OFFICE OF THE STATE ARCHITECT STATE BUILDINGS PROGRAM POLICIES AND PROCEDURES

CODE COMPLIANCE PLAN REVIEW PROCEDURES

- 1. All construction for state agencies on state-owned or state leased-purchased properties or facilities are to submit design documents for code compliance plan reviews to the state's code review Consultants or State Buildings Program (SBP) approved agency building official. If a code review Consultant determines that code review is not required, provide an email documenting that fact to be submitted with Exhibit L1. If a state agency leases space in an area where local building codes may not apply, the agency may also follow this process. For a listing of projects that do not require code review, refer to International Building Code section 105.2 and 105.2.2.
- 2. Upon selection of an Architect/Engineer, a Plan Review Authorization (SBP-017) should be prepared and delivered to the selected code review Consultant. This authorization indicates the project valuation and the review fee authorized. With this authorization, agency shall provide an intended submittal schedule. Reviews for projects submitted to the code review Consultant without a Plan Review Authorization (SBP-017) will not commence until the Consultant receives the prepared authorization form.
- Architect/Engineer shall prepare the project Schematic Design (SD), Design Development (DD), and Construction Document (CD) submittals in accordance with the attached checklists and submit to the code review Consultant. On projects of limited scope where a combined SD/DD or SD/DD/CD submittal is considered appropriate, please consult with the code review Consultant prior to submittal.
- 4. The code review Consultant will provide a written list of comments addressing issues noted in the review. A response shall be prepared and submitted to the code review Consultant addressing the deficiencies and questions noted in the review. Specifically, state the Consultant's comment followed by the Architect/Engineer's response chronologically. At the Construction Document review, a response shall be prepared and submitted to the code review Consultant within 30 days or a mutually agreed upon timeframe addressing the deficiencies and questions noted in the review.
- 5. Once all code issues have been satisfactorily addressed, the code review Consultant will issue a Compliance Notice to the submitting agency along with a listing of required inspections and will send a copy to State Buildings Program indicating that the documents appear to be in compliance with code requirements and are appropriate for bidding. On CM/GC projects, a similar process is to be followed through schematic design; however, design development code compliance reviews must be completed on DD documents prior to establishing and accepting a GMP and the Compliance Notice must be issued on CD documents prior to bidding each bid package. If the Compliance Notice is contingent on required modifications to the documents for either lump sum or CM/GC projects, the agency must certify to SBP that the modifications have been incorporated into the documents at the issuance of the Notice to Proceed (SBP-6.26 or SBP-7.26).
- 6. Review of responses and subsequent preparation of a Compliance Notice received more than 30 days than the mutually agreed upon date, may result in additional services as determined by State Buildings Program. (Note: Withholding all payment for plan review services until a Compliance Notice is issued is not permitted unless the code review Consultant is negligent in providing a timely review of responses submitted within the 30 day or mutually agreed upon timeframe. All disputes concerning delays and payments should be brought to SBP's attention.)
- 7. Meetings between the agency and/or Architect/Engineer and the code review Consultant may be requested at any time. Such meetings will be considered additional services beyond the authorized

fee per the discretion of the code review Consultant, at the contracted rates, with a pre-approved top set number encumbered through an approved amendment to the authorization.

8. Communication Policy

- a. All communication to the code review Consultant, verbal and written, shall be directed through the assigned reviewer for the code review Consultant. The reviewer will be assigned at the time of initial submittal and all participants will be notified who this individual is.
- b. All communications from the Architect/Engineer shall be directed through an assigned individual in the Architect/Engineer's office. The Architect/Engineer should indicate who the assigned individual will be with the initial submittal.
- c. The code review Consultant may discuss code issues in meetings and/or on the phone. However, it should be understood that these are discussions only and should not be construed to establish the final opinion of the code review Consultant. The codes are complex documents and matters of interpretation and application often require extensive study to establish the code review Consultant's opinions. Only written comments provided by the code review Consultant shall be considered final opinions.
- d. Written review comments will be provided based upon the code review Consultant's reviews of submittals. The code review Consultant will provide detailed reviews of the documents based upon the code review Consultant's understanding of the material presented. It should be noted that an item of code compliance that is not noted with a review and is later discovered would be incorporated with future submittal reviews. Progress submittal reviews should not be considered approved sign-offs of the reviewed documents. The code review Consultant's reviews will not alleviate the Architect/Engineer's responsibility to provide Construction Documents in full compliance with all applicable codes.
- 9. The code review Consultant will provide reviews in a timely manner. Projects of unusual character or complexity may require more extensive study of various issues and, therefore, more time. The code review Consultant will not compromise the accuracy of reviews to meet a schedule. If schedules dictate, the code review Consultant will provide partial reviews in order to facilitate the design process and supplemental reviews may be provided as appropriate. Submittals from the Architect/Engineer should include detailed delineation in regards to the intended code approach in order to expedite the review process. All submittals shall include the information outlined in the State Buildings Program attached checklists for the appropriate phase of submittal and scope of the project.
- Request to Change Application of Certain Provisions of the Code (See Section 1.B of SBP Building Code Compliance policy for detailed information on requests for alternative methods, modifications, appeals, and amendments.)
 - a. Any variations from basic code compliance shall be clearly documented. Alternative or equivalent methods or materials shall be submitted to the code review Consultant or approved agency building code official for review. The code review Consultant will issue a written opinion of compliance and has the authority to accept, reject or forward the equivalency to State Buildings Program for action. Written opinions for equivalency may be considered additional services and may be billed on an hourly basis at the contracted rates with a pre-approved top set number encumbered through an approved amendment to the authorization.
 - b. Modifications from code requirements may be requested from State Buildings Program or approved agency building code official. SBP may request the Agency to get an opinion on the modification request from the code review Consultant who will issue a written opinion. Written opinions for modification requests may be considered additional services and may be billed on an hourly basis at the contracted rates with a pre-approved top set number encumbered through an approved amendment to the authorization.

Code Review Checklist For Schematic Design Submittal

The following information shall be included in Schematic Design submittal documents for code review purposes. Plans shall include minimum overall dimensions and shall be of sufficient clarity to indicate schematically the location, nature and extent of the proposed work. A title sheet and additional sheets as necessary shall be included and contain the following information:

1. **GENERAL**:

- □ An outline of submittal requirements as required by the state contract for A/E design services on the project.
- A schematic table of contents listing drawings anticipated to be included in the construction document submittal package.
- Provide an outline of anticipated hazardous materials to be used, stored and probable locations for use and storage.
- □ Schematic code compliance plan. (See attached example)
- □ A key plan for additions and renovations indicating the relationship of the project area to the existing building(s).

2. BUILDING CLASSIFICATION:

- A. Occupancy Classification: Compute the floor area and occupant load of the building or portion(s) thereof. See section 1002 and Table 1004.1.2. Indicate the occupancy group(s) which the use of the building or portion(s) thereof most nearly resembles. See sections 301, 303.1, 304.1, 305.1, 306.1, 307.1, 308.1, 309.1, 310.1, 311.1, and 312.1. See section 302 for buildings with mixed occupants and establish if it is to be a separated use or non-separated use. Demonstrate by drawing and/or narrative how the building will conform to the occupancy requirements in Section 303 through 312.
- B. Type of Construction: Indicate the type of construction proposed for the building. Indicate the building materials proposed and the fire resistance of the parts of the building. See Chapter 6. Demonstrate by drawing and/or narrative how the building will conform to the type of construction requirements in Chapter 6. Indicate if the building is to be fully, partially or non-fire sprinklered.
- □ C. Location on Property: Indicate the location of the building on the site and clearances to property lines and/or building on a plot plan. See Tables 601, 602, and 704.8 for fire resistance of exterior walls and opening protection. See Section 503.
- D. Allowable Floor Area: Indicate the proposed floor area and calculate the allowable floor area for each occupancy in the building. See Table 503 for basic allowable floor area for each occupancy group and type of construction. See Section 506 and 507 for allowable increases based in location on property and installation of an approved automatic fire sprinkler system. See Section 504.2 for allowable floor area of multi-story buildings. Demonstrate by drawing and/or narrative the total allowable and actual proposed floor area.
- □ E. Height and Number of Stories: Indicate the height of the building and the number of stories, Section 502.1. See Table 503 for the maximum height and number of stories permitted based on occupancy group and type of construction. See Section 504.2 for

allowable story increased based on the installation of an approved automatic fire-sprinkler system. Include the allowable and proposed height and number of stories in the narrative.

- 1. Provide a schematic exiting design indicating how exiting from all portions of the building will conform to the requirements of IBC Chapter 10. Indicate proposed occupant load and calculate required exit widths. Indicate proposed rated corridors, stair enclosures, exit passageways, horizontal exits, etc.
- 2. Demonstrate how the building will conform with other applicable detailed code regulations in Chapters 4, 7 through 11, 14, 15, 24 through 26, and 30 through 33 by drawing and/or narrative.
- 3. In most cases, renovation/addition projects require all the previously requested information, in addition to the following:
 - a. Square footage and locations of areas to be renovated.
 - b. Square footage and occupancy classifications and uses of existing spaces not to be renovated.
 - c. Details of investigations necessary to determine the Type of Construction of the existing building and types and locations of fire resistive construction such as:
 - Area Separation Walls
 - Vertical and Horizontal Occupancy Separations
 - Horizontal Exits
 - Tenant Separations
 - Rated Corridor Construction
 - d. Overall floor plants indicating how exiting from renovated areas interface with all other adjacent areas.
 - * Note: Verification of required opening protection in fire resistive construction should also be noted.
- □ **F. Structural Analysis:** Provide sketches and descriptions of proposed structural systems.
- □ **G. Building Systems:** Provide sketches and descriptions of plumbing, mechanical and electrical systems.
- □ H. Building Materials: Provide an outline of proposed construction materials.

Code Review Checklist For Design Development Submittal

The following information should be included in Design Development submittal documents for code review purposes. Plans should include overall dimensions, drawn to scale, and should be of sufficient clarity to indicate fully the development of the project's location, nature and extent of the work proposed.

- 1. Provide the code review SD submittal <u>building classification</u> information and code compliance plan with changes highlighted.
- 2. Provide Design Development drawings indicating, at a minimum, the following:

□ A. Site Plan

Show property lines, streets, roads, sidewalks, curbs, curb cuts, building location, future additions, existing buildings, driveways, parking lot layout, walks, steps, ramps, fences, gates and walls. Show north arrow. Provide dimensions where yard area increases are proposed and where exterior wall/opening protection may be required.

□ B. Floor Plans

Dimensions: Overall and additional dimensions, as applicable. Show north arrow. Rooms: Room names and numbers, and cross references to enlarged plans (as applicable)

Floors: Floor elevations, ramps, stairs.

Walls: Indicate existing and new walls. Show fire rated corridors, occupancy separations, area separation, shaft enclosures, etc.

Doors: Door swings.

Windows: Indicate fire and human impact labeled assemblies.

Toilet Rooms: Plumbing fixtures, stalls, and cross references to enlarged plans (as applicable)

Stairs: Dimension of stairwell, number of risers and treads.

Miscellaneous Items: Drinking fountains, folding partitions, and elevators.

□ C. Roof Plan

Show roof slopes, crickets and skylights. Show drainage to roof drains, overflow drains, scuppers, etc.

□ D. Exterior Elevations

Show floor elevations, finish grades and vertical dimensions. Show roof slope, door and window locations, indicate all materials.

E. Building Sections

Show vertical dimensions relating to floor, ceiling, and roof height. Note and indicate all materials and proposed listed assemblies for fire rated construction.

□ F. Reflected Ceiling Plan

Indicate ceiling materials. Show proposed ceiling layout.

G. Enlarged Floor Plan(s) (as appropriate)

Toilet Room Plans: Show plumbing fixtures, stall layout and handicap accessibility. Verify plumbing fixture count with code requirements.

Kitchens: Show kitchen equipment layout.

□ H. Schedules

Develop outlines for doors, windows and associated frames.

□ I. Structural Notes

Outline to include:

Live Loads: Floor, stairs, corridors, roof, snow, earthquake and wind.

Dead Loads: Material weight, mechanical and electrical weight, wet-pipe or dry-pipe

fire sprinkler system, and soil bearing pressure.

Material Strength: Concrete, masonry, steel and wood. Foundation design based on Soils Report.

□ J. Structural Schematics

Provide foundation plan and structural plan that include floor, roof, and wall construction.

□ K. Mechanical Schematics

Show HVAC system layout.

Show fuel-fired boiler equipment location.

Show gas service location.

Show kitchen exhaust hood location.

Show smoke control system operation narrative/schematic, as applicable.

L. Plumbing Schematics

Show water and gas service connections.

Plumbing Fixtures: Show water closets, urinals, lavatories and drinking fountains. Roof Drainage: Show roof drain leader sizes, and overflow drains, etc., as appropriate.

□ M. Electrical Schematics

Show electrical service and electrical panel location(s).

Show light fixtures layout.

□ N. Specification Outline

Describe structural, mechanical and electrical systems including fire protection.

Establish specification sections for principle materials and finishes.

3. Remodel/addition projects should additionally indicate interface with existing conditions, and limits of work within the existing building.

Code Review Checklist for Construction Document Submittal

The following information should be included in Construction Document submittal for code review purposes. Plans should be fully dimensioned and drawn to scale and should be of sufficient clarity to indicate the precise location, nature and extent of the work proposed.

- 1. Provide the code review DD submittal <u>building classification</u> information and code compliance plan with changes highlighted.
- 2. Provide an electronic (pdf) version of the construction documents as well as two (2) sets of Construction Documents indicating, at a minimum, the following:

□ A. Title Sheet

- Table of Contents
- Names of Architect, Engineers and Consultants
- Building Code Analysis (see Schematic Design submittal requirements)
- Note Type of Work:
 - 1) New Building
 - 2) Building Addition
 - 3) Alteration/Renovation/Tenant Finish
- Code Compliance Plan (example: Attachment A)
- Data Point Connection Chart, if applicable (example: Attachment B)
- Vicinity Map
- Identify types and provide amounts and locations of all hazardous materials intended to be stored or used and the type of use as indicated by Table 307.7(1) and 307.7(2). Quantities of all hazardous materials are required to be identified at all locations. List actual quantities and compare to exempt amounts as provided for in Tables 307.7(1) and 307.7(2). Note: Projects with extensive quantities of hazardous materials will be required to submit a Hazardous Materials Management Plan.

□ B. Site Plan

Property lines, street names, scale, north arrow

Building location, setbacks, finish floor elevation, dimensions

Contours: Existing and new grades

Existing and new paving, parking lot plan

Sidewalks, steps, curbs, curb cuts and drives

Fences, gates, walls and retaining walls

Existing structures, trees and shrubs to remain or to be removed

New Landscaping: Trees, shrubs, ground cover

Utilities: New and existing

Site Details: Handicap curb ramps, signage, etc.

Handicap Accessible Routes

□ C. Floor Plan(s)

Dimensions: Overall, building break, grid lines, room and opening dimensions, north

arrow

Rooms: Room names and numbers, and cross reference to enlarged plans

Floors: Floor elevations, change in materials, ramps, stairs

Walls: Indicate existing and new walls, wall types, material and fire rated assemblies

Doors: Door swing and number Windows: Indicate mullions

Toilet Rooms: Plumbing fixtures, stalls, floor drains, and cross reference to enlarged plans

Stairs: Dimension of stairwell, show traffic pattern, number of risers and treads, cross reference to stair details

Miscellaneous Items: Fire extinguisher cabinets, access doors, drinking fountains, folding partitions, ladders, lockers, shelving, railings, guardrails, and elevators Alterations: Existing opening to be infilled and new openings to be cut

□ D. Roof Plan

Materials: Type of roofing

Drainage: Roof drains, overflow drains, scuppers, gutters, leaders

Roof pitch to drains showing high point and low point

Crickets, skylights, vents, fans, mechanical equipment, roof access

Miscellaneous: Roof pavers, ladders, splash blocks, ventilation of roof spaces, and expansion joints

□ E. Exterior Elevations

Materials: Type of exterior finish

Windows and Doors: Provide window and door openings, dimension height of opening, indicate window and door type

Dimensions: Grid lines, vertical dimensions, floor levels, grade elevations Miscellaneous: Ladders, louvers, railings, gutters and downspouts

□ F. Building Sections

Dimensions: Vertical dimensions relating to floor, ceiling, roof, top of steel Provide grid lines and cross reference to floor plans

Materials: Note and indicate material as well as listed fire rated assemblies

☐ G. Reflected Ceiling Plan

Provide ceiling construction. Show ceiling breaks, or change in height Show ceiling pattern, diffusers, light fixtures, exit signage and access panels

☐ H. Enlarged Floor Plan(s)

Toilet Room Plans: Plumbing fixtures, stall layout, and handicap accessibility Verify plumbing fixture count with code requirements.

Kitchens: Kitchen equipment layout

□ I. Interior Elevations

Toilet Room Elevations: Plumbing fixture heights and handicap accessibility Indicate wall finish materials

□ J. Schedules

Room Finish Schedule: Show interior finishes

Door Schedule: Door types, sizes and fire rating, door hardware Window Schedule: Window types, frames, labels, glazing and sizes

□ K. Architectural Details

Stairs: Riser and tread dimensions, headroom clearance, and handrail details and attachment details

Guardrails: Height and distance between intermediate rails and attachment details Ramps: Slope and length and handrails

Wall Types: Fire rated construction, corridor walls, shaft walls, area separation walls, occupancy separation walls. Indicate listed assemblies for fire rated construction. Specify fire penetration sealants at rated walls.

□ L. Structural Notes

Live Loads: Floors, stairs, corridors, roof, snow, earthquake and wind

Dead Loads: Material weight, mechanical and electrical weight, wet-pipe or dry-pipe fire sprinkler system, and soil bearing pressure

Material Strength: Concrete, masonry, steel and wood

Foundation design based on Soils Report. Provide one (1) copy of the Soils/Geotechnical Report.

□ M. Structural Plans

Provide Foundation Plan and Structural Framing Plans that include floor, roof, and wall construction

- N. Structural Details (as required)
- □ O. Structural Calculations (one set)

□ P. Mechanical Plans

Show HVAC system layout

Show fire damper and fire/smoke damper locations, location of fuel-fired equipment, including type and size of flues, BTUH input, gas pipe sizes

Provide kitchen exhaust hood size/fire protection, smoke control systems, as applicable

□ Q. Plumbing Plans

Storm sewer, sanitary sewer, water, gas, fire hydrant, catch basin locations

Water and gas connections

Plumbing Fixtures: Water closets, urinals, lavatories, and drinking fountains

Roof Drainage: Roof drain, overflow drain, scuppers, and leader sizes and locations

Fire sprinkler system and standpipe location and main connections

List kitchen equipment

Sand traps, grease traps, etc.

Plumbing isometrics

□ R. Electrical Plans

Service and distribution equipment location: Electrical service, transformer, electrical meter and panel location

Exit sign locations, light fixtures layout and emergency lighting

Electrical outlets and circuits

Fire alarm/detection system

Light fixture schedule

Panelboard circuit schedule/calculations

One-line diagram

□ S. Specifications

Describe structural, mechanical and electrical systems

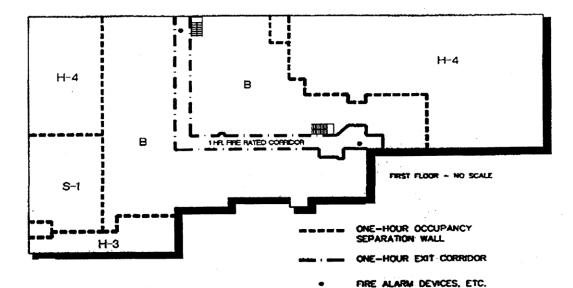
Complete specification sections for principal materials and finishes

Provide statement of special inspections required

3. Remodel/addition projects should additionally indicate interface with existing conditions and limits of work within the existing building.

(ATTACHMENT A)

CODE COMPLIANCE PLAN (EXAMPLE)



STAIRS

