FINAL STATEMENT OF REASONS FOR PROPOSED BUILDING STANDARDS OF THE DIVISION OF THE STATE ARCHITECT (DSA-SS AND DSA-SS/CC) REGARDING THE 2022 CALIFORNIA BUILDING CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2

(DSA-SS/CC 05/21)

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a Final Statement of Reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

UPDATES TO THE INITIAL STATEMENT OF REASONS:

Government Code Section 11346.9(a)(1) requires an update of the information contained in the Initial Statement of Reasons. If the update identifies any data or any technical, theoretical or empirical study, report, or similar document on which the state agency is relying that was not identified in the Initial Statement of Reasons, the state agency shall comply with Government Code Section 11347.1.

The Division of the State Architect is making the following changes to the Initial Statement of Reasons for the proposed actions associated with this rulemaking.

Item 8

Chapter 18A SOILS AND FOUNDATIONS, Section 1812A EARTH RETAINING SHORING.

Section 1812A.7: See Item 8 in OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S) section below. DSA has updated the Final Express Terms to match the Express Terms document authored by OSHPD.

Item 10 Chapter 19A CONCRETE, Section 1901A GENERAL.

Section 1901A.2: See Item 10 in OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S) section below. DSA has updated the Final Express Terms to match the Express Terms document authored by OSHPD.

CHAPTER 21 MASONRY, Section 2115 ADDITIONAL REQUIREMENTS FOR COMMUNITY COLLEGES [DSA-SS/CC]

Sections 2115.5-2115.6, 2115.7 and 2115.9: See Item 12 in OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S) section below.

DSA has updated the Final Express Terms in order to align the language in 2115.5-2115.6, 2115.7 and 2115.9 with what DSA and OSHPD are proposing for 2104A.3, 2105A.2 and 2106A.1 [DSA-SS, OSHPD 1 & 4] and what OSHPD is proposing for 2104.3, 2105.2 and 2106.1 [OSHPD 1R, 2 & 5].

Section 2115.8.2: See Item 12 in OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S) section below.

Proposal to change 2000 to 1500 in Exception 1 has been withdrawn; DSA has updated the Final Express Terms to reflect this withdrawal.

Item 13 CHAPTER 21A MASONRY, Section 2105A QUALITY ASSURANCE

Sections 2105A.2: Upon receipt of 45-day comment, it was determined that the initially-proposed language reducing the minimum design compressive strength from 2000 psi to 1500 psi to match the TMS 402/602 requirements simultaneously reduced the limit above which masonry prism testing is required. This would represent a change from the requirements in the 2019 CBC and was not the intent of the initially-proposed language. In response, both DSA and OSHPD updated the Final Express Terms to align the testing requirement with the existing amendment in the 2019 CBC while at the same time maintaining alignment with the TMS 402/602 regarding minimum design compressive strength

The word "Section" is deleted as it refers to a previous section that is a proposed deletion; editorial change.

Section 2105A.4: See Item 13 in OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S) section below.

Proposal to change 2000 to 1500 in Exception 1 has been withdrawn; DSA has updated the Final Express Terms to reflect this withdrawal.

Chapter 35 REFERENCED STANDARDS

Upon receipt of 45-day comment, DSA concurs to adopt newer editions for several referenced standards in Chapter 35 in order to align with OSHPD. As such, DSA has updated the Final Express Terms to reflect the revised editions of referenced standards to match the Express Terms document authored by OSHPD.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

Pursuant to Government Code Section 11346.9(a)(2), if the determination as to whether the proposed action would impose a mandate, the agency shall state whether the mandate is reimbursable pursuant to Part 7 of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the finding(s).

The Division of the State Architect has determined that the proposed regulatory action WOULD NOT impose a mandate on local agencies or school districts.

OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S).

Government Code Section 11346.9(a)(3) requires a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and an explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the action, or reasons for making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group.

Item 4

Chapter 15, Sections 1507.16.6 and 1507.17.5 Material standards.

Commenter(s) and Recommendation (if applicable):

Benjamin Davis, California Solar & Storage Association; Joseph Cain, Solar Energy Industries Association: Commenters proposed to correct "...mistakes in the IBC model code in Chapter 15":

Agency Response:

DSA will not be taking action during this rulemaking cycle in response to this comment. Errata for the IBC should be addressed with ICC, not via the rulemaking process for the CBC. In addition, the sections identified for proposed revision (1507.16.6 and 1507.17.5) were not included in DSA's 45 day Express Terms.

Chapter 15, Section 1511.9 Photovoltaic (PV) panel systems.

Commenter(s) and Recommendation (if applicable):

Benjamin Davis, California Solar & Storage Association; Joseph Cain, Solar Energy Industries Association recommended complete strikeout of the entire section, noting redundancy with 3111.3.1 and a desire to remove all structural requirements for PV from Chapter 15 to mirror efforts undertaken with the IBC this cycle.

Agency Response:

DSA agrees with the recommendation to correct the reference to UL 1703 instead of the erroneous reference to UL 7103; this correction was reflected in our 45 day Express Terms and is included in our Final Express Terms.

Regarding the desire to remove all structural requirements for PV from Chapter 15, DSA is willing to study this, for the reasons submitted by the commenters. However, the turnaround between receipt of 45-day comment and when the final 15-day comment period occurred did not permit sufficient time for this study and any resultant changes. We cannot simply delete Section 1511.9 as recommended; there are other sections of the code as well as DSA publications which reference and rely on the information in 1511.9.1. 1511.9.1 is an important continued amendment for DSA. Therefore, we must necessarily confirm that all aspects of the language in 1511.9.1 are addressed elsewhere before removing the language from Chapter 15. Section 3111.3.1 does not include all aspects covered by 1511.9.1 so it is not completely redundant to Section 1511.9.1.

DSA intends to study this proposal for consideration of action during the intervening code cycle. Therefore, this item continues unchanged from the 45 day Express Terms version.

Item 4

Chapter 15, Section 1512 Photovoltaic Panels and Modules.

Commenter(s) and Recommendation (if applicable):

Benjamin Davis, California Solar & Storage Association; Joseph Cain, Solar Energy Industries Association: Commenters proposed to:

"Strike out Section 1512, Photovoltaic Panels and Modules as it is redundant with Section 3111.3 (This section was removed from the model code)"

Agency Response:

DSA agrees, Section 1512 was removed from the model code (2021 IBC) and therefore the 2022 CBC will reflect that removal as DSA's Express Terms contain no proposed actions involving Section 1512. Therefore, there are no further changes needed in the Express Terms as a result of this comment.

Chapter 16A, Section 1613A.3 Ballasted photovoltaic panel systems.

Commenter(s) and Recommendation (if applicable):

Benjamin Davis, California Solar & Storage Association; Joseph Cain, Solar Energy Industries Association: Commenters proposed to revise section to keep 1:12 maximum roof slope, and to clarify that these provisions apply only to ballasted, unattached PV systems.

Agency Response:

Upon further review, DSA has decided not to accept the comment with the proposed revisions for the following reasons. Since the reference to ASCE 7, Section 13.6.12 is valid for both "attached" and "unattached" ballasted PV systems, there should not be language added to limit this amendment to only "unattached" ballasted PV systems. For "unattached" ballasted PV systems, the exceptions in ASCE 7, Section 13.6.12 would apply; whereas for ballasted PV systems with attachment points, the main requirements in ASCE 7, Section 13.6.12, which refers to Section 13.3 for both forces and displacements, would apply. It should also be noted that DSA did not propose any new changes to this language, so this section was only included in the IET as a note for the publisher. Revising this section would also create a conflict with the corresponding amendment in Section 1617.9.6, which is adopted by DSA-SS/CC, since there were no comments for that section.

Item 8 Chapter 18A SOILS AND FOUNDATIONS, Section 1812A EARTH RETAINING SHORING

This comment was submitted by DSA staff for the purpose of aligning the proposed code change with the corresponding OSHPD proposal where the subject code section is coadopted by both agencies.

Commenter(s) and Recommendation (if applicable):

Bryan Frank, DSA Structural Codes and Standards Unit: Chapter 18A is co-adopted by OSHPD and DSA and Section 1812A consists entirely of co-adopted amendments. OSHPD proposes in their Express Terms to strike the identifying text "DSA-SS, DSA-SS/CC, and OSHPD 1 and 4" where it occurs in the title and item #1 of sub-section 1812A.7. This change was not included in the DSA 45-Day Express Terms; however, DSA should maintain alignment with OSHPD in these regulations. As such, DSA should strike the identifying text as shown in the Express Terms document authored by OSHPD.

Agency Response:

DSA agrees with the comment. In efforts to update the Express Terms pursuant to this comment, DSA proposed the additional changes during a 15-day public comment period and received no objections nor further comment.

Chapter 19A CONCRETE, Section 1901A GENERAL

This comment was submitted by DSA staff for the purpose of aligning the proposed code change with the corresponding OSHPD proposal where the subject code section is coadopted by both agencies.

Commenter(s) and Recommendation (if applicable):

Bryan Frank, DSA Structural Codes and Standards Unit: Chapter 19A is co-adopted by OSHPD and DSA. The model code (2021 International Building Code) has revised the title of Section 1906 from "STRUCTURAL PLAIN CONCRETE" to "FOOTINGS FOR LIGHT-FRAME CONSTRUCTION". DSA and OSHPD have co-adopted a prior and continuing amendment in Section 1906A, which replaces the model code content with the following: "Not permitted by OSHPD and DSA-SS". Because of the change made to the title of this section by the model code, OSHPD has determined further clarification is needed in the code to communicate that plain concrete is not permitted. To provide this clarification, OSHPD proposes in their Express Terms the following revisions to Section 1901A.2: (1) strike the text "Plain and" from the section title and (2) add the text "except that plain concrete is not permitted" to the end of the first sentence.

This change was not included in the DSA 45-Day Express Terms; however, DSA should maintain alignment with OSHPD in these regulations for the clarifying benefit of the OSHPD proposal. Additionally, adding an OSHPD banner to the proposed changes will create the mistaken impression that DSA now permits plain concrete, which is untrue based on continued amendments. As such, DSA should revise Section 1901A.2 as shown in the Express Terms document authored by OSHPD.

Agency Response:

DSA agrees with the comment. In efforts to update the Express Terms pursuant to this comment, DSA proposed the additional changes during a 15-day public comment period and received no objections nor further comment.

Item 12 CHAPTER 21 MASONRY, Section 2115 ADDITIONAL REQUIREMENTS FOR COMMUNITY COLLEGES [DSA-SS/CC]

Sections 2115.5-2115.6, 2115.7 and 2115.9:

This comment was submitted by DSA staff for the purpose of aligning the proposed code change with the corresponding OSHPD proposal where the subject code section is coadopted by both agencies.

Commenter(s) and Recommendation (if applicable):

Diane Gould, DSA Structural Codes and Standards Unit: DSA and OSHPD proposals for adjustments to Chapter 21 and 21A amendments that were included in the 45-Day Express Terms were prepared in response to public comment from the Masonry

Institute of America (MIA) and Concrete Masonry Association of California and Nevada (CMACN) to provide better clarity and alignment with TMS 402/602.

Section 2115 contains alternative provisions for Community Colleges [DSA-SS/CC]. The language in the current 2019 CBC [DSA-SS/CC] provisions in 2115.5-2115.6, 2115.7 and 2115.9 parallels the [DSA-SS] provisions in 2104A.3, 2105A.2 and 2106A.1, respectively.

Proposed adjustments to the language in 2115.5-2115.6, 2115.7 and 2115.9 were not included in the DSA 45-Day Express Terms; however, for consistency, DSA should maintain alignment of the [DSA-SS/CC] provisions in 2115.5-2115.6, 2115.7 and 2115.9 with the [DSA-SS] provisions in 2104A.3, 2105A.2 and 2106A.1, respectively.

Agency Response:

DSA agrees with the comment. In efforts to update the Express Terms pursuant to this comment, DSA proposed the additional changes during a 15-day public comment period and received no objections nor further comment.

Section 2115.8.2:

Commenter(s) and Recommendation (if applicable):

John Chrysler and Kurt Siggard, Masonry Institute of America (MIA) and Concrete Masonry Association of Calfornia and Nevada (CMACN): Commenters proposed disapproval of proposal to change testing threshold from 2000 psi to 1500 psi; citing there was no rationale to do so. They do support changing minimum design threshold to 1500 psi to align with the referenced material standard (TMS 402)

Agency Response:

DSA agrees with the comment and has withdrawn the proposal.

Item 13 CHAPTER 21A MASONRY, Section 2105A QUALITY ASSURANCE

Sections 2105A.2 and 2105A.4:.

Commenter(s) and Recommendation (if applicable):

John Chrysler and Kurt Siggard, Masonry Institute of America (MIA) and Concrete Masonry Association of Calfornia and Nevada (CMACN): Commenters proposed disapproval of proposal to change testing threshold from 2000 psi to 1500 psi; citing there was no rationale to do so. They do support changing minimum design threshold to 1500 psi to align with the referenced material standard (TMS 402)

Agency Response:

DSA agrees with this comment and has updated the proposal for 2105A.2 and withdrawn the proposal for 2105A.4 from the final Express Terms.

Item 21

Chapter 31, Section 3111.3 Photovoltaic solar energy systems.

Commenter(s) and Recommendation (if applicable):

Benjamin Davis, California Solar & Storage Association; Joseph Cain, Solar Energy Industries Association: Commenters proposed to revise section to strike out pointer to Section 1512.

Agency Response:

The reference pointer to Section 1512 as noted in this comment was previously repealed in the Initial Express Terms. Therefore, there are no further changes needed in the Express Terms as a result of this comment.

Item 23

Chapter 35 Referenced Standards.

This comment was submitted by DSA staff for the purpose of aligning the proposed referenced standards with the corresponding OSHPD (HCAi) proposal where the subject referenced standards are co-adopted by both agencies.

Commenter(s) and Recommendation (if applicable):

Ryan Turner, DSA Structural Codes and Standards Unit: Chapter 35 contains a comprehensive list of all standards that are referenced in this code. OSHPD is proposing to adopt newer editions for several reference standards in Chapter 35 that do not align with DSA. This change was not included in the DSA 45-Day Express Terms; however, DSA intends to maintain alignment with OSHPD in these regulations to adopt the latest standard. As such, DSA proposes to adopt the same editions to match the Express Terms document authored by OSHPD.

Agency Response:

DSA agrees with the comment. In efforts to update the Express Terms pursuant to this comment, DSA proposed the additional changes during a 15-day public comment period and received no objections nor further comment.

DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS

Government Code Section 11346.9(a)(4) requires a determination with supporting information that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, or would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more

cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

The Division of the State Architect has determined that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, would be as effective and less burdensome to affected private persons than the adopted regulations, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law. The proposed regulations will not have a cost impact to private persons.

REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:

Government Code Section 11346.9(a)(5) requires an explanation setting forth the reasons for rejecting any proposed alternatives that would lessen the adverse economic impact on small businesses, including the benefits of the proposed regulation per 11346.5(a)(3).

DSA has determined that the proposed regulations will not have an adverse economic impact on small businesses. The proposed regulations are technical modifications that will provide clarification and consistency within the code.