural supply only when needed

3) Proper Plant Selection

- Right Plant, Right Place, Right Time – non-invasive, native/climate-appropriate plants selected for a specific climate and geography, spaced for mature size, and planted in the appropriate season help build soils, conserve water, and provide habitat

Transitioning to the watershed approach requires collaboration between government, non-profit, and private actors. The following are three example strategies that will help shape a state-wide landscaping transformation:

- 1) **Messaging & Branding** – unified, state-wide messaging campaign
- 2) **Regulations** – standards for turf replacement rebate programs that integrate the watershed approach
- 3) **Education & Training** – decision-maker education and landscape workforce development

Alignment with California Legislation

The watershed approach aligns closely with an array of state agency mandates to augment water supply, improve water quality/reduce runoff, reduce green waste, and sequester carbon. Specifically, the watershed approach appeals to the following legislative and policy mandates:

1. Water Conservation – Lead Agencies: State Water Resources Control Board, Department of Water Resources

Legislative Mandate – SB X7-7 20% urban water use reduction by 2020:

http://www.swrcb.ca.gov/water_issues/hot_topics/20x2020/docs/20x2020plan.pdf

Executive Order – 25% average urban water use reduction from 2013: <http://gov.ca.gov/home.php>

Over 50% of California urban water is used outdoors. The following four watershed approach landscaping principals can help the state achieve its water conservation goals: 1) enhanced soil water holding capacity; 2) on-site rainwater and graywater collection; 3) limited, efficient, supplemental irrigation; and 4)climate appropriate, water-conserving plants.

For example, soil scientists report that for every additional 1% of organic matter per acre of soil (introduced by way of compost), soil capacity to hold plant-available water increases by 16,500 gallons. The increased water holding capacity reduces irrigation requirements, as does the removal of inefficient, ineffective, and degraded irrigation systems. Similarly, climate appropriate plants, central to the watershed approach, require 50-80% less water than turf grass, limiting supplemental irrigation needs.

2. Water Quality Improvement – Lead Agencies: State Water Resources Control Board, Dept. of Pesticide Regulation

Legislative Mandate – Clean Water Act; attain and comply with MS4 Permits:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/municipal.shtml

Urban runoff is the number one source of ocean pollution. Water running off our properties picks up pollutants like fertilizers, pesticides, animal waste, and fine sediment, as well as oil, brake pad dust and exhaust from cars. Runoff also contributes to flooding and degradation of stream banks. Watershed approach landscaping principles minimize and clean would-be runoff by 1) maximizing on-site water retention and percolation through landscape topography and materials; and 2) eliminating excess supplemental irrigation. Decentralized yet prevalent reductions in urban landscape runoff can help municipalities remain in compliance with their MS4 permits and save significant money on costly stormwater management measures and processing facilities.

3. Green Waste Reduction – Lead Agency: CalRecycle

Legislative Mandate – AB 341 75% solid waste to be source reduced, recycled, or composted by 2020:

<http://www.calrecycle.ca.gov/75Percent/>

Of the projected 43 million tons of waste that will be produced in California in 2020, green waste, lumber, food, and organics comprise 44% of disposal activity. Components of each of these disposal sectors can be re-purposed into landscaping materials that support living soils by reducing surface compaction, increasing water absorption and retention, and by supplying soil nutrients. Thus, central pillars of the watershed approach (e.g., mulch and compost) can help the state re-direct conventional waste streams to capture multiple landscape benefits while achieving legislative goals.

4. Carbon Sequestration – Lead Agency: Air Resources Control Board

Legislative mandate – AB 32 reduce GHG emissions to 1990 levels by 2020: <http://www.arb.ca.gov/cc/ab32/ab32.htm>

Healthy, living urban landscapes serve as a Green House Gas (GHG) mitigation strategy. Plants and trees sequester (remove) carbon from the atmosphere as they grow, reducing atmospheric carbon dioxide and slowing the buildup of GHGs. Plants also store atmospheric carbon in soils by releasing carbon compounds in the form of simple sugars that feed soil microbes. The soil microbes use those simple sugars to grow and to set up a symbiotic relationships with other inhabitants of the soil. Each time those sugars are traded, they become more complex, with more carbon atoms bonded together. More complex carbon compounds are locked more permanently into the soil. Thus, many scientists look at soil carbon sequestration as a viable means of mitigating the impact of GHG emissions.

Supporting Resources & Programs

The following programs and resources come from and represent a small sampling of the many organizations, agencies, and businesses that support the watershed approach:

Awahnee Water Principles (Local Government Commission's Water Principles)

http://www.lgc.org/wordpress/docs/ahwahnee/ahwahnee_water_principles.pdf

California Native Plant Society <http://www.cnps.org/>

California Urban Water Conservation Council (Sustainable Landscaping – Market Transformation Framework)

<http://cuwcc.org/Portals/0/Document%20Library/Committees/Programmatic%20Committees/Landscape/Resources/Sustainable%20Landscaping%20Market%20Transformation%20Framework%20-%20DRAFT.pdf>

California Urban Water Conservation Council (New Norm Landscape Symposia Report)

<http://cuwcc.org/Portals/0/Document%20Library/Resources/Workshops/Landscape%20Symposia/CUWCC%20Landscape%20Symposia%20Report.pdf>

City of Santa Monica (9-year case study contrasting a conventional yard with a native garden)

<http://www.smgov.net/uploadedFiles/Departments/OSE/Categories/Landscape/garden-garden-2013.pdf>

EcoLandscape California (River-Friendly Landscaping Green Gardener Training Program)

<http://www.ecolandscape.org>

Friendly Brands (A series of "Friendly" themed brands promote similar sustainable water use and watershed approach landscaping values: [Bay](#)-, [California](#)-, [Creek](#)-, [Fish](#)-, [Garden](#)-, [Ocean](#)-, [River](#)-, [Russian River](#)-, [River \(Sacramento\)](#)- Friendly)

G3 - Green Gardens Group (Watershed Wise Landscape Programming & Training)

<http://www.greengardengroup.com/programs/>

Metropolitan Water District (BeWaterWise Demonstration Gardens) <http://www.bewaterwise.com/gardens2visit.html>

Surfrider Foundation's Ocean Friendly Gardens Program (CPR: Conservation, Permeability and Retention)

www.oceanfriendlygardens.org

TreePeople (Plant Native and Climate Appropriate) <http://www.treepeople.org/plant-native-and-climate-appropriate>

The following references support claims in the above section – 'Alignment with California Legislation.'

Water Supply

<http://www.fao.org/docrep/009/a0100e/a0100e08.htm>

<http://irrigatedag.wsu.edu/soil-organic-matter-boosts-water-holding-capacity/>

http://msue.anr.msu.edu/news/compost_increases_the_water_holding_capacity_of_droughty_soils

<http://www.allianceforwaterefficiency.org/WorkArea/DownloadAsset.aspx?id=9155>

http://www.ppic.org/content/pubs/cep/EP_706EHEP.pdf

Water Quality

http://water.epa.gov/polwaste/nps/urban_facts.cfm

http://www.pbs.org/newshour/bb/environment-jan-june13-pledge_03-14/

http://socalwater.org/images/SCWC_Stormwater_White_Paper_Case_Studies.Smaller.pdf

Green Waste Reduction

<http://compostingcouncil.org/admin/wp-content/uploads/2010/09/Compost-and-Its-Benefits.pdf>

<http://compostingcouncil.org/strive-for-5/>

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_053288.pdf

<http://www.calrecycle.ca.gov/75Percent/WhatItMeans.pdf>

Carbon Sequestration

<http://www.landlearnnsw.org.au/sustainability/climate-change/agriculture/crops-pastures/soil-carbon>

<http://www.kristinohlson.com/books/soil-will-save-us>

<http://www.soilfoodweb.com/Article.html>

<http://pubs.rsc.org/en/Content/ArticleLanding/2008/EE/b809492f#!divAbstract>

<http://www.thebluecarbonproject.com/the-problem-2/>