Architecture, Engineering, and Construction

Project Adaptation Guidelines United States and Canada

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

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This document replaces and supersedes the Standard Plan Change Boundaries dated 5 August 2014. All previous versions of that document as well as any previous guidance related to the Standard Plans Change Boundaries are obsolete.

This document is available for download from the AEC Website: <u>http://aec.ldschurch.org/aec</u>.

Contact the Architecture, Engineering, and Construction Division with questions or suggestions for improvement.

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Approved Meetinghouse Designs

Meetinghouse floor plans and exterior elevations have been approved by the Presiding Bishopric for use by North America Operations (NAO) areas for new construction. Following schematic approval, construction documents have been prepared by the Architecture, Engineering and Construction Division (AEC), working with the respective Area Meetinghouse Design Committees (AMDC), and specifically the Area Architecture and Engineering Manager (AEM) to establish materials, appearance and construction detail standards for each specific approved meetinghouse design.

Uniformity

Certain meetinghouse features are considered uniform and are required to accommodate the Church program. The Presiding Bishopric and MFD, as delegated by the Budget Appropriations Committee (BAC) have defined features to be included in all Church-built meetinghouse facilities, and have given specific direction regarding some elements of meetinghouse design and operation, which are listed herein.

Adaptation

The Project Manager and Project Architect (Principal Consultant) site adapt approved meetinghouse designs within the boundaries of these guidelines, under the direction of the Area Construction Manager (ACM/APM). Each area's AMDC determines the level of approval needed to make adaptations beyond what is contained in these Project Adaptation Guidelines.

Requests to site adapt those items prohibited by these Guidelines require AEC review and possibly Physical Facilities Advisory Committee (PFAC) approval.

Stake President

The Stake President selects from the pre-approved standard exterior and interior style options, standard furnishings packages and finish color schemes. The stake president may also select exterior wall finish colors (brick, EIFS, etc.), as indicated herein. Masonry colors or textures which will add cost over standard colors and textures should not be approved.

Project Architect and Consultants

The Project Architect and its consultants should adhere to the intent of the approved meetinghouse designs and specifications.

Some of the approved plans have been provided with localization options that help the project architect and its consultants address specific site considerations.

All interior finishes have been selected based on the color scheme selected for the project, except for the following, which should be selected by the project team: low contrast accent color on the rear rostrum wall, if desired; two options for field

and accent ceramic wall tile in restrooms; two color options for toilet partitions to coordinate with ceramic tile combination; and some drapery color options.

Agencies Having Jurisdiction (AHJ)

If local jurisdictions mandate changes to the approved plans, the Architect should notify the Project Manager, and they should resist such changes. The Project Manager is responsible for the resolution of such issues, and will involve legal counsel as necessary.

The Presiding Bishopric has mandated program and image features for meetinghouse projects. Image features include an appropriate meetinghouse image and a steeple (for Church-built meetinghouses). The Bishopric has designated AEC as the stewards regarding the Bishopric-established meetinghouse image and function guidelines. If significant changes to the exterior appearance of an approved plan design are required by a local jurisdiction, approval from the AEM and the Design and Facilities Support (DFS) Section of AEC are required, before specific design changes are proposed to the AHJ or commitments are made regarding local demands for design changes.

Approved plans are prepared to comply with the current International Building Code. If NAO, project architects or their consultants are aware of items in approved plans which do not comply with the International Building Code, they should make the AEM and DFS aware of such items of non-compliance so corrections can be made to the approved plans.

Value Managed Relationships (VMRs), National Contracts

VMRs are long-term, mutually advantageous relationships between the Church and manufacturers/suppliers to continually improve quality, cost and timeliness for goods and services used in construction and maintenance. VMRs are managed by the Purchasing Division under the direction of AEC.

VMR requirements are clearly defined in the approved specifications. VMRs add value through bulk purchasing and national pricing discounts while meeting quality standards of materials and installation.

The Church has also established National Contracts with certain manufacturers/ suppliers which extend beyond requirements of individual projects, such as extended and system (materials and labor) warrantees, not normally provided by manufacturers/ suppliers.

Areas may choose to use manufacturers/suppliers other than those with whom the Church has established VMR or National Contract relationships. However, before doing so they should consult with AEC and the Purchasing Division to verify that proposed alternates meet the quality standards, pricing, and warranty benefits derived from VMR/national contract relationships.

Exteriors

Approved plan documents have exterior styles that utilize materials that provide long life, are low maintenance, are reasonable cost, and which provide the image desired by the Presiding Bishopric

Exterior Walls

Type FBX brick and/or EIFS (Exterior Insulation and Finish System) finishes establish the cost and maintenance standard for exterior walls. Mineral-fiber cement siding is the siding standard, when used. Areas may choose to use other exterior materials, but they should not cost more, should not require more maintenance, and should meet the same appearance standards. Areas may alter the percentage of brick and/or EIFS finishes, making cost conscious decisions based on local pricing. Areas may alter design features and exterior details on individual projects. If exterior appearance will be altered significantly from the Bishopric-approved image, the DFS Section of AEC must review the proposed changes.

Windows and Storefronts

Color is to be white. The pattern on internal muntin bars should be followed for the approved plan style option selected.

Fascia, Soffit and Gables Ends

Color is to be white.

Gutters and Downspouts

Approved plans have dormers or gable ends at exterior entries to direct water, rain and snow away from exterior walkways, so gutters are not needed to protect exterior entrances. Areas may install gutters and downspouts based on climate and soil conditions.

Building Aprons

Building aprons should not be used unless required by the geotechnical evaluation report to protect moisture sensitive soils, or because of soil drainage properties, grades and climatic conditions.

Roofing

Asphalt roofing is normally the lowest initial cost roofing system. VMR manufacturers have been selected that provide materials that meet quality standards, trained and approved installers and extended system (materials and labor) warranties. Areas may elect to use concrete roofing tiles or metal tile shingles based on climatic conditions or where they are the predominant material for sloped roofs. Suppliers listed in the approved specifications provide materials that meet quality standards, with extended warranties.

Steeples

A steeple is one of the Presiding Bishopric-mandated image features for Churchbuilt meetinghouses. Color is to be white, without accent colors except for faux windows, which are to be black. Steeples are of aluminum or fiberglass. The design, size, height, and shape should not be changed on an approved plan. When replacing a steeple on an existing building, the AEM should provide the design to DFS for joint review and approval. If it is proposed that a steeple be added to a building which has not previously had one, DFS approval is required, prior to submittal to PFAC for review and approval.

Exterior Signage

The First Presidency and the Twelve have assigned the Correlation Department of the Church stewardship over the Church logo and have given specific guidelines for its use. The Correlation Department has indicated "Exterior meetinghouse signs identify a building as a sacred place of worship for The Church of Jesus Christ of Latter-day Saints. A meetinghouse sign is not intended to be a billboard or a directional sign to help people find the building. Rather, it serves as a dignified signature of the Church on the building. All meetinghouses should have an exterior sign with the Church logotype. While Church meetinghouses vary in style, location and type of structure, exterior signs should be consistent throughout the world. The Church logotype should never be recreated or modified in any way on a sign." The Church logotype plus 'Visitors Welcome' is the required format for meetinghouses in the U.S. and Canada. A stone sign, provided by selected suppliers who have been given the approved style and size template, is to be inset mounted on a forward-facing prominent wall of the building. Avoid placing trees and shrubs where they could limit the visibility of the sign when they have grown to mature height and density.

The Correlation Department, due to cost, risk of liability due to injuries to people who fall on signs, and risk of vandalism, discourage free-standing monument signs. However, they indicate "Where approved by the director for temporal affairs, a freestanding sign may be included on the site of an existing or new building, parallel to the main road (one sided). A freestanding monument sign does not replace an attached exterior meetinghouse sign. It may be used in addition to an exterior building-mounted sign when the following conditions are met:

- The building is more than 135 feet from the edge of the closest driving lane of the adjacent road, or the view of the building from the road is obstructed by landscaping, site features, adjacent buildings, or topography.
- There is minimal risk of liability due to pedestrian injuries caused by contact with the sign.
- Including the sign does not increase the risk of vandalism.
- Special permits can be obtained without undue expense.

When approval is given to construct a free-standing monument sign, the approved design prepared and provided by AEC should be used.

The Correlation Department has directed that "accent lighting of a meetinghouse building mounted or free-standing monument exterior sign is not approved."

The approved design for post-mounted signage for accessible parking is found in AEC's approved site/civil details. The details will often need to be site adapted to conform to local codes. On construction projects these signs are provided by the contractor, or they may be procured from local sign companies by the FM Group. Other signs around a meetinghouse, such as "no parking," "private property", etc. should be ordered from LDS eMarket as custom signs. From the Correlation Department: "The Environmental Graphics team, with the approval of the Meetinghouse Facilities Department, prepares the artwork for all Church signs and establishes the formats and materials used." MFD assistance with appropriate wording and format for exterior signage is provided by AEC at mfdsigns@ldschurch.org.

Interiors

Floor Plan

Approved plans have been created to meet the Church program requirements for the size of unit(s) anticipated to occupy the meetinghouse. Changes to Bishopricapproved floor plans should not be made by the NAO Areas. Should changes to the floor plan be necessary due to local jurisdiction requirements or local conditions, the ASPC and AEM should provide the proposed changes to AEC for review and approval before proceeding. AEC has been appointed as the stewards regarding Bishopric-established function guidelines, and will evaluate the potential effects of the changes on building function.

Areas may make the following changes, as necessary:

- In cold climates, convert a classroom to a coat room, or make other necessary plan adjustments, such as coat rack alcoves in corridors to provide adequate coat storage
- In cold climates, add entry vestibules. DFS should review proposed vestibule design to comment on potential effects to building function, and to prevent inappropriate exterior appearance.
- In hot climates, delete entry vestibules or coat rack alcoves
- Add sliding chalkboards, scripture cabinets, table storage and permanently mounted projection screens in joint use seminary or institute classroom.
- Delete or add clerk's office casework based on the number of occupying units

Areas should not make the following changes, without DFS review:

- Alter clerks' office design and details
- Change the number or layout of teaching areas by adding folding partitions or removing walls or folding partitions to combine rooms
- Add storage cabinets beyond those shown

- Change window sizes, shapes or specifications
- Add ornamental wood trim or paneling beyond that shown
- Change approved light fixture layouts or schedule
- Add or modify lighting for artwork
- Add offices for stake or ward counselors, priesthood leaders, patriarchs, or other Church leaders, or designate rooms as interview rooms
- Change chalkboards to markerboards other than those in offices, high council rooms, and shared-use seminary and institute classrooms

Interior Signage

Text for meetinghouse interior signs have been approved through Church councils. Orders should be limited to signs approved by the Correlation Department, and are found on LDS eMarket. Approved plans include interior signage layouts and schedules. Requests for exceptions for non-standard signs are to be referred to MFD at mfdsigns@ldschurch.org.

Building Systems

The Architect and its consultants should make site adapt changes to the approved plans as necessary to satisfy specific site, utilities, climate, code, zoning and AHJ requirements. Localization options to address certain predominant conditions are included in some approved plan documents.

Structural

Footing and foundation design is to be based upon code requirements and the recommendations of the geotechnical evaluation report. In some areas, conventional foundation systems will need to be replaced with deep foundation systems.

Structural systems are to be site adapted for the locally required environmental forces such as those from rain, snow, wind and seismic activity. Except for roof trusses and footings, experience has shown that generally little or no cost savings can be achieved by reducing the member sizes shown in the approved plans for smaller environmental loads.

Mechanical

Approved plans are designed with natural gas as the preferred fuel source. If natural gas is not available, the heat pump localization option should be considered. In all situations, the site adapt engineer is to obtain approval from the Project Manager for which localization option is used.

Site Development

Use the AEC (DFS) peer review process to help reduce site development costs. AEC (DFS) will review civil, landscaping, and irrigation plans during the schematic and design development phases to help prevent unnecessary site expenditures.

Design the site to meet an appearance standard that is complementary to the surrounding properties. Limit improvements to the developed portion of the site. Leave future building and parking expansion areas undeveloped with only minimal grading and landscaping except as required by the AHJ.

Parking

Base parking area size on the capacity needed for a specific approved plan, as well as jurisdictional requirements, except in urban areas where public transportation is available and few members travel by car. Utilizing data provided by the Membership and Statistical Department on unit demographics, a design parking range has been calculated for each approved plan, based on the design occupancy. This is shown in the *United States and Canada Approved Plans Planning Brochure*. The ranges provide adequate parking for each approved plan's maximum accommodated Sunday attendance. The ranges assume overlapping meeting schedules for buildings designed to house three units, when parking will be needed for two units meeting simultaneously. For buildings designed to hold two units overlapping is not considered. It is not cost effective to purchase additional land and construct additional parking stalls when only one unit will be meeting in the building at a time.

Design parking ranges for stake centers are based on full occupancy of the chapel and overflow seating in the cultural center for a stake conference. This provides more than adequate parking for regular Sunday use by the occupying units.

Areas may exceed the design parking range if additional parking is determined to be needed by including a parking strategy in the approved annual plan. The DTA can authorize up to 15% more parking than the upper limit of the design parking range for a specific project, but only for situations where best judgment regarding parking layout and the cost of construction and maintenance of additional parking area is less than the cost of landscape installation and maintenance.

In snow accumulation areas landscaped parking lot islands should not be included in designs unless required by the AHJ. The use of landscaped parking lot islands should be minimized as much as possible.

Landscape Planting and Irrigation

Responding to direction from the Presiding Bishopric, standard style options for planting and irrigation have been developed. The intent of the style options is to enhance the appearance of Church meetinghouse properties. The style options have been modified over time to respond to the cost of landscape development and the need to conserve water, while maintaining the desired appearance standards. Style options should be closely followed, but special care should be given to adapt them to fit within their neighborhoods. A range of lawn and shrub coverages are assigned to each eco-region. These can be modified when justified and proven appropriate for the site.

"Grass +" style options have higher lawn percentages than their base companion eco-region options. They are developed for humidity transitional areas where higher percentages of lawn may be more common. "Rural" style options have been developed for rural areas where a lesser level of development would be appropriate.

Angled sidewalks shown at main entries on some of the style options or *Planning Brochure* sample site plan drawings are not required, and may be removed, if desired.

Raised decorative planters are not approved.

Approved Civil/Site Details

Approved civil/site details for parking lots, sidewalks, curbs, curb ramps, gutters, driveways, catch basins, inlet boxes, light pole bases, dumpster and mechanical enclosures, exterior stairs and ramps, bicycle racks, flagpoles, fencing, storage buildings and other site elements are located on the AEC website. Do not change these approved civil/site details unless required by the AHJ. The details are to be site adapted by the project team.

Dumpster Enclosure

The dumpster enclosure size and location should be coordinated with the trash collection agency that will service the site. A chain link enclosure with slats will be least expensive. Details for both a chain link enclosure and a masonry wall enclosure are included in the approved civil/site details on the AEC website.

Mechanical Equipment Enclosures

A vinyl fence enclosure will be least expensive. Details for both a vinyl fence and a masonry wall enclosure are included in the approved site/civil details on the AEC website.

Fencing

Perimeter fencing should be provided when the meetinghouse site abuts development (optional when the local standard is to not have fencing), when fencing is needed to control pedestrian traffic, or when it is required by the AHJ.

Chain link fencing will usually be the least expensive. Plastic slats may be added when needed for screening. Other fence materials should be used only when required by the AHJ, in which case it should be of similar quality, material and cost as that in the surrounding area.

Snow Melt Cable or Piping

The use of snow melt cable or piping in concrete is an exception that requires prior approval by PFAC.

Exterior and Parking Area Lighting

Ornamental, seasonal, building accent lighting or floodlighting, or other special lighting or related power outlets are not allowed. By specific direction of the Church Correlation Department, lighting should not be installed to light the Church logo sign, whether it is mounted on the building or on a free-standing monument sign.

Lighting of the steeple is not included on the approved meetinghouse plans. It is expensive to install and maintain. Steeple lighting may be added to a new meetinghouse project as a DTA approved exception where such lighting is common practice for churches in the area and where the meetinghouse is not located adjacent to an LDS temple. Lighting is to comply with applicable exterior lighting ordinances and energy codes. If lighting is added, use AEC design, layout and control details. Adding steeple lighting to existing meetinghouses is not approved.

Flagpole

If requested by the Stake President, a flagpole may be installed as part of a new meetinghouse project. It should be placed in a front lawn area and should not require additional concrete walks. Use the approved civil/site details developed by AEC. These details include a pole mounted light, if the flag will be left posted at night, which can be deleted from the details if not needed. Ground, separate pole, or building mounted flagpole lighting is not approved.

Storage Building

AEC has provided approved drawings on the AEC website for storage buildings. For full-size (three ward) meetinghouses and stake centers a 12 foot by 14-foot building with three rooms for ward camping or other storage and one room for FM maintenance storage should be provided as part of a new construction project, if needed. For smaller meetinghouses, a 10-foot by 12-foot building with two rooms for unit storage and one for FM maintenance storage should be provided, if needed. Areas may modify exterior wall materials to match meetinghouse materials and appearance.