Landscape Architect Training

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

Meetinghouse Facilities Department

Overview

Welcome to landscape architect training for The Church of Jesus Christ of Latter-day Saints. Please complete this training prior to beginning work on a Church landscape project. If you have questions, please contact the architect, or contact David Wright, AEC landscape architect, at wrightds@ Churchof JesusChrist.org or 801-240-9478. Landscape architect training has two steps:

 Prework training. This consists of self-study and tasks to help you learn the essential Church-specific standards, resources, and tools you will use on the job. Plan to spend about one to two hours completing the prework training.

To complete the tasks, you need to know the meetinghouse style for the project you will be working on. If you don't have that information, please obtain it from the architect.

2. **E-learning Course.** After you complete the prework training, you will be provided a link to the e-learning course in which you practice using the Church's tools and resources and make decisions similar to those you will make on the job.

Please do not begin the e-learning course until you complete the prework training.

Plan to spend about 45 minutes completing the e-learning course.

After you successfully complete the prework and e-learning course, you are trained to perform Church landscape work. Completing this training does not relieve you of your professional duties. It is your responsibility as a landscape architect to use your landscape design expertise and your best professional judgment in designing landscape projects.

Thank you for your participation!

Step 1: Prework

You are asked to comply with the Church's unique landscaping needs and requirements. If this is your first project with the Church, the requirements are new to you. If you have worked on previous Church projects, you should still review the requirements because they might have changed.

We want to equip you with the resources and tools you need to successfully meet the Church's requirements as you complete a landscape project.

The tasks in this prework are intended to help you learn the essential design standards, methods, and online tools you will use to meet Church requirements and to design and oversee a successful landscape installation.

While it takes one to two hours of your time to complete this prework, it is intended to save time in the long run, and it gives you the foundation you need to move forward.

After you complete the following 12 tasks, you are prepared for Step 2: E-learning Course.

1. REVIEW ROLES AND RESPONSIBILITIES

Here are some Church-specific roles you should be familiar with:

- **Project manager (PM)**—responsible for the overall construction of a meetinghouse and its landscape.
- Facilities manager (FM)—responsible for the management and maintenance of a meeting-house.
- **FM group**—office staff, which includes the administrative assistant who supports the facilities manager.
- **Bishop**—ecclesiastical leader who presides over a single ward or branch congregation (the equivalent of a pastor in many other Christian denominations).
- **Stake president**—ecclesiastical leader who presides over a stake, which is organized from a group of contiguous wards or branches.

Your contribution as a member of the design team is important to the project's success. The design team consists of:

- Project manager
- Facilities manager
- Architect
- Landscape architect
- Civil engineer

2. REGISTER FOR AN LDS ACCOUNT

The LDS Account enables you to sign in to other necessary tools when directed. You do not need to be a member of the Church to register for an LDS Account.

Register for your LDS Account at https://ldsaccount.lds. org/ by clicking these links:

a. Create an Account

b. Register as a Member or Register as a Friend

You can note your username and password here for future reference:

Username

Password

3. BECOME FAMILIAR WITH THE AEC WEBSITE

Go to the AEC website at http://aec.ldschurch.org/aec/, and bookmark it in your browser. The website provides access to the guiding principles, instructions, processes, resources, and tools you need to succeed with the project.

You will frequently use the following three sections of the website. The prework tasks in this document pertain to the tools in these sections.

- Specifications:
 - Specifications documents
- Design Guidelines:
 - United States and Canada Design Guidelines
 - Topsoil Testing Report and Template
- Landscape Resources:
 - Landscape Architect Checklist
 - Eco-Regions Map
 - Eco-Region Specific Documents (Prototypical Drawings)
 - Interactive Church-Approved Plants
 - Common Landscape Detail Sheets
 - SMART Controller Planning and Installation Checklists
 - Training

Tip: The green AEC button in the upper-left corner on each page of the website takes you to the international site, which you will not use. To return to the resources and tools you will use, click the US/Canada Information link.

4. STUDY THE UNITED STATES AND CANADA DESIGN GUIDELINES

These guidelines represent the Church's design standards. Understanding and applying these standards is critical to the success of the project. To obtain the current design guidelines, contact David Wright, AEC landscape architect, at wrightds@ChurchofJesusChrist.org.

Review the introduction.

Note: While much of this training is focused on new meetinghouse landscapes, it also applies to replacement and improvement work, historic properties, Seminaries and Institutes projects, Welfare Department projects, mission offices projects, and additions.

Review the glossary.

Study Chapter 4: Landscape. This chapter is essential to help you understand the standards and guidelines that are unique to the Church for landscape design and construction. Please take the time to study this chapter so you have a strong foundation for the remaining prework tasks below and for your work on the project.

5. PRINT AND STUDY THE LANDSCAPE ARCHITECT CHECKLIST

The Landscape Architect Checklist identifies your most critical responsibilities throughout the project. Refer to it often, and use it as a guide throughout all phases of the project.

- a. Go to the AEC website: http://aec.ldschurch.org/aec/.
- b. Click Landscape Resources.
- c. Access the checklist under the heading Landscape Architect Checklist.

Print and study the checklist. Gain an understanding of the expectations.

6. DETERMINE THE ECO-REGION FOR THE PROJECT SITE

The interactive eco-regions map enables you to determine the geographic and environmental region (eco-region) for a project site. This is important because specific landscape style options and prototypical drawings are based on eco-regions.

- a. Go to the AEC website: http://aec.ldschurch.org/aec/.
- b. Click Landscape Resources.
- c. Click on the map under the heading Eco-Regions Map.

Determine the eco-region for your project and note it here for future reference:

Note: If your project site resides in one eco-region but is also very close to another eco-region, use your professional expertise to evaluate both eco-regions and select the eco-region you feel is most applicable.

7. STUDY THE PROTOTYPICAL DRAWINGS FOR THE PROJECT

The prototypical drawings are based on design element options for the specific eco-region. You will download the DWG file and adapt the design for the project location and conditions. For this task, review the PDF version of the drawings. To access the prototypical drawings:

- a. Go to the AEC website: http://aec.ldschurch.org/aec/.
- b. Click Landscape Resources.

- c. Under the section called Eco-Region Specific
 Documents and in the Meetinghouse Prototypical
 Drawings column, click the download button that
 corresponds with the project's eco-region.
- d. Click the PDF button for the project's meetinghouse style to download the PDF version.

Note: If you don't know the project's meetinghouse style, please get that information from the architect before proceeding.

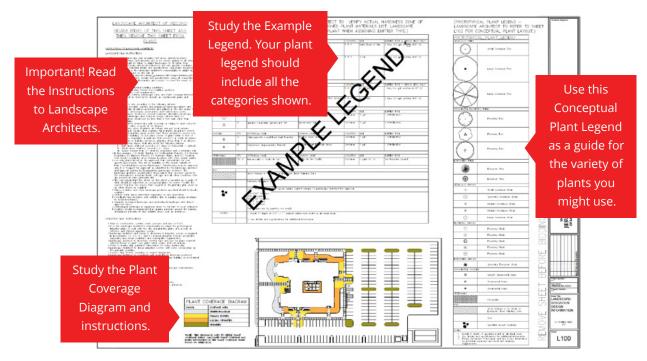
Below is an example of where to click for the 9.2 Southern Plains eco-region's prototypical drawings for an Independence 230 meetinghouse:

	Eco Region		Site Management Plan Template	Annual Service Calendar	Meetinghouse Prototypical Drawings		CES Prototypical Drawings	
1	.0	Artic Tundra	🗐 SMP-1.0	ASC-1.0	*			
5	5.0	Northeastern Forests	🗐 SMP-5.0	🗷 ASC-5.0	*			
6	5.0	Western Mountains	🗐 SMP-6.0	🛎 ASC-6.0	*		*	
7	7.0 We	West Coast Forests	🗐 SMP-7.0	ASC-7.0	*	Meetinghouse Prototypical Drawing Downloads		
8	3.1	Eastern Forests	🗐 SMP-8.1	🛎 ASC-8.1	*	9.2 Southern Plains Heritage 98 Heritage 09T MH		
8	3.2	Southeastern Forests	🗐 SMP-8.2	🛋 ASC-8.2	*			73 🌁
9	9.1	Northern Plains	🗐 SMP-9.1	🛎 ASC-9.1	- *	Heritage 09T SC	12 🦉	
9	9.2	Southern Plains	🗐 SMP-9.2	🛋 ASC-9.2	1) 🛓		ndence 90	12 2
1	0.1	Northern Cold Desert	🗐 SMP-10.1	🛎 ASC-10.1	*	Independence 230 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		2) 🔁 🛢
1	0.2	Southern Warm Desert	🗐 SMP-10.2	ASC-10.2	*			
1	1.0	Mediterranean California	🗐 SMP-11.0	🗷 ASC-11.0	*			
1	2.0	Southern Highlands	🗐 SMP-12.0	🖾 ASC-12.0	*			able instructions
1	3.0	Southwest Mountains	🗐 SMP-13.0	🗷 ASC-13.0	*			
1	4.0	Tropical Dry Forests	🗐 SMP-14.0	🛋 ASC-14.0	*			
1	5.0	Tropical Wet Forests	SMP-15.0	ASC-15.0	*			

Eco-Region Specific Documents

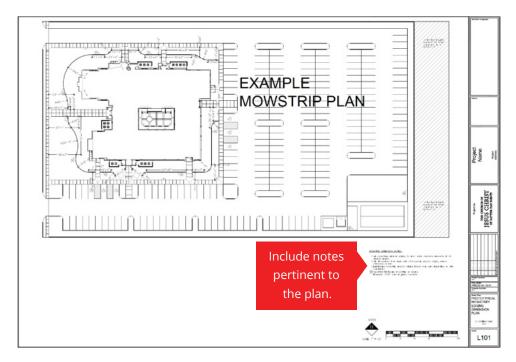
Open and study the PDF version of the prototypical drawings. Give particular attention to the following:

a. Sheet L100—Landscape/Irrigation Design Information



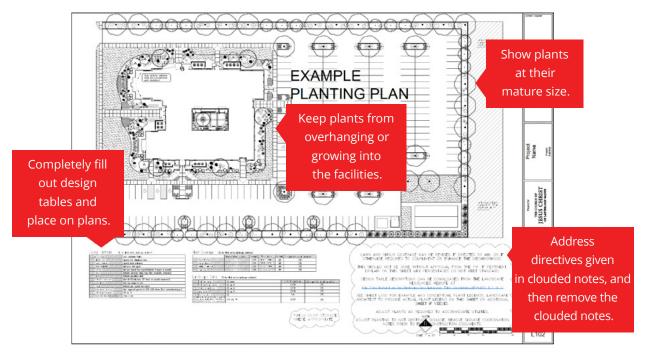
b. Sheet L101—Prototypical Mow Strip/Edging Dimension Plan

- The landscape contractor should install carefully placed and smooth-transitioning mow strips. Provide a layout to help accomplish this.
- When designing mow strips, terminate them at 90 degrees into adjacent concrete paving.



c. Sheet L102—Prototypical Landscape Plan

- Create a landscape plan using guidelines found on the AEC website and the instructions found on the Landscape/Irrigation Design Information sheet.
- The plan should comply with the five guiding principles found in the Architecture, Engineering, and Construction Design Guidelines (see number 3 above).

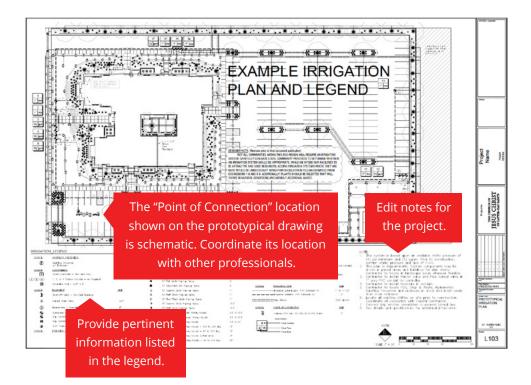


d. Sheet L103—Prototypical Irrigation Plan

- Determine if permanent irrigation system plans are necessary for the site. This decision is based on a discussion with the design team as well as consideration of climatic conditions and cultural practices. Do not propose irrigation systems for where they are not agreed upon and not necessary.
- Design an efficient irrigation system.
- Separate trees and shrubs located within planters on different irrigation zones.

- Coordinate the selection and proposed location of the SMART controller.
- The "Point of Connection" location shown on the prototypical drawing is schematic. Coordinate its location with other professionals so that it is placed in an unobtrusive location.

Note: Prototypical drawings are occasionally updated. Be sure to download and use the most current prototypical drawings found on the AEC website for your landscape project.



8. CREATE A CHURCH-APPROVED PLANT LIST

The interactive Church-approved plants online search tool is used to create a list of Church-approved plants to select from and use in construction documents. You can base your list on filters such as eco-region, USDA hardiness zone, soil composition preference, and more.

You can submit additional plants for approval if desired.

For this task, use the interactive Church-approved plants online search tool to create a list of Church-approved plants.

- a. Go to the AEC website: http://aec.ldschurch.org/aec/.
- b. Click Landscape Resources.
- c. Click Interactive Church-Approved Plants.

- d. If prompted, sign in with your LDS Account.
- e. In the tool, click Filters (at the far right).
- f. Select the correct filters for the project's eco-region and USDA hardiness zone, and then click the green Apply button (in the lower right).
- g. The results are listed by plant category. Click the arrow next to a category to reveal approved plants.
- Hover over a plant name to see plant details.
 Experiment with additional filters to create a Church-approved plant list. Become familiar with the tool.

Note: After you begin work on the project, you should acquire accurate information to base the plant list on. Use this task for practice.

Next, in the left menu, click **Submit a Plant**. Review the types of information that are requested to submit a new plant for approval.

9. STUDY THE COMMON LANDSCAPE DETAIL SHEETS

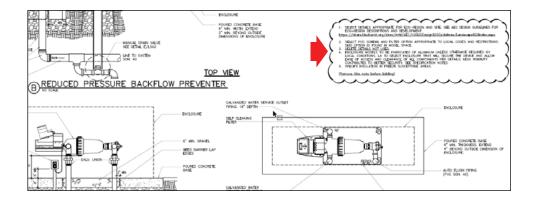
The common landscape detail sheets contain Churchspecific irrigation and planting detail drawings that you should download and use as you create construction documents. Please follow the specific instructions provided in the detail sheets.

- a. Go to the AEC website: http://aec.ldschurch.org/aec/.
- b. Click Landscape Resources.

c. Under the heading Common Landscape Detail Sheets, click the PDF button.

Open and study the PDF version of the detail sheets (L501–L506). Give particular attention to the instructions noted in clouds, for example:

Note: Detail sheets are regularly updated. Be sure to download and use the most current detail sheets found on the AEC website for your construction documents. You may have to supplement these details with your own if required.



10. STUDY THE SMART CONTROLLER CHECKLISTS

You will select the type of SMART controller for the site from the approved products found in the standard specifications. Provide the SMART controller checklist to the landscape contractor as part of the specification manual. The contractor will complete the checklist during installation to ensure it is correctly completed.

- a. Go to the AEC website: http://aec.ldschurch.org/aec/.
- b. Click Landscape Resources.
- Under the heading SMART Controller Planning and Installation Checklists, click Controller Link, Rain Master, and WeatherTRAK.

Study the different checklists. If desired, contact David Wright to view recorded SMART controller trainings.

11. ACCESS AND REVIEW THE TOPSOIL TESTING REPORT FORM

The Topsoil Testing Report is a Church-specific form that is provided to the testing laboratory to tabulate the soil-testing data. The form lists the Church's acceptable soil levels so you can compare them with the test data.

- a. Go to the AEC website: http://aec.ldschurch.org/aec/.
- b. Click Design Guidelines.
- c. Scroll all the way down, and under Landscape, click **Topsoil Testing Report** to review the PDF version.

Study the Topsoil Testing Report and give particular attention to the instructions provided on the form and the Acceptable Level(s) in the Soil Test Data section.

12. ACCESS THE STANDARD SPECIFICATIONS DOCUMENTS AND FAMILIARIZE YOURSELF WITH THEIR FORMAT

Standard specification documents are provided so that you can edit them for site-specific conditions. Use the specifications related to work on your project in Division 31: Earthwork and Division 32: Exterior Improvements. You will include the edited specifications with the construction documents. The landscape contractor relies on these specifications during construction.

- a. Go to the AEC website: http://aec.ldschurch.org/aec/.
- b. Click Specifications.
- c. Click New Meetinghouse.
- d. Scroll down to the division entitled Division 31: Earthwork and click **Expand this division . . .**
- e. Click the Word document for 32 8423 (Underground Sprinklers) under the column New Meetinghouse and Std.
- f. If prompted, enter the password **nephi** (use this password for all specification documents).

Open and study the downloaded document as an example of a specifications document.

Give particular attention to the instructions provided in red text.

Open and review these additional documents:

- 31 0501 31 1413
- 31 2213 31 2216
- 32 8466 32 9001
- 32 9120 32 9121
- 32 9122 32 9223
- 32 9300

Note: Specifications documents are occasionally updated. Be sure to download and edit the most current specifications documents found on the AEC website for your project.

YOU HAVE COMPLETED STEP 1: PREWORK

You should have a good foundation in the guidelines, resources, and tools required for a Church landscape project. Step 2: E-learning Course builds on this foundation.

Here is a Quick Reference Guide. It is a "cheat sheet" that lists all of the above resources and tools, their uses, and how to access them.

Step 2: E-learning Course

The prework prepared you for the e-learning course, where you will practice applying the Church's standards, tools, and resources and make decisions similar to those you will make on the job. The e-learning course emphasizes areas that present a continual challenge and potential for error in meeting the Church's requirements.

Please begin the e-learning course only after you have completed the prework training. Plan to spend 45–60 minutes completing the e-learning course.

- To access the e-learning course, go to http://broadcast.lds.org/elearning/mfd/landscape-architect2/ story_html5.html.
- 2. Complete the online course.
- 3. Important: At the end of the course, follow the instructions to receive course credit and have your name added to the Church's list of trained landscape architects.

Completion

Congratulations on completing the landscape architect training! After you complete the prework and e-learning course, you are trained to perform LDS Church landscape work. Remember, this does not relieve you of your professional duties. It is your responsibility as a landscape architect to use your landscape design expertise and best professional judgment in designing landscape projects.

We suggest the following steps:

- 1. Download the DWG files for the project's prototypical drawings and detail sheets.
- 2. Review the Landscape Architect Checklist, and give particular attention to the Preliminary Design Phase items that you will begin working on first.
- 3. With the architect, discuss your role in the project and next steps, such as:
 - Verifying the submission of the Topsoil Testing Report.
 - Visiting the project site and examining the conditions.
 - Assisting in the development of a proposed site plan.
 - Assisting in the location of utility lines, boxes, poles, and relevant appurtenances.
 - Assisting in setting proper grades and overall grading character.

Thank you for your participation!

