

COMMENTARY ON THE 2018 EJCDC CONSTRUCTION DOCUMENTS

Prepared By



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National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

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2018 EJCDC CONSTRUCTION DOCUMENTS
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Editors' Note

The contributing authors and the editors of this Commentary are members of the Engineers Joint Contract Documents Committee (EJCDC). The comments and opinions expressed here are intended to assist the reader, and provide the perspective of the individual authors and editors; there is no intent to modify or supplement the content of the other 2018 EJCDC Construction Documents, as published. The views stated should not be taken as legal advice or counsel, and do not represent an official position of the full EJCDC committee regarding any specific topic.

1.0 INTRODUCTION TO THE EJCDC CONSTRUCTION DOCUMENTS

1.1 *The EJCDC Construction Series*

The Engineers Joint Contract Documents Committee (EJCDC) develops, publishes, and updates standard contract documents for the design and construction of engineered projects. As of October 2018, the EJCDC Construction (C-Series) Documents are comprised of 27 documents, including this Commentary, for use in establishing and administering the contractual relationships between a project owner (“Owner”) and a construction contractor (“Contractor”). This Commentary discusses the content and use of EJCDC’s C-Series Documents.

1.2 *Defined Terms*

This Commentary and the Guidelines for Use, Guidance Notes, and Notes to Users in EJCDC’s C-Series Documents use the defined terms presented in the standard text of the C-Series documents, exactly as shown in the definitions provisions of EJCDC® C-700—2018, Standard General Conditions of the Construction Contract (and, for certain specialized bidding-related definitions, in EJCDC® C-200—2018, Instructions to Bidders for Construction Contracts. Those definitions are included with this Commentary for reference as C-001 Exhibit A.

Furthermore, this Commentary also employs the same terminology and definitions set forth in C-700—2018 Paragraph 1.02, for terms such as “furnish,” “install,” “provide,” “perform,” “day,” and “defective”—terms that are used in the documents without initial capital letters.

Within this Commentary and elsewhere in EJCDC’s C-Series Documents, the titles of individual documents are indicated using initial capital letters, whether the full title is indicated or when using one of the shorthand titles listed in Paragraph 1.5 of this Commentary.

Two other terms are frequently used in this Commentary but not defined in the 2018 C-Series Documents:

- “Division 00 documents” are a construction project’s bidding (procurement) and contractual documents. The term “Division 00” is from the Construction Specifications Institute’s (CSI) *MasterFormat*® document. Division 00 is defined as the written elements of a set of construction documents generally comprised of introductory information (such as seals and certifications and a table of contents), bidding requirements, contracting requirements (described in Section 1.8 of

this Commentary), and addenda. Many of EJCDC's C-Series documents are used as source documents for preparing a project's Division 00 documents. As described in Section 1.8 of this Commentary, Division 00 does not include the Specifications (which are Divisions 01 through 49, as set forth in CSI's *MasterFormat*).

- A "project manual" is the set of written documents, often bound in one or more volumes, prepared for, or made available for, procuring and constructing the Work, including but not limited to the Division 00 documents and the Specifications.

1.3 *Engineers Joint Contract Documents Committee*

The members of EJCDC represent a major cross-section of the professional design and construction community. The EJCDC documents are prepared with the active participation of representatives of project owner groups, contractors, professional liability insurers, surety and insurance experts, the engineering and design community, design-builders, construction managers, construction lawyers, and other project stakeholders, all of whom are active participants in document development and revision.

EJCDC is administered and supported in equal measure by the following national sponsoring organizations:

- A. American Council of Engineering Companies (ACEC)
- B. American Society of Civil Engineers (ASCE)
- C. National Society of Professional Engineers (NSPE)

The EJCDC documents are commonly used on both public and private projects, and are intended for projects principally designed by engineers, including public infrastructure; water and wastewater treatment and conveyance facilities; other utility work; solid waste handling and processing facilities; transportation projects; production and processing facilities; electrical projects; plumbing and fire protection projects; engineered instrumentation, controls, and information technology projects; site development work; environmental remediation projects; street, curb, and gutter work; tunneling and excavating projects; and similar applications.

EJCDC publishes the following document series:

- A. *Engineering Series (E-Series)*: Agreements for professional services, include various Owner-Engineer agreements, and subagreements between Engineer and other design professionals, and between the Engineer and a subcontractor furnishing labor and materials (non-professional services). The E-Series also includes a teaming agreement, peer review agreement, project management agreement, and a commentary document.
- B. *Construction Series (C-Series)*: Documents in this series include contracts for construction under design-bid-build and design-negotiate-build project delivery methods. The series includes bidding/solicitation documents for selecting a Contractor; standard agreement forms for the Owner-Contractor prime contract; general conditions and supplementary conditions of the construction contract; bid bonds, performance bond, payment bond, and warranty bond; various administrative forms; a construction subcontract; and this Commentary.
- C. *Construction Manager as Advisor Series (CMA-Series)*: This family of documents, adapted from the C-Series and other EJCDC document families, is intended for projects involving an owner-hired Construction Manager serving alongside the Owner-hired Engineer. The CMA-Series includes prime contract documents, solicitation documents, construction subcontract,

Owner-Construction Manager agreement, a scope of services for the Owner-Engineer agreement, bonds, administrative forms, and a commentary. EJCDC will publish the first edition of the CMa-Series in 2020.

- D. *Design-Build Series (D-Series)*: Documents in this series include the Owner—Design-Builder prime contract and related solicitation documents; an Owner-Consultant agreement; Design-Builder—Engineer subcontract; construction subcontract; bonds; various administrative forms, and a commentary document. EJCDC’s former Remediation (“R-Series”) Documents, discontinued in 2015, were a form of design-build adapted for environmental remediation; the current D-Series Documents may be adapted for use on environmental remediation projects.
- E. *Procurement Series (P-Series)*: This family of documents is intended for the direct purchase by a Buyer (typically a project owner) from a Seller of engineered equipment and materials (“furnish and deliver” obligations for design-bid-deliver or design-negotiate-deliver), including provisions for the assignment of the procurement contract to a construction contractor (retained under documents developed using the C-Series). The series includes administrative forms and a commentary.
- F. *Public-Private Partnership Documents (P3-Series)*: EJCDC publishes documents for the agreement of a public owner and a private entity (sometimes called a “concessionaire”) to partner in a long-term contract for providing public improvements. The P3-Series Documents include optional provisions for financing, operating, and maintaining the public improvement.
- G. *Narrative Series (N-Series)*: In addition to its various commentary documents, EJCDC publishes certain narrative-style guidance documents, including the Uniform Location of Subject Matter (developed jointly with the American Institute of Architects and the Construction Specifications Institute).

1.4 *EJCDC’s Guiding Principles*

EJCDC’s overall mission is to develop, publish, and maintain high-quality standard design and construction contract documents; to promote the use of the documents in the engineering profession and construction industry; and to provide guidance and information to users of EJCDC’s documents. EJCDC strives to identify, acknowledge, and fairly allocate risks, using a balanced approach that assigns a specific risk to the party best able to manage and control that risk. EJCDC’s publications are written to be objective and fair to all parties; to recognize and respect the parties’ separate interests, capabilities, and roles; and to contribute to the continual improvement of professional engineering services and construction contracting practices throughout the United States. It is the intent of EJCDC that its documents be thorough, practical, and even-handed.

1.5 *Development and Content of the Construction Series*

EJCDC has written the C-Series documents with the input of organizations and individuals with substantial knowledge and practical experience in design and construction, including engineers, contractors, project owners, subcontractors, sureties, insurers, risk managers, and attorneys. EJCDC considers legal and legislative developments while preparing and updating its documents. The content, terminology, and allocations of responsibility and risk in the C-Series documents are coordinated within each respective document, with other documents of the C-Series, and with EJCDC documents other than the C-Series, such as the E-Series and P-Series documents. The C-Series documents also serve an important administrative function by establishing practical, orderly, and standard procedures for bidding, contractor

selection, contract formation, commencement of construction, progress payments, changes during construction, resolution of claims and disputes, completion of the project, and many other routine yet vital elements of the construction process.

As with previous editions of the C-Series, EJCDC's 2018 C-Series Documents are endorsed by the Construction Specifications Institute (CSI) for organizational format and consistency with the principles and recommended practices set forth in CSI's various Practice Guide books, including the *Project Delivery Practice Guide*, *Construction Specifications Practice Guide*, and *Construction Contract Administration Practice Guide*. The C-Series Documents are also endorsed by the National Utility Contractors Association (NUCA). In addition, EJCDC's C-Series Documents are pre-approved for use on public works projects funded or financed by the United States Department of Agriculture's Rural Utilities Service (RUS).

The 2018 C-Series Documents are listed below in numerical order (shortened titles used in this Commentary are in parentheses).

- A. EJCDC® C-001, Commentary on the 2018 EJCDC Construction Documents (Commentary)
- B. Documents for initiating the Contractor-selection and contracting processes (see this Commentary, Section 2):
 - 1. EJCDC® C-050, Bidding Procedures and Construction Contract Documents
 - 2. EJCDC® C-051, Engineer's Letter to Owner Requesting Instructions Concerning Bonds and Insurance
 - 3. EJCDC® C-052, Owner's Instructions to Engineer Concerning Bonds and Insurance
- C. Bidding-phase documents (see this Commentary, Section 3):
 - 1. EJCDC® C-111, Advertisement for Bids for Construction Contract (Advertisement for Bids; Advertisement)
 - 2. EJCDC® C-200, Instructions to Bidders for Construction Contract (Instructions to Bidders; Instructions; ITB)
 - 3. EJCDC® C-410, Bid Form for Construction Contract (Bid Form)
 - 4. EJCDC® C-430 Bid Bond—Penal Sum Form
 - 5. EJCDC® C-435 Bid Bond—Damages Form
 - 6. EJCDC® C-451, Qualifications Statement
 - 7. EJCDC® C-510, Notice of Award
- D. Agreement Forms
 - 1. EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price) (Owner-Contractor Agreement—Stipulated Price)(see this Commentary, Section 4)
 - 2. EJCDC® C-522, Contract for Construction of a Small Project (Small-Project Construction Contract)(see this Commentary, Section 10)
 - 3. EJCDC® C-523, Construction Subcontract (see this Commentary, Section 9)
 - 4. EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus-Fee) (Owner-Contractor Agreement—Cost-Plus)(see this Commentary, Section 4)

- E. Commencement of Construction; Contract Bond Forms
 - 1. EJCDC® C-550, Notice to Proceed (NTP) (see this Commentary, Section 5)
 - 2. EJCDC® C-610, Performance Bond (see this Commentary, Section 5)
 - 3. EJCDC® C-612, Warranty Bond (see this Commentary, Section 8)
 - 4. EJCDC® C-615, Payment Bond (see this Commentary, Section 5)
- F. General Conditions and Supplementary Conditions (see this Commentary, Section 6)
 - 1. EJCDC® C-700, Standard General Conditions of the Construction Contract (General Conditions; GC)
 - 2. EJCDC® C-800, Supplementary Conditions of the Construction Contract (Supplementary Conditions; SC)
- G. Construction Contract Administration Forms (see this Commentary, Section 7)
 - 1. EJCDC® C-620, Contractor’s Application for Payment
 - 2. EJCDC® C-625, Certificate of Substantial Completion
 - 3. EJCDC® C-626, Notice of Acceptability of Work
 - 4. EJCDC® C-940, Work Change Directive
 - 5. EJCDC® C-941, Change Order
 - 6. EJCDC® C-942, Field Order

Each C-Series Document is further described within this Commentary. To obtain the current, valid editions of C-Series documents, guides, and other documents published by EJCDC, please access one of the following websites:

- A. EJCDC at www.ejcdc.org
- B. NSPE at www.nspe.org
- C. ACEC at www.acec.org
- D. ASCE at www.asce.org

1.6 *Pre-approval by USDA/RUS*

The United States Department of Agriculture’s Rural Utilities Service (USDA/RUS) funds and finances public infrastructure projects in rural regions of the country. The public owners of these projects must obtain USDA/RUS approval of professional services agreements with engineering firms, and of bidding documents and construction contracts. As a convenience to the public owners and their engineering firms, USDA/RUS has pre-approved several EJCDC documents, including C-700 (General Conditions), C-520 (Owner-Contractor Agreement—Stipulated Price), and EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services. The pre-approval is subject to various USDA/RUS-required clauses that amend or supplement the EJCDC documents; these required clauses are published in USDA/RUS Bulletin 1780-26. As of July 2019 USDA/RUS is updating Bulletin 1780-26 to coordinate with the 2018 C-Series and the 2019 edition of E-500.

EJCDC formerly featured special editions of three key documents for use on public projects with financing or funding by RUS or other governmental third parties. These “Funding Agency” documents were last

published in 2002 and discontinued by EJCDC in 2009, and should no longer be used. The discontinued documents are:

- A. EJCDC® C-521, Suggested Form of Agreement Between Owner and Contractor (Stipulated Price); Funding Agency Edition
- B. EJCDC® C-710, Standard General Conditions of the Construction Contract; Funding Agency Edition
- C. EJCDC® E-510, Agreement Between Owner and Engineer; Funding Agency Edition

1.7 *Cross-References and Abbreviations*

This Commentary includes numerous cross-references to specific provisions of various C-Series documents and cross-references to other parts of the Commentary itself. For brevity's sake, a shorthand approach is used for such cross-references, typically comprised of the EJCDC document number and the paragraph number within that document, without "EJCDC" or the word "Paragraph."

- For example, a reference to Paragraph 2.02 of the Instructions to Bidders is cited as "C-200 7.10"; a reference to Section 1.5 of this Commentary would be "C-001 1.5."
- This Commentary may sometimes cite provisions of the General Conditions simply by using a "GC" with the paragraph number, such as "GC-2.01."
- References to provisions of the Supplementary Conditions include as part of the paragraph designation the prefix "SC": thus, a reference to Paragraph SC-4.05 of EJCDC's model language for Supplementary Conditions would be "C-800 SC-4.05."
- Where an entire article is cross-referenced, the word "Article" is included.

Occasionally, this Commentary includes references to specific provisions in documents in other EJCDC document families. In such cases, the full EJCDC document number and title will typically be indicated. Where the follow-on text includes repeated citations to provisions of that document, a shorthand system similar to that indicated above may be used. Thus, a reference to Paragraph 6.01.E of EJCDC® E-500—2019, Agreement between Owner and Engineer for Professional Services, may be abbreviated as "E-500 6.01.E."

Where reference is made to a non-EJCDC published document, the first reference to the document will include the entire title and edition, such as "the American Institute of Architects' AIA® A312™—2010, Performance Bond and Payment Bond," and subsequent references to same document include only an acronym for the organization name, document number, and edition; e.g., "AIA A312—2010." Where a third-party document is formally indicated with copyright or trademark designations, such designations are used in this Commentary only in the first citation of the associated document or reference.

1.8 *Pagination*

The Construction Specifications Institute (CSI) *MasterFormat*® is a commonly used format for organizing, numbering, and titling the written documents that are bound into a typical project manual for a construction project (the term "project manual" is discussed in Section 1.2 of this Commentary). Since 2004, multiple updates of *MasterFormat* have been published that organize Specifications and other project manual content into 50 divisions. The first *MasterFormat* division is "Division 00 – Procurement and Contracting Requirements." As described in Section 1.2 of this Commentary, many of the documents in EJCDC's C-Series are source documents for developing a project's Division 00 documents. EJCDC's numbering of its C-Series documents is generally consistent with *MasterFormat*, although using fewer digits than the six- and eight-digit numbers indicated in *MasterFormat*. For example, *MasterFormat*

assigns document number “00 11 13” for an advertisement for bids, whereas EJCDC has numbered its Advertisement for Bids as “C-111”; similarly, *MasterFormat* assigns “00 45 13” for a bidder’s qualifications, whereas EJCDC has numbered its Qualifications Statement document as “C-451.”

If CSI’s *MasterFormat* is being used as the basis for organizing the project manual, consult the current edition of *MasterFormat* for the appropriate document numbering. Within each project document sourced from a C-Series document, consider indicating the *MasterFormat* document number as a prefix to the page number in the document footer. For example, *MasterFormat* assign document number “00 52 13” to the Owner-Contractor Agreement—Stipulated Price (for design-bid-build or design-negotiate-build project delivery); thus, the pages of an Owner-Contractor Agreement—Stipulated Price developed from EJCDC C-520—2018 would be numbered as “00 52 13-1,” “00 52 13-2,” and so on. Similar logic applies to the other documents that comprise Division 00 of the project manual.

Because the documents that comprise Division 00 are not Specifications (rather, in accordance with *MasterFormat*, Specifications are in Divisions 01 through 49; see also the EJCDC definition of Specifications at C-700 1.01.A.39), the content of the individual documents of Division 00 are typically not in accordance with CSI’s *SectionFormat*[®], which applies to the organization of Specifications.

EJCDC[®] N-122/AIA[®] A521[™]—2012, Uniform Location of Subject Matter, developed by EJCDC and the AIA in partnership with CSI, functions as a guide or index to the various subjects that are addressed in the EJCDC C-Series documents. The Uniform Location of Subject Matter is available online, free of charge, from the websites of EJCDC, EJCDC’s sponsoring organizations, and the AIA.

In addition to being consistent with the Uniform Location of Subject Matter, the content of EJCDC’s C-Series documents is arranged in logical order and format, and is generally consistent from one edition of the C-Series to the next although, on occasion, revisions are made to the location, titling, and numbering of articles and paragraphs within a given C-Series document.

In general, the documents that comprise the Bidding Requirements (defined at C-700 1.01.A.7), such as Project documents developed from C-111, C-200, C-410, C-430 or C-435, and C-451, relate only to the process of soliciting Bids or proposals, selecting the Successful Bidder, and signing the Contract. The Bidding Requirements documents are not Contract Documents, and apply only through the formation of the Contract.

In contrast, the “contracting requirements” documents (a term not used in EJCDC’s C-Series documents outside of this Commentary, but used in CSI *MasterFormat*), apply after the Effective Date of the Contract and are an essential part of the Contract Documents. The “contracting requirements” include the Owner-Contractor Agreement, any supplements to the Agreement, performance and payment bonds, the General Conditions, Supplementary Conditions, and related documents (if any) such as requirements of funding or financing entities and minimum prevailing wage rates that may be applicable to public work, and Addenda (if any).

In accordance with *MasterFormat*, Addenda (when issued for a Project), are part of Division 00 (assigned as “00 91 13” in *MasterFormat*). When multiple Addenda are bound with the Contract Documents, it may be useful to number the first Addendum as “Document 00 91 13.01,” the second Addendum as “Document “00 91 13.02,” and so on. Although EJCDC does not publish any model Addendum form, readers should consult either CSI’s *Project Delivery Practice Guide* or CSI’s *Construction Specifications Practice Guide* for CSI’s suggested Addendum format.

Although CSI *MasterFormat* assigns various types of Contract modifications, including Field Orders, Work Change Directives, and Change Orders, under “00 94 00,” such Contract modifications occur after the Contract commences and therefore are not bound into the project manual. However, numbering Contract

modifications in accordance with *MasterFormat* and saving them in the Project's electronic files together with other Division 00 documents may be useful from a document management standpoint.

Finally, in addition to the Bidding Requirements and contracting requirements, CSI *MasterFormat* also presents recommended numbers and titles for the "introductory information" of Division 00, such as project title pages (when used), seals and certifications of the project design professionals in responsible charge, the project manual's table of contents, and others. EJCDC does not publish any model documents or specific guidance for "introductory information." The sealing and signing by the Project's design professionals in responsible charge should be in accordance with Laws and Regulations governing the associated design professions. The various state Laws and Regulations governing the practice of engineering, geology, architecture, landscape architecture, and other design professions are generally available online, free of charge.

1.9 Who Prepares Division 00 for a Project?

Because design professionals, such as engineers, geologists, and architects, typically prepare the Specifications and Drawings that comprise the significant majority of a Project's construction documents, tradition has evolved that the design professional also plays a prominent role in preparing the Project's Division 00 documents. However, the definitions of the practice of engineering, geology, and architecture (as set forth in the various Laws and Regulations governing the practice of the associated design disciplines) typically omit the preparation of Division 00 documents for construction projects. Thus, it is not mandatory, from a professional practice standpoint, that the design professional prepare the Project's Division 00 documents. In many cases, the Owner's employees, such as a procurement officer, risk manager, or attorney, prepares the Division 00 documents; elsewhere, an Owner-hired third-party program manager or consultant may prepare the Division 00 documents.

Another entity that may prepare, or assist in preparing, the Project's Division 00 documents is an Owner-hired construction manager. There are two forms of construction management project delivery: (1) construction manager as advisor ("CMA"), and (2) construction manager-at-risk (CMAR). Because EJCDC's C-Series documents, as published, do not include or address the role of a third-party construction manager, the C-Series should not be used for either CMA or CMAR projects without substantial modification. For CMA projects, EJCDC recommends the EJCDC CMA-Series documents, scheduled for publication in 2019-2020. Additional information on the alternative types of construction management project delivery is available in CSI's *Project Delivery Practice Guide*, and in CSI's *Construction Contract Administration Practice Guide*.

Regardless of which entity or individual prepares all or part of the Project's Division 00 documents, it is very important that the documents of Division 00 be well coordinated among each other and with the Drawings and Specifications. When the Engineer does not prepare the Project's Division 00 documents, it is important for the Engineer to receive drafts of the Project's Division 00 documents as early as possible so that the Specifications and Drawings can be appropriately coordinated with Division 00. C-700 3.01 ("Intent") indicates that all the Contract Documents are complementary and together comprise the Contract; it is highly recommended that, in the preparation of the construction documents, conflicting requirements be avoided to the greatest extent possible, to reduce the potential for misinterpretations and disputes.

When the Engineer prepares the Project's Division 00 documents, it is important that Engineer not undertake tasks that are outside of its profession, licensure, areas of expertise and experience, and insurance coverage. Division 00 documents address some subjects that are outside the expertise and experience of engineers and other design professionals, including insurance, bonds, indemnification, and other risk management matters. Therefore, Engineer (or other design professional) should not provide

legal, insurance, bond, or risk management advice to the Owner or others. When drafting the Project's Division 00 documents, it is highly advisable for the Engineer to transmit the draft Division 00 documents to the Owner for review, comment, and direction, together with a recommendation that the Owner have the documents reviewed by qualified legal counsel experienced with procurement of construction services and the contents of construction contracts; and by bond/insurance consultants, risk managers, financial advisors, and others with appropriate expertise. Indeed, the provisions of EJCDC E-500—2019, Agreement between Owner and Engineer for Professional Services, and EJCDC's other Owner-Engineer agreement forms (including E-505, E-520, E-525, D-500, D-505, and others) expressly require the Owner to furnish services such as accounting, bond, and financial advisory services; legal services; insurance advice; and auditing services, and indicate that the Engineer does not furnish such services.

To assist the Engineer in preparing the initial drafts of Division 00 (if such is one of Engineer's duties), and in doing so to remain within Engineer's areas of expertise and experience, EJCDC recommends three C-Series documents that are intended to be used at the outset of the preparation of a Project's Division 00:

- C-050, Bidding Procedures and Construction Contract Documents.
- C-051, Engineer's Letter to Owner Requesting Instructions Concerning Bonds and Insurance
- C-052, Owner's Instructions to Engineer Concerning Bonds and Insurance.

These three preliminary C-Series documents are discussed in this Commentary's next section (C-001 Section 2.0).

2.0 DOCUMENTS FOR INITIATING DEVELOPMENT OF THE BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS

2.1 Introduction

There are many different ways to select a construction contractor for a project, and many possible approaches to preparing the associated construction contract and managing the risks inherent to construction. Owners vary in their practices and preferences; the nature of a project may affect the contracting approach; governing laws, regulations, rules, or standards and the owner's procurement policies may be determinative. EJCDC C-050, C-051, and C-052 are intended to assist the Owner in establishing the selection process (with emphasis on traditional competitive bidding or negotiating with contractors prequalified or identified in advance by the Owner), the essential contractual terms, and the insurance and bonding requirements for the Project. C-050, C-051, and C-052 are intended to assist the Owner in communicating the Owner's requirements for the Division 00 documents to the Engineer (or other entity preparing the Project's Division 00 documents).

C-050, C-051, and C-052 also serve to spur the Owner and Engineer to discuss and document the Owner's decisions and the direction given the Engineer regarding bidding procedures, the content of the construction contract, and bonding and insurance requirements. Thus, C-050, C-051, and C-052 essentially serve as convenient checklists for the Owner and Engineer in the early development of the Project's Division 00 documents, aid in efficient decision making, and promote communication and documentation of the Owner's directions. Each of these three C-Series documents is discussed below.

The successful development of a Project's Division 00 documents requires adequate commitment of attention and budget. Therefore, it is often advisable to select the source documents for the Project's Division 00 during the Project's preliminary design phase, and to draft the Project's Division 00 documents as early as possible in the Project's final design phase. Special circumstances may necessitate an early focus: for example, if the Project will include a separate equipment procurement contract entered into by the Owner with an equipment supplier ("Seller"), in which the procurement contract is typically prepared, put out to bid, and the Seller selected prior to the end of the preliminary design phase, and thus concentration on how the procurement contract will be coordinated with the associated construction contract is often essential during the planning or preliminary design phase.

Occasionally, the Owner will change its initial decisions on the Project's Division 00 documents or, more commonly, insufficient information is available during initial discussions between the Owner and Engineer to permit completion of C-050 and C-052 in their entirety. When this is the case, the Project documents developed from C-050 and C-052 should be updated and saved in the Owner's and Engineer's project files for later use.

2.2 EJCDC® C-050, Bidding Procedures and Construction Contract Documents

C-050's primary purpose is to obtain the Owner's directions regarding two tasks: (1) preparing or assembling the contractor selection documents for the specific Project—the advertisement for bids or invitation to bidders, request for proposals, instructions to bidders, bid form, bid bonds, and other bidding/proposal documents, as applicable; and (2) preparing or assembling drafts of the various components of the Division 00 contract documents, most notably the Owner-Contractor Agreement, the General Conditions, and Supplementary Conditions.

C-050 also contains a section in which Owner can provide baseline information about the Project (C-050, Section 2.0) and instruct the Engineer regarding the basis for the Specifications (Division 01, C-050 3.10;

Divisions 02-49, C-050 3.11). (If this information has already been communicated during the formation of the Owner-Engineer agreement, it is unnecessary to address it in C-050.) C-050 is not used to convey information regarding bond or insurance requirements—that important task is accomplished using EJCDC C-051 and C-052.

When the design engineer's services under the Owner-Engineer Agreement do not include full construction phase services for the Engineer, C-050 also serves as a prompt for the Owner and design engineer to discuss the design engineer's role in the construction phase which, in turn, may have a significant effect on how the Project's bidding/proposal documents and "front-end" Contract Documents are drafted.

Also, if not already established in the Owner-Engineer Agreement's scope of services, C-050 serves as a basis for documenting the source documents to be used in preparing the Project's Division 00 documents (e.g., EJCDC C-Series documents, the Owner's custom Division 00 documents, or other documents), the Specifications, and the basic organizational format to be used for the project manual (e.g., current edition of CSI *MasterFormat*[®], or other).

C-050 should be either completed by the Owner and returned to the Engineer, or completed based on the Owner's input in meetings or other communications with the Engineer. In many cases, it may be necessary for C-050 to be completed over a period of time, as the Owner's preferences in preparing the Division 00 documents are clarified and refined. When this is the case, EJCDC recommends that the Project's C-050 be updated as revisions are made to the Owner's directions to the Engineer, and copies of the updated form and its attachments saved in the Project files of both the Owner and the Engineer.

Naturally, the degree of involvement in the contractor selection and contract drafting processes of the Owner and the Engineer respectively will vary depending on the size and capability of the Owner's professional staff, possible Owner retention of a third-party advisor such as a program manager, and the assignment undertaken by the Engineer under the Owner-Engineer Agreement. A typical scenario would have the Engineer carrying out responsibilities such as those specified in EJCDC[®] E-500—2019, Agreement Between Owner and Engineer for Professional Services. In other cases, however, the majority of the contractor selection process and preparation of contracts (other than the Engineer's preparation or furnishing of the Drawings, Specifications, Addenda and other technical documents) will be done by the Owner's employees, the Owner's legal counsel, or a construction manager or program manager, with minimal help from the design engineer.

It is important that the Owner and the Engineer (1) agree that a specific series of bidding/proposal procedures be established, (2) identify the entity that will serve as the Issuing Office during the bidding phase, and (3) identify the specific documents or Contract content to be used in preparing the Project's Division 00 documents. Clarity regarding the scope of the design engineer's involvement in the Project during construction is also critical. When there is agreement and mutual understanding on these points, the Project's Division 00 documents can be prepared efficiently.

When the Owner is a public entity, it is very important that the Owner's legal counsel be consulted with respect to statutory and agency/municipal requirements.

In every case, whether the Project's source of funds is private or public, review by the Owner's legal counsel is a very basic, prudent measure that EJCDC strongly recommends.

2.3 *EJCDC® C-051, Engineer's Letter to Owner Requesting Instructions Concerning Bonds and Insurance*

EJCDC recommends that the Engineer request the Owner's instructions on bonds and insurance in a formal written document (optimally, using language closely based on C-051), thus documenting that the Engineer has actively sought the Owner's instructions on these important risk management matters. C-051 is in the form of a letter from the Engineer to the Owner, requesting the Owner's instructions regarding bonding and insurance requirements to be incorporated into the Division 00 documents. The model language of C-051 brings to the Owner's attention the approach taken in EJCDC's C-Series documents with respect to construction project insurance and bonding.

It is advisable for the Engineer to obtain the Owner's insurance and bonding instructions in writing, and scrupulously follow the Owner's instructions, because engineers typically are not experienced with or qualified to give advice on risk management, insurance, and legal matters, and may not have insurance coverage for bonding or insurance-related claims.

Because construction risks vary from project to project, and because an owner's position on risk can (and often does) change over time, the Owner's instructions regarding bonding and insurance requirements should be requested from the Owner for each individual project. EJCDC's recommended practice is that such a procedure should be followed regardless of whether the Owner has a standard set of construction risk-management requirements for all of the Owner's construction projects.

The format of C-051 is a reasonably short letter that is intended to be accompanied by copies of (1) C-052, the form to be used by Owner in responding to the C-051 letter; (2) relevant, specified EJCDC C-Series documents (for example, the standard performance and payment bonds), and (3) insurance and bond-related excerpts from the Instructions to Bidders and the Supplementary Conditions (these excerpts are included with C-051, for the user's convenience).

2.4 *EJCDC® C-052, Owner's Instructions to Engineer Concerning Bonds and Insurance*

C-052 is a convenient form for use by the Owner or the Owner's risk manager in responding to the Engineer's request for instructions regarding bonding and insurance requirements for the Project's bidding/proposal process and the construction contract. Because engineers are not insurance experts or risk advisors, the model language of C-052 includes an acknowledgement by the Owner that the Owner has not relied on the Engineer for bonding and insurance advice, and includes an indemnification of the Engineer relative to the Owner's insurance decisions.

The C-052 document is premised on Owner using the bonds/insurance excerpts (previously provided to Owner by Engineer, as an attachment to the letter based on C-051) to provide key information, such as required insurance coverage limits, and make desired revisions to the insurance specifications in the excerpts.

The Owner's written instructions to the Engineer regarding bonding and insurance requirements should be maintained in an accessible location in the Project files of the Owner and Engineer for later reference as required.

In some cases, especially when the Owner and Engineer have a history of working together on multiple capital projects, the Owner may not respond to the Engineer's request (developed from C-051) for each project. In such situations, the Owner may perhaps assume, or orally direct, that the Engineer incorporate the Owner's "usual" insurance and bonding requirements into the Bidding Documents. When this is the case, the Engineer should, in addition to saving a copy of the Engineer's written request for the Owner's

instructions (developed from C-051), consider either (1) sending a written communication to the Owner indicating that, unless the Owner responds otherwise by a specified date, the Engineer will proceed with incorporating the Owner's "usual" insurance and bonding requirements into the Bidding Documents and expressly disclaiming any responsibility for the provisions and coverage types and limits indicated therein, or (2) obtaining oral concurrence from the Owner to use the "usual" requirements, and documenting the Owner's direction in a memo to the Engineer's project file. In either event, it is advisable for the Engineer to document that it sought the Owner's instructions and the basis for the bonding and insurance requirements included in the draft bidding and contract documents.

3.0 DOCUMENTS FOR COMPETITIVE BIDDING

3.1 *Introduction*

Competitive bidding is a widely used method of selecting contractors for construction projects. On public projects, it is often mandated by law. In all cases where it is used, the competitive bidding process should be conducted based on express, written rules and procedures.

Throughout this Section 3 of this Commentary, reference will be made to “bidding,” in which prospective contractors (“Bidders”) submit pricing and, perhaps, other information to the Owner for evaluation. The Owner selects a Successful Bidder, which will enter into the Contract and thus become the Contractor. In bidding, the Bidders submit pricing based on an established scope of Work as set forth in the Bidding Documents. Alternatively, when the Owner will entertain conditions, exceptions, and alternative approaches from prospective contractors, including negotiation of the pricing, scope, quality, and contractual terms and conditions, the terms “proposals” and “negotiation” apply. Regardless, it is beneficial for the Owner to conduct the process of contractor selection based on written rules and procedures. The balance of this Section 3 of this Commentary refers to “bidding,” although many of the same concepts apply to proposals and negotiation.

Using and enforcing written rules and procedures for bidding establishes a level playing field, encourages participation by contractors, helps foster an appropriate business climate, and, for public work, reduces the potential for bid protests. A bid protest occurs when an aggrieved Bidder (or other entity with a substantial interest in the outcome of the Project’s bidding process, such a prospective Subcontractor or Supplier) takes issue with the bidding process or the Owner’s award of the Contract. Means of protesting can range from making a phone call to the Owner or Engineer indicating disagreement with the bidding or award process, to submitting a written protest, to filing a formal legal action. Legal action is more likely on public work and, correspondingly, less likely in private work. Even informal bid protests can degrade the bidding environment and create a less attractive business climate on the Owner’s projects. At their worst, bid protests result in delays, added costs (including attorneys’ fees), and possibly adverse publicity. Well drafted and organized Contract Documents (including both contractual documents and design documents); clear and fair rules and forms for bidding; and appropriate enforcement and administration of the bidding process, are all keys to reducing the potential for bid protests and their adverse consequences.

When bidding procedures, as set forth in the Bidding Requirements (see Section 3.2 immediately below), are clear and appropriately detailed, all participants in the bidding process will benefit. Contractors will be motivated to bid when the ground rules are fair and clear, and are fairly enforced and administered. Also, there will be a more orderly and less dispute-prone bidding process that, in turn, will allow all participants to focus on the objective of entering into a contract at a competitive price, and moving forward with construction.

3.2 *Bidding Requirements Documents Do Not Become Contract Documents*

The “Bidding Requirements” are documents specific to the bidding process, including the Advertisement for Bids (when the solicitation is made publicly to any and all interested prospective Bidders) or “Invitation to Bid” (when the Owner uses a closed solicitation process in which only selected, often prequalified, contractors are invited to bid); the Instructions to Bidders; the Bid Form; the bid security form (usually a Bid Bond); the Qualifications Statement; and other supplements, if any, to the Bid Form. The term “Bidding Requirements” is defined at C-700 1.01.A.7; also see C-001 Exhibit A, which includes a copy of all defined terms.

The “Contract Documents” are generally defined at C-700 1.01.A.13, and are identified for the specific Project in the Agreement (C-520 7.01, C-522 2.02, C-525 11.01). The Contract Documents include both legal/commercial/contractual documents such as the General Conditions, Supplementary Conditions, and Agreement, and the design documents—the Drawings and Specifications. Certain documents issued after the Effective date of the Contract, such as the Notice to Proceed, Change Orders, Work Change Directives, and Field Orders, are also Contract Documents. The Bidding Requirements are not Contract Documents—thus it is important to ensure that substantive subject matter that is applicable to the Contractor’s performance under the Contract is inserted in one of the Contract Documents, and is not misplaced in the Bidding Requirements.

The term “Bidding Documents”—defined at C-700 1.01.A.6—encompasses both the Bidding Requirements and the proposed Contract Documents, together with Addenda (if any) issued prior to the receipt of Bids. The Bidding Documents are so named because they are the full scope of documents issued to prospective Bidders to solicit Bids for the Work.

The Bid submitted by the Successful Bidder is typically not a Contract Document. The Bid’s essential content, the Bidder’s price (often comprised of multiple component prices) to perform the Work, should be stated in the Owner-Contractor Agreement, as finalized and signed, in the provision setting forth the Contract Price. In some cases—typically, projects with numerous bid/pay items, such as projects with numerous (sometimes dozens) of items of Unit Price Work—an exception may be made by specifically incorporating all or a portion of the Successful Bidder’s submitted Bid as a Contract Document (as an exhibit to the Agreement), if doing so is necessary to avoid rekeying numerous bid/pay items (which has associated potential for transcription errors). However, when the Contract has one or only a few bid/pay items, or whenever it is possible to reliably transfer the price information from the Bid to the Agreement, the submitted Bid document should not be made part of the Contract Documents.

Owners and engineers preparing Bidding Documents should use advertisements or invitations to bid and Instructions to Bidders only for their intended purposes, i.e., to be procedural and informative relative to bidding, Contractor selection (award), and Contract formation, but not contain contractual provisions, and should scrupulously avoid any and all restatements or explanations of technical and contractual provisions contained in the Contract Documents.

3.3 *EJCDC® C-111, Advertisement for Bids for Construction Contract*

This section of the Commentary supplements the explanatory comments and notes in C-111.

In general, bidding can be either open to all interested prospective Bidders, or closed and limited to invited prospective Bidders only. For public works projects, governing laws may dictate the bidding format that must be used. Although C-111 is titled “Advertisement for Bids” and is based on open, competitive bidding, with relatively minor modifications it can be adapted to serve as a Project’s “Invitation to Bid” when a closed bidding process is used.

The purpose of the Advertisement for Bids is to attract prospective Bidders (and, indirectly, prospective Subcontractors and Suppliers) and provide them with sufficient information so that they may determine whether to obtain the Bidding Documents for the Project. An Advertisement for Bids (or Invitation) should be prepared for all projects where competitive pricing is sought, whether large or small and whether for public or private owners.

In publicly funded construction, the law usually requires that a bidding announcement be published as a legal notice in the local newspaper or other designated periodical in general circulation, and typically states that the Owner is seeking Bids from any and all qualified Bidders. The Advertisement for Bids serves

as the announcement, advertisement, or legal notice required by law on publicly funded projects. For a private owner, the Advertisement or Invitation presents all the information required to stimulate the interest of prospective Bidders.

C-111 presents EJCDC's suggested, model language for a Project's Advertisement for Bids in template-style format. For a given Project, the Advertisement is to be tailored to the needs of the Project and Owner.

Other names sometimes used for this document include "Notice to Bidders" and "Solicitation." Invitation to Bid is the preferred title when the Owner is inviting only certain contractors (perhaps prequalified) to submit Bids. EJCDC uses the term Advertisement and the document can easily be customized to meet the needs of a given solicitation.

The Project's Advertisement for Bids should be brief, simple, free from irrelevant material, and should be limited to information that will allow prospective Bidders to judge whether the Work is within their capacity, whether they have the physical and financial resources to undertake the Work, whether they have the necessary qualifications and required licenses to perform the Work, and whether they will have time to prepare a Bid. The Advertisement for Bids should not contain detailed requirements or instructions that properly belong in other components of the Bidding Documents.

Although a copy of the Advertisement for Bids is typically included in the project manual with other Bidding Requirements documents (and with the proposed Contract Documents, other than the Drawings, which are separately distributed), the user of C-111 should bear in mind that the Advertisement will often be read in isolation and must, therefore, stand on its own without undue reliance on other documents to accomplish its purpose. Balanced against this point is the important consideration that publishing a lengthy Advertisement in a newspaper can be expensive.

C-111 presents the basic contents for a typical Advertisement for Bids. Public project owners may be required by Laws or Regulations, or by local custom, to provide more information than what is presented in C-111. The Owner's legal counsel, procurement department, or both should be consulted to confirm that the information presented in the Project's draft Advertisement for Bids is in the proper legal form, that it adequately protects the Owner, and that it is complete for the nature and locale of the Project.

The following paragraphs present information on the various component parts of C-111.

- A. *Project Identification:* Clearly identify the Project's name or title, and contract or other identification number associated with the Project, and the Owner's name. The location of the Project may be stated, but do not include details on the geographical location or nature of the Site, because this information is presented elsewhere in the Bidding Documents.
- B. *Bids by Invitation:* On projects for private owners, indicate if Bids will be received only from invited prospective Bidders. Similarly, when the Project (public or private) includes prequalification requirements, indicate if Bids will be received only from firms prequalified by the Owner, and indicate where additional information may be obtained regarding prequalification requirements.
- C. *Time, Date and Place for Receipt of Bids:* Indicate who will receive the Bids, when and where the Bids will be received, and whether the Bid opening will be public or private.
- D. *Description of the Work:* Briefly describe the major characteristics of the Project or the Project type and relative size, to give contractors an indication of whether the Project is within their construction ability and financial capacity. Do not include an elaborate, detailed summary of the Project components, and avoid indicating quantities of the Work. Including

substantial detail in the Advertisement increases the potential for conflicts with other elements of the Bidding Documents and will, for public solicitations, increase the cost of publishing the Advertisement in a newspaper or other periodical.

The extent of detail to indicate in the Advertisement is often a matter of disagreement among project teams. In general, the information presented should be sufficient to attract the attention of not only prospective Bidders (entities that will submit a Bid for the Contract) but also prospective major Subcontractors and Suppliers. A hypothetical example is:

“Providing buried concrete pressure pipe and appurtenances, ranging in size from 24-inch diameter to 48-inch diameter, along Route 123 from Oak Street to Washington Boulevard, and replacing pumps, valves, and appurtenances at the Roosevelt Pump Station. The Work includes excavation and fill, concrete and asphalt paving, landscaping, precast concrete, piping and valves, cast-in-place concrete, painting, signage, and electrical construction. Pump station rehabilitation includes minor plumbing, HVAC, and metals Work.”

- E. *Type of Bid*: Briefly indicate the type of Bid required; for example, whether the Project will have a single prime or multiple prime contracts, whether the Project includes sectional Bids, whether the compensation method is lump sum, unit price, or cost-plus-fee, and any special features such as “price-plus-time” bidding. Indicate whether the Bid includes alternate bid items. Do not present detailed instructions on using the Bid Form or Bid submittal—such instructions should be in the Instructions to Bidders.
- F. *Probable Bid Price*: C-111 includes model, optional language for indicating in the Advertisement the Owner’s opinion of the approximate total bid price for the Work. This is an efficient means of communicating to prospective Bidders whether the Work would be within their financial capability and resources. Some owners avoid making known the opinion of probable construction cost, perhaps believing that releasing such an opinion will prompt Bidders to raise their prices to the Owner’s budget even if the pricing would otherwise be lower; in almost every case, such belief is incorrect because: (1) contractors preparing Bids tend to rely on no one’s judgment but their own regarding the probable cost of the Work, and (2) when the basis for being awarded the Contract is the lowest-priced Bid, a Bidder has little to gain and much to lose by artificially inflating the prices in the Bid.
- G. *Examination and Procurement of Bidding Documents*: Indicate whether the Bidding Documents will be available on paper or as Electronic Documents, and whether a website will be used for viewing and obtaining the Bidding Documents. C-111 includes model language for using a website for prospective Bidders’ access to the Bidding Documents.

As applicable, indicate the names and locations of plan rooms and construction information subscription services where the Bidding Documents may be examined, and the addresses of offices where the Bidding Documents may be seen and obtained. It is typically unnecessary to indicate the website address for each online construction information subscription service where the Bidding Documents are on file, but the names of such services should be indicated in the Advertisement. When the official location for viewing and/or obtaining the Bidding Documents is a website, the full website address (URL) of such website should be indicated in the Advertisement.

Clearly indicate the entity serving as the “Issuing Office”—a term that is defined in the Instructions to Bidders; the definition is restated for reference at the end of C-001 Exhibit A.

There should be only one Issuing Office per project. Careful tracking of the entities to which the Bidding Documents were issued should be maintained by the Issuing Office. When the Bidding Documents are distributed through a website, even if the website logs (and tracks) the entities that obtained Bidding Documents, an Issuing Office is still necessary.

Indicate information regarding charges, or deposits (if any) for obtaining the Bidding Documents. There are usually no charges imposed if the Bidding Documents are downloaded from a website; and such charges are small when the Bidding Documents are Electronic Documents distributed by physical media such as a compact disc or USB thumb drive. The higher the cost of obtaining the Bidding Documents, the more prospective Bidders will be discouraged from obtaining Bidding Documents and bidding on the Work. Also, when paper Bidding Documents are distributed, indicate in the Advertisement whether all or part of any cost for obtaining the Bidding Documents will be refunded for returning the Bidding Documents in good condition within a reasonable (indicated) period after the opening of Bids.

For public work, provisions on charges and refunds may be governed by statutes.

EJCDC's model language is that partial sets of Bidding Documents will not be available from the Issuing Office, under the premise that a complete set of Bidding Documents is necessary for any Bidder or sub-bidder (prospective Subcontractor or Supplier) to fully understand all applicable elements of the Work and associated contractual terms and conditions. Sub-bidders frequently obtain partial sets from third-party sources, whether from prospective Bidders, plan rooms, or construction information subscription services. Thus, it is appropriate for the Bidding Documents to include a disclaimer that neither the Owner nor Engineer will be responsible for the consequences of using a partial set of Bidding Documents.

Refer to C-001 3.4.B for a discussion of security of Bidding Documents and requirements, if any, for prospective Bidders to sign a confidentiality agreement to obtain the Bidding Documents. Where such requirements are in place, they should be mentioned in the Advertisement.

When the Bidding Documents will be made available as Electronic Documents, the Advertisement should clearly indicate the Electronic Documents' file format, typically "portable document format" (PDF). Other Electronic Documents file formats may also be used, such as "native" or executable file formats, particularly for Drawings, whether two-dimensional drawings, three-dimensional (3D) CAD models, building information models (BIM), civil information models (CIM), and others. Fully addressing the advantages and drawbacks of distributing such files, and advisable document security and liability practices, are beyond the scope of C-111 and this Commentary; brief comments are presented in C-001 3.4.B below, and in the Guidance Notes of C-800 SC-2.06.

- H. *Bid Security*: Many project advertisements include language concerning the type and amount of required bid security (most typically bid bonds). C-111 does not include information on bid security, which is, instead, addressed in the Instructions to Bidders (C-200 Article 8). To reduce the potential for conflicting with the Instructions to Bidders, EJCDC recommends not presenting bid security requirements in the Advertisement. However, when a bid bond is mandatory, and/or when a performance bond and payment bond will be required for the Work and the Owner or Engineer believes there is strong potential for smaller contractors (who may not have a surety or perhaps have limited bonding capacity) to take an interest in

the Project, it may be appropriate to indicate in the Advertisement that bonds issued by a qualified surety are required (perhaps with a reference to the specific qualifications requirements in the General Conditions at GC-6.01.A).

- I. *Pre-Bid Conference*: Because an Advertisement is often read as a standalone document, prior to prospective Bidders obtaining the Bidding Documents, it is appropriate to include in the Advertisement information on a pre-bid conference, if any, including the date, time, and location for the conference and whether attendance by Bidders is mandatory. Refer to the Guidance Notes in C-111 and C-200 Article 4.
- J. *Bidder's Qualifications*: Because detailed requirements for Bidders' required qualifications are in the Instructions to Bidders (C-200 Article 3), the model language of C-111 does not address Bidders' qualifications. However, it is appropriate to alert potential Bidders if prequalification is required.
- K. *Statutory Requirements*: Requirements such as non-discrimination in employment, applicability of prevailing minimum wage rates, participation in the Project by funding or financing entities, and other, similar provisions may be referred to in the Advertisement (and sometimes such references are mandated by statutory or funding/financing entity requirements, or Owner practice). However, the associated language in the Advertisement should typically be brief and include a reference to where such topics are addressed in full in the Bidding Documents. To the extent possible, EJCDC recommends avoiding repeating in the Advertisement requirements that are properly (and likely more thoroughly) addressed elsewhere in the Bidding Documents.
- L. *Contract Times*: To reduce the potential for conflicting with other requirements of the Bidding Documents concerning the Contract Times, C-111 includes no model language addressing the Contract Times, which are properly addressed in (1) the Owner-Contractor Agreement when the Contract Times are stipulated by the Owner (C-520 Article 4, C-522 Article 4, C-525 Article 4), and (2) in the case of price-plus-time bidding, in the Instructions (C-200 Article 9), Bid Form, and Agreement.
- M. *Issuer*: If the Advertisement for Bids will serve as a legal notice on a public project, indicate the Owner's name and the name and title of the person authorized to issue the Advertisement; this is not necessarily the same as the Issuing Office. The Advertisement should typically also indicate the date that the Advertisement for Bids was, or will be, published.

In addition to C-111, examples of invitations and advertisements may be found in trade publications, and in other industry reference materials, such as the Construction Specifications Institute's *CSI Project Delivery Practice Guide* and the *CSI Construction Specifications Practice Guide*.

3.4 EJCDC® C-200, Instructions to Bidders for Construction Contract

The Instructions to Bidders provides the rules with which Bidders must comply during the Project's bidding phase; procedural requirements for submitting a Bid; and requirements for the process of Bid evaluation, Contract award, and Contract signing by the parties. C-200 is EJCDC's recommended starting point for preparing Instructions to Bidders for a specific letting. C-200 is closely coordinated with the other C-Series documents, including the Advertisement for Bids, Bid Bonds, Bid Form, Agreement, and General Conditions, among others.

C-200 presents model language, in template format, for developing Project-specific Instructions to Bidders. The Owner or its representatives must develop Instructions to Bidders on a Project-specific basis, to address the Owner’s requirements for the specific Project and—especially for public work—comply with the Laws and Regulations in effect where the Project is located.

EJCDC intends that, in a typical case, most of the articles in the model language of C-200 will be modified or tailored for the specific Project. Indeed, some of C-200’s articles may not be needed at all on certain projects.

As stated in this Commentary’s Section 2.2, the Instructions to Bidders are not part of the Contract Documents. The Instructions to Bidders are only in effect during the bidding phase. Once the Owner-Contractor Agreement is fully signed by both parties, the Instructions to Bidders (and other Bidding Requirements) are superseded and the Contract Documents, as listed in the Owner-Contractor Agreement (in C-520 7.01, C-522 2.02, or C-525 11.01), control.

A discussion of C-200’s provisions is presented below. To assist the drafter of the specific Project’s Instructions to Bidders, C-200 includes Guidance Notes and Notes to User to alert the drafter to modifications, additions, and other considerations that may be necessary or appropriate.

A. Instructions to Bidders, Article 1—Defined Terms

Terms in the Instructions to Bidders have the same meanings as in the General Conditions (C-700 1.01 “Defined Terms”); these are also provided for reference in C-001 Exhibit A. Any defined terms that are not used in the Contract Documents (and thus are not defined in the General Conditions or Supplementary Conditions), but are used in the Bidding Requirements, are to be indicated in Article 1 of the Instructions to Bidders. Defined terms use initial capital letters, as stated in C-700 1.01.A.

B. Instructions to Bidders, Article 2—Bidding Documents

Practices may vary widely in the manner of issuing Bidding Documents, handling deposits (if any) for Bidding Documents, and procedures during the bidding process, such as transmitting the Bidding Documents as Electronic Documents (a term defined at C-700 1.01.20) via physical media (such as compact disc or USB thumb/flash drive) or Internet websites, and distribution of Bidding Documents with either the Owner, Engineer, or a third party (such as a document management firm or program manager) serving as the Issuing Office. If these Project-specific practices are not addressed in the Advertisement (or Invitation to Bid), they should be addressed in C-200 Article 2.

The term Issuing Office is used in the model language for this article and in C-111; the term is defined in C-200 1.01.A, and restated for reference at the end of C-001 Exhibit A.

The Advertisement (Invitation to Bid) should explicitly identify the Issuing Office and should indicate the required amount of the non-refundable cost or deposit, if any, for the Bidding Documents and the refundable amount of the deposit and conditions under which a refund is eligible. For public work, this is often governed by statute and Owner’s legal counsel should be consulted to verify the applicable requirements. If there is no Advertisement or Invitation to Bid, such requirements should be included in C-200 Article 2.

C-200 Article 2 includes model language addressing the increasingly common practice of distributing Bidding Documents as Electronic Documents via a Project website, and also addresses the common requirement for all holders of the Bidding Documents (“plan holders”) to register with the Issuing Office.

The necessity of retaining a list of plan holders is obvious: The Issuing Office will issue Addenda to registered plan holders, thus helping to ensure that all registered plan holders receive updates, clarifications, and modifications to the Bidding Documents at the same time, and to help keep the Owner and Engineer informed as to the potential entities that may submit Bids on the Project. In creating and maintaining a plan holders' list, it is often useful to record, for each entity that has obtained the Bidding Documents, the entity's name, physical address, telephone number, e-mail address, contact person name, and whether the plan holder is a general contractor, subcontractor (and trade), supplier, or other. All entities that should receive Addenda, including plan rooms, construction information subscription services, the Owner, and possibly authorities having jurisdiction, should be included on the plan holders' list.

Prospective Subcontractors and Suppliers often contact the Issuing Office seeking to obtain a copy of the plan holders' list, to obtain information on where and to whom quotes or proposals should be submitted. Sharing such information spurs increased interest in the Project and may promote increased competition. Whether plan holders' lists will be shared by the Issuing Office should be discussed by the Owner and Engineer prior to the publication of the Advertisement or invitation to bid; a prompt for this discussion is included in C-050. EJDCDC recommends a uniform approach to sharing information among prospective Bidders and sub-bidders, without partiality to any interested entity. This is especially important in bidding public work.

The Owner may require certain security procedures relative to the Bidding Documents when the nature of the facility construction is security-sensitive, such as a public water treatment facility. Such security procedures, if any, should be incorporated into the Project's Instructions to Bidders at Article 2. When a confidentiality agreement or other type of release agreement is to be signed by a prospective plan holder before the Bidding Documents, whether as Electronic Documents or otherwise, will be released, such requirements should be indicated in either the Project's Instructions to Bidders at Article 2, or in the Advertisement or Invitation to Bid.

C-200 2.06 includes model language addressing the issuance of Bidding Documents as Electronic Documents, and, at C-200 2.06.C, includes optional language for the distribution of electronic files in "native" or executable format, such as CAD, BIM, or CIM files. Distributing executable files has the potential to improve bid prices by facilitating more accurate quantity take-offs and cost estimates and, in some cases will allow a Bidder to evaluate multiple alternative construction approaches. Access to such files may also reduce estimating costs and speed up the estimating process. Putting increased power to evaluate the proposed Work into the Bidders' hands is likely to result in price advantages for the Owner.

However, an underlying error in the file, or misapplication or misinterpretation of the model content, may have a significant adverse effect on the bid price developed from the files. This may, in turn, prompt a bid protest or subsequent construction Change Proposal, Claim, or dispute. Owners and engineers interested in distributing executable electronic files either to Bidders, or later to the Contractor, are encouraged to discuss the potential liabilities and approaches with experienced consultants and legal counsel.

C. *Instructions to Bidders, Article 3—Qualifications of Bidders*

The basic rule for competitive bidding is that the Owner will award the Contract to the responsible Bidder that submits the lowest-priced, responsive bid. A “responsible” Bidder is qualified to perform the Work that is the subject of the contract. A “responsive” Bid means one that was completed and submitted in accordance with the requirements of the Bidding Requirements, with all required information furnished, and no prohibited actions taken. Thus, responsiveness is a relatively objective evaluation. In contrast, evaluating responsibility (qualifications) is generally more subjective. The subjectivity in evaluating qualifications, and the great importance of selecting a contractor capable of performing the Work, mean that Owner and Engineer must give the qualifications process due care and consideration.

The responsibility of a Bidder is typically evaluated based on the qualifications and experience record submitted by the Bidder to the Owner (in some cases the Owner and Engineer may also have independent knowledge of a Bidder’s qualifications, from prior projects, or they may conduct research that goes beyond the Bidder’s submittals). Owners and Engineers should recognize that for a Bidder, preparing a thorough qualifications submittal can require substantial time and effort. Therefore, C-200 Article 3 presents alternative model language for when such qualifications submittals are required: (1) within a specified number of days after the submittal of the Bids (thus allowing all Bidders to concentrate on pricing up until the Bid is submitted, and then turn their attention to the qualifications submittal immediately thereafter), (2) post-bid submittal of qualifications statements only from those Bidders so advised by the Owner (typically, the Bidders submitting the three lowest-priced responsive Bids), or (3) requiring all Bidders to include a completed qualifications statement with their Bid at the time of Bid submittal.

While submittal of qualifications statements immediately after the Bid opening is obviously preferred by Bidders, adopting such an approach demands that sufficient time be allowed in the time schedule for the bidding phase. Often, however, bidding schedules are constrained as many owners allow only a brief interval between the opening of Bids and the planned award of the Contract. Short schedules in the bidding phase may not support post-bid submittal of qualifications statements. However, when post-bid opening qualifications statements are allowed, the Owner and Engineer may reap the benefits of more accurate pricing, fewer errors or minor informalities in the Bids, and more complete qualifications statements.

The Instructions to Bidders should not require Bidders to submit qualifications information that the Owner (in some cases in consultation with the Engineer) is not capable of evaluating. As an example, some public owners may require a Bidder to submit three years of audited financial statements, which are lengthy and best interpreted by an experienced accountant and, thus, are often not particularly useful to the typical Owner or Engineer personnel available to review the submittals. For additional information on evaluating a Bidder’s responsibility, refer to this Commentary’s discussion of C-451 (Qualifications Statement).

EJCDC’s C-Series documents include affirmative representations by the Bidder (in C-410, Bid Form) and in the Contractor’s representations section of the Owner-Contractor Agreement (C-520, C-522, C-525) that the Bidder (Contractor) is experienced in the type of work required and is capable of performing the Work. However, most project owners will typically prefer more specific criteria on which to base a judgment of Bidder responsibility and qualifications.

To assist in making objective evaluations of Bidder responsibility (and to reduce the potential for bid protests based on allegations of overly subjective or unfair evaluations of “responsibility”), standards or criteria that will be applied in evaluating Bidders’ responsibility should be indicated in their entirety in Article 3 of the Instructions. Such standards or criteria may be dictated by Laws or Regulations. Requiring that all Bidders complete a standard qualifications form is a useful approach. EJCDC recommends using EJCDC® C-451, Qualifications Statement, to obtain basic information regarding a contractor’s qualifications. C-451 is discussed in detail in Section 3.7 of this Commentary.

Some Owners may wish to prequalify prospective Bidders; that is, to accept Bids only from entities prequalified by the Owner in advance of accepting Bids or prior to issuance of the Bidding Documents. In effect, this requires a separate round of pre-bid informational submittals and associated evaluations. A prequalification process spares unqualified contractors from wasted time and effort in preparing a bid. Each Bidder that survives the prequalification process knows that the field of competitors has been narrowed and there is a better chance of success, thus creating an incentive to prepare a serious competitive Bid.

For public work, prequalification procedures need to be discussed in detail by the Owner, Engineer, and the Owner’s legal counsel, and provisions concerning prequalification must be carefully drafted. Procedures and approaches for inviting separate statements for prequalification purposes are not addressed in this Commentary, although C-451 may be useful to either prequalify prospective Bidders or to evaluate qualifications with or after the submittal of Bids.

D. Instructions to Bidders, Article 4—Pre-Bid Conference

A pre-bid conference provides the opportunity for prospective Bidders to discuss the Project with representatives of the Owner and the Engineer. A successful pre-bid conference will typically (1) familiarize prospective Bidders with the bidding procedures set forth in the Instructions to Bidders, (2) illuminate the scope and quality requirements for the Work, and (3) include a visit to the Site. Although not a necessity for every project, there are many situations in which pre-bid conferences are conducted:

1. When the Project involves multiple-prime contracts
2. On projects with substantial probable construction costs
3. When the Owner’s standard procedures require such a conference
4. On projects that involve the expansion or rehabilitation of an existing facility
5. When there is a need to coordinate the Contractor's Work with a significant amount of work by others (Owner's forces, utility companies, contractors from another project, etc.),
6. When the sequencing of phases of the Work is of critical importance
7. When the Project involves complex Site or environmental constraints.

If the Owner requires mandatory attendance at the pre-bid conference, such requirement needs to be clearly stated in the Advertisement and in Article 4 of the Project’s Instructions to Bidders, including the consequences of non-attendance. Statutes and practices regarding mandatory pre-bid conferences on public work vary by jurisdiction.

EJCDC suggests that the pre-bid conference be held late enough in the bidding phase to provide a reasonable assurance that Bidders have reviewed the Bidding Documents, but not

later than 15 days before the date set for the receipt of Bids, to allow time to draft and issue an Addendum if Bidders raise issues at the conference that need to be addressed.

For additional information on pre-bid conferences, refer to the Guidance Notes at C-200 Article 4 and to this Commentary's Section 3.2 (regarding C-111).

Typically, the Engineer will prepare an agenda for the pre-bid conference, maintain a record of attendees, and prepare a record (minutes) of the conference proceedings. The written record (minutes) of a pre-bid conference should be distributed to the pre-bid conference attendees and other plan holders registered with the Issuing Office.

It is common for pre-bid conference minutes to include attendees' questions and the responses from the Owner and Engineer. Such responses should avoid serving as interpretations or, worse, de-facto Addenda. Thus, care should be taken in how topics are handled at the pre-bid conference and how they are presented in the resulting minutes from the conference. Questions at the pre-bid conference that require an Addendum should be answered only via an Addendum, and not in the pre-bid conference minutes. Interpretations, clarifications, and Addenda are addressed in this Commentary's discussion on C-200 Article 7.

E. *Instructions to Bidders, Article 5—Site and Other Areas; Existing Site Conditions; Examination of Site; Owner's Safety Program; Other Work at the Site*

On most engineered projects the conditions at the Site, and especially the subsurface conditions, will be of great importance and interest to prospective Bidders.

Consistent with the instructions in C-200 Article 5 regarding Site visits, Guidance Note 8 prior to C-200 5.01.A characterizes the expectation for the Bidder's familiarization with the Site: That the Bidder is expected to "conduct an alert, heads-up, eyes-open, reasonable examination" of the area and the conditions under which the Work is to be performed.

The Site itself is furnished by the Owner, and includes the location for the construction of permanent structures or permanent changes to existing facilities, together with any related rights-of-way, easements, or other areas that the Owner designates as being available to the Contractor. All additional lands for use by the Contractor, for example for temporary facilities or storage of materials and equipment, are to be obtained and paid for by the Contractor. All pertinent information related to the Site and easements, and to encumbrances and restrictions on access, that is available at the time the Bidding Documents are released should be included in the Bidding Documents, either in the Supplementary Conditions (see C-800 SC-5.01.A) or in Division 01 of the Specifications (such as in a possible section under *MasterFormat's* "01 14 00, Work Restrictions"). On some Projects, complete information on some easements is not yet available at the time the Bidding Documents are released; in such instances, the Instructions to Bidders should indicate appropriate assumptions on which prospective Bidders may rely in preparing a Bid; see Guidance Note 1 prior to C-200 5.01.

C-700 Article 5, C-800 SC-5.03, and C-800 SC-5.06 cover the topic of "Technical Data" (a term defined at C-700 1.01.A.46) contained in drawings and reports on subsurface conditions, and resource documents regarding conditions at the Site. In short, Technical Data is site conditions data on which the Bidders may rely. New in the 2018 C-Series is that the Supplementary Conditions will only list those reports and drawings of the Site that contain Technical Data; prior to the 2018 C-Series, the Supplementary Conditions were used to list all reports and drawings that constituted resource data on the Site, regardless of whether a specific

document included Technical Data, or was merely an archive document of uncertain reliability or relevance.

With the 2018 C-Series, however, EJCDC continues to advocate that Owners and Engineers fully disclose to prospective Bidders all information about the Site known to the Owner and Engineer. Therefore, those reports and drawings that constitute resource information about the Site, but that do not contain or include Technical Data (upon which Bidders or the Contractor may rely), should be listed or identified in the Project's Instructions to Bidders. C-200 5.04 includes model language for the drafter of the Project's Instructions to indicate such documents. Neither the reports and drawings listed in the Instructions at Paragraph 5.04 nor the reports and drawings containing Technical Data, as indicated in the Project's Supplementary Conditions at SC-5.03 and SC-5.06, are Contract Documents.

For additional discussion of the associated Site conditions provisions in the General Conditions, refer to this Commentary's Section 6.3 regarding C-700 5.03, C-700 5.04, and C-700 5.06.

C-200 5.02.A alerts Bidders to the limitations on reliance on furnished resource documents. Interpretations and conclusions are the responsibility of the Bidder. See also C-700 5.03.C (concerning Technical Data associated with subsurface and physical conditions) and C-700 5.06.B (concerning Technical Data associated with a Hazardous Environmental Condition).

EJCDC's C-Series documents include optional Geotechnical Baseline Report clauses and a related optional Instruction to Bidders (C-200 5.02.A.4). A Geotechnical Baseline Report is an interpretive Contract Document that among other functions provides Bidders with basis-of-pricing assumptions regarding subsurface site conditions, and is typically accompanied by a "Geotechnical Data Report" (GDR) that contains the factual data used in the preparation of the Geotechnical Baseline Report. For additional information and guidance, refer to this Commentary's Section 6.3 regarding C-700 5.03 and C-700 5.04, as well as C-800 SC-5.03 and C-800 Exhibit B for model, optional clauses on Geotechnical Baseline Reports and Geotechnical Data Reports.

C-200 5.04 requires that Bidders visit the Site, and addresses the topic of site investigations and testing by Bidders. As a general matter, EJCDC does not consider it practical for Bidders to perform extensive or detailed investigations or tests at the Site and, in common practice, it is rare for Bidders to do so; in most cases it is more practical for Owner or Engineer to conduct such investigations during the planning or design phase. On the rare project where such investigations or tests by Bidders are specifically required, EJCDC advises the drafter of the Instructions to spell out exactly what is expected of Bidders and the ground rules for conducting such tests and investigations, including insurance requirements; and reasonable time must be allowed for Bidders to carry out the investigations or tests.

The Instructions for a specific Project should indicate how Bidders are to obtain permission to make surveys and investigations in Paragraphs C-200 5.04, when required, on private or public property over which the Owner does not have jurisdiction (for example, investigations on a state highway right-of-way for a city-owned project).

C-200 5.05 (Owner's Safety Program) and 5.06 (Other Work at the Site) inform Bidders that provisions regarding these topics are set out in the Supplementary Conditions.

F. *Instructions to Bidders, Article 6—Bidder’s Representations and Certifications*

In submitting a Bid to the Owner, the Bidder makes fundamental, significant representations and certifications to the Owner. The text of the Bidder’s representations and certifications are set forth in the Bid Form (C-410 Article 8) and are not repeated in the Instructions. Rather, C-200 Article 6 includes a cross-reference to the representations and certifications in the Bid Form. The Bidder’s certifications and representations address the Bidder’s fundamental responsibilities in preparing a Bid—examining the Bidding Documents, understanding all terms and conditions, visiting the Site, accounting for all factors that affect the cost to perform the Work, and others. The Bidder’s representations (statements) and certifications in the Bid Form are repeated, word for word, in the Contract (specifically in the Owner-Contractor Agreement) that the Successful Bidder signs.

G. *Instructions to Bidders, Article 7—Interpretations and Addenda*

Releasing Bidding Documents to prospective Bidders allows the Bidders themselves and prospective Subcontractors to review the documents with their own, unique viewpoints as experienced contractors. This process may result in the discovery of inconsistencies, conflicting requirements, omissions, problematic contract provisions, and design issues that require clarification or interpretation. Receipt of prospective Bidders’ questions and requests for clarifications and interpretations presents the Engineer and Owner with an opportunity to improve clarity and, in some cases, make final revisions to the scope and quality requirements of the Work, prior to receipt of the Bids. C-200 Article 7 sets forth the requirements for submitting such requests and for the issuance of Addenda by the Owner or Engineer. The term “Addendum” is defined at C-700 1.01.A.1.

Such requests from prospective Bidders should typically be in writing, as required by C-200 7.01. A response by the Owner or the Engineer to inquiries by prospective Bidders is optional. However, as a practical matter, such inquiries should not be ignored; a response will clarify the issue and facilitate better Bids.

EJCDC does not publish a suggested Addendum format; to view the useful, logical Addendum format recommended by the Construction Specifications Institute (CSI), refer to CSI’s reference books, *CSI Project Delivery Practice Guide*, and *CSI Construction Specifications Practice Guide*. As a matter of good practice, an Addendum should be clearly identified as an Addendum, numbered sequentially, and dated. The Addendum should prominently indicate the Owner and Project; state that the Addendum is directed to prospective Bidders and that it modifies the Bidding Documents; list the specific attachments (if any); and clearly set forth in detail the individual changes to the Bidding Documents, by specific reference to the associated document, Specification (including section and paragraph designation), or Drawing.

When an Addendum modifies the Engineer’s design, it may be appropriate or required by Laws and Regulations governing the practice of the associated design profession for the design professional in responsible charge to seal and sign the Addendum.

Addenda should typically be delivered by a method that allows the issuing entity (typically the Issuing Office) to have a record of delivery to each holder of the Bidding Documents (“plan holder”) registered with the Issuing Office. Common methods of transmitting or delivering Addenda include: (1) delivery by certified or registered mail (typically, “return receipt requested”), (2) delivery by courier service (typically resulting in a record of delivery); (3)

distribution from a Bidding Documents website that automatically creates a record of the entity that downloaded each document, including Addenda; (4) by direct e-mail to each plan holder with a request for an e-mail or faxed acknowledgement of receipt, and (5) binding the Addendum into undistributed copies of the Bidding Documents.

Addenda are critical elements in the bidding process and often affect bid pricing. The later in the bidding phase that an Addendum is issued, the more likely it is to cause problems for prospective Bidders and sub-bidders as they strive to analyze the contract provisions and scope of the Work, and develop final Bid pricing. Thus, it is in the interest of the Owner and the Project for Addenda to be delivered as early as reasonably possible, and in no event later than a specified number of days prior to the deadline for receipt of Bids, unless the Addendum's modifications are minor and unlikely to cause significant changes in pricing. If a significant inquiry is received just before the deadline for receipt of Bids, strong consideration should be given to issuing a procedural Addendum to postpone the Bid opening, followed by a substantive Addendum that properly clarifies or revises the Bidding Documents.

The Instructions to Bidders concerning Addenda should be conformed to governing Laws and Regulations—for example, state or local public bidding laws may stipulate the latest time before the Bid opening that an Addendum can be issued on a public project.

Failure of a Bidder to receive a given Addendum could, potentially, serve as the basis for a bid protest or, if the Contract has been awarded to such Bidder, the Bidder could potentially take the position after the Work is underway that the Contract Price was based on incomplete Bidding Documents (due to failure to receive or acknowledge receipt of the Addendum), and present the Owner with a Claim for a change in compensation, Contract Times, or both. It is therefore important for the Issuing Office to be thorough in the distribution of Addenda, and to maintain a complete record of confirmation of delivery of each Addendum to each plan holder registered with the Issuing Office. Although the Bid Form (C-410 7.03) includes space for the Bidder's mandatory, express acknowledgment of receipt of each individual Addendum, at that stage of the bidding process it is usually too late to rectify a Bidder's failure to receive all Addenda.

To attain fairness in the bidding process, it is important—in both public work and private work—that no prospective Bidder or sub-bidder have the advantage of “inside information” not available to other plan holders. To this end, the involved entities (Owner, Engineer, Issuing Office) should have a plan or agreement about sharing information with plan holders and other interested entities. Oral interpretations and “inside information” should be avoided.

Consider the adequacy of the time periods for receipt of questions and issuance of Addenda, particularly when the Issuing Office is other than the Engineer.

When the Agreement is prepared for signature by the parties, following award of the Contract, the listing of what comprises the Contract Documents (C-520 7.01, C-522 2.02, C-525 11.01) must be properly completed for the Contract, including indication of the specific Addenda that are incorporated into the Contract Documents. Each Addendum that modified the proposed contract (including front-end contract provisions as well as the Drawings and Specifications) must be designated as a Contract Document. Addenda that modified only the Bidding Requirements (e.g., an Addendum where the only modification was to postpone the deadline for receipt of Bids) should not be listed as Contract Documents.

Some Owners or Engineers engage in the practice of preparing comprehensive “Question and Answer” documents that include all questions received during the bidding phase to date and the Engineer’s or Owner’s responses to each; the “Q&A” document is often distributed to all plan holders registered with the Issuing Office. Such documents, while doubtless well intentioned, have the potential to undermine or conflict with the duly prepared Addenda and other Contract Documents. EJCDC does not recommend the use of Q&A documents; if such a document is issued, extreme care should be taken in preparing its content. As stated in C-200 7.04, only responses set forth in an Addendum are binding.

H. *Instructions to Bidders, Article 8—Bid Security*

Bid security refers to a bid bond or other collateral that a Bidder submits to secure its commitment to entering into the Contract if it is the Successful Bidder (by definition, the Bidder to which Owner awards the Contract). Bid security helps reduce the potential that a Successful Bidder will subsequently refuse to accept the award of Contract, for whatever reason (other opportunities, discovery of an error in its Bid, or other). If the Successful Bidder defaults (i.e., fails to enter into the Contract and furnish required performance and payment bonds), the bid security compensates the Owner for the higher cost of entering into a contract with the second-low Bidder. (If Owner rejects all bids or abandons the Project, it may not be entitled to the Bid security, depending on the precise circumstances and the terms of the bond or other Bid security document.)

For public projects, statutory requirements may require bid security and may regulate the amount, type of bid security, and time period for which the bid security must be posted. When applicable, the Owner (public owner) or its legal counsel should review such requirements and provide direction to the drafter of the Project’s Bidding Requirements regarding appropriate revisions to C-200 Article 8. For this, EJCDC recommends using EJCDC® C-052, Owner’s Instructions to Engineer Concerning Bonds and Insurance.

Because engineers are not expert in or experienced with risk management matters such as bid security and surety bonds, the Engineer should not undertake to advise the Owner on such matters. The Owner or its legal counsel should direct the Engineer (or other drafter of the Instructions) on the required type amount of the bid security to be indicated in the Project’s Instructions (see C-200 8.01). Although a common amount is five or ten percent of the maximum price indicated in the Bid (thus including alternate Bid items, if any), some owners require amounts as high as 20 percent. Absent a statutory requirement, an appropriate benchmark percentage may be the percentage required by the state highway authority in the jurisdiction where the Project is located.

Under the model language of C-200 8.01 the only acceptable form of Bid security is a bid bond. A threshold reason for this requirement is the inherent risk and uncertainty associated with accepting and handling alternative forms of Bid security, such as cash, mortgages, stocks/bonds, or negotiable instruments. Another important basis for requiring a bid bond is the link between a bid bond and the subsequent furnishing of performance and payment bonds.

On most public works projects, the federal Miller Act and individual states’ “Little Miller Acts” require that contractors furnish a performance bond and payment bond; many private-sector construction projects also require performance and payment bonds. Requiring a bid bond issued by a surety meeting the qualifications requirements of C-700 6.01 presents evidence to the Owner that the Bidder is underwritten by a surety capable of furnishing the required

performance and payment bonds. Most well-crafted bid bonds make furnishing of required performance and payment bonds an express obligation that the Bidder must meet—in effect, the bid bond surety is promising that the Bidder can obtain performance and payment bonding. See Paragraph 2 of the EJCDC bid bond forms, EJCDC® C-430 and C-435. A bidder that submits a form of bid security other than a bid bond may not be underwritten by a surety, or may have insufficient bonding capacity for the project.

In some cases state law, local custom, or Owner preference may necessitate that Bidders be allowed to furnish forms of Bid security other than a bid bond. When such is the case, revise C-200 8.01 to specify the additional acceptable forms of Bid security.

The standard EJCDC instruction at C-200 8.01 informs Bidders that they must use the form of Bid bond included in the Bidding Documents. Requiring a specific, standardized bid bond form puts all Bidders on the same playing field, and when the Bids are received will allow for the rapid determination of whether the Bidder has complied with the bid bond requirement. If the Bidders are allowed to use a bond form of their choice, C-200 8.01 should be revised and any bond criteria should be indicated.

EJCDC publishes two Bid Bond forms, each of which has been reviewed by surety experts for form and content and either of which may be included as the required Bid Bond form. See C-001 3.6 *Bid Security/Bid Bonds*, for additional discussion of matters pertinent to C-200 Article 8, including differences in the intended use of the two Bid Bond forms.

C-200 8.02 concerns the bid security (bid bond) of the Successful Bidder, and addresses the consequences of default by the Successful Bidder. The wording is consistent with the terms of the two EJCDC bid bonds, EJCDC® C-430 and EJCDC® C-435. In the typical situation it is likely that the terms and conditions set forth in the bond form (rather than the Instructions) will govern the surety's obligations in the event of default by the Successful Bidder, and the Owner's recourse against the surety. Again, the form of required bid bond and the specific terms of the Instructions to Bidders for a specific Contract should be directed by the Owner or its legal counsel.

C-200 8.02, 8.03, and 8.04 address the return or release of bid security by the Owner. The periods indicated in these provisions should be consistent with the applicable Laws and Regulations (for public work) and—for the bid security of the Successful Bidder and other Bidders that the Owner believes may have a reasonable chance of being awarded the Contract—be coordinated with the duration that the Bids are to remain valid and subject to the Owner's acceptance (as set forth in the Bid Form; see C-410 7.01). For EJCDC's presumed schedule of events between the deadline for receipt of Bids and the Effective Date of the Contract (and release of final bid security), refer to this Commentary's discussion of C-700 4.01.

C-200 8.02, 8.03, and 8.04 refer to various situations in which the Owner will “release” the bid security. Where the bid security is a check, cash, or similar collateral, obviously the bid security must be returned to the Bidder. In the prevalent case in which the bid security is a bid bond, the bid bond may be either returned to the Bidder or, at the Owner's option, destroyed. If the bid bond is destroyed, it is advisable for the Owner or Engineer to so advise the Bidder, so that the Bidder is aware of the release of its bid bond, and of the associated availability of that amount of its total bonding capacity.

I. *Instructions to Bidders, Article 9—Contract Times*

The Contract Times (a term defined at C-700 1.01.A.15) for Substantial Completion, readiness for final payment, and any intermediate Milestones are obviously of significant interest to Bidders. The time allowed for completion of the Work, and its relationship to other projects by the Contractor, other work in the region, procurement of materials, availability of construction equipment, and seasonal weather impacts may have a significant effect on the prices submitted in the Bid.

Because the Contract Times are an essential element of any contract, they should be indicated at only one location in the Bidding Documents: in the Owner-Contractor Agreement. To reduce the potential for conflicts in the Bidding Documents, EJCDC recommends against restating the Contract Times in the Instructions or in other Bidding Requirements documents.

1. *Price-Plus-Time Bidding*

There are two broad approaches taken to the Contract Times in the bidding process: (1) the Contract Times are stipulated by the Owner in the Agreement and, for purposes of bidding, are non-negotiable (the most-common approach), or (2) the Owner may require Bidders to submit in their Bids both bid prices and the Bidder's proposed time for completion. The latter, termed "price-plus-time" bidding or "A+B" bidding, is less common and, for public work, may be limited by statute. Price-plus-time bidding is used when the Owner desires to have Bidders compete for the award on the basis of both price and time, rather than competing on price alone. Price-plus-time bidding should be used only after thorough analysis and discussion by Owner and its construction advisors, and, for public work, only if clearly allowed by Laws and Regulations.

Accordingly, C-200 Article 9 informs the Bidder as to which of these two options applies to the specific bidding process in progress: (1) Owner-stipulated Contract Times (C-200 9.01), or (2) price-plus-time bidding (C-200 9.02). The drafter of the Instructions to Bidders should choose either C-200 9.01 or C-200 9.02, but not both.

2. *Liquidated Damages for Late Completion*

Because provisions concerning damages for the Contractor's late completion are of significant interest to Bidders, C-200 9.03 includes a cross-reference to the location where liquidated damages provisions, if any, are set forth: in the Owner-Contractor Agreement. Liquidated damages in this context refers to the specified damages for late completion—the Contractor's failure to comply with the Contract Times. EJCDC's approach, consistent with EJCDC® N-122/AIA® A521™, Uniform Location of Subject Matter, is that provisions for liquidated damages should be indicated only in the Owner-Contractor Agreement.

3. *Incentives for Early Completion*

If the Contract will include a bonus provision to incentivize early completion, a cross-reference in the Project's Instructions at Article 9 would be appropriate. The actual bonus provision would typically be set forth in the Owner-Contractor Agreement.

See this Commentary's Section 4, "The EJCDC Owner-Contractor Agreement Forms," for a discussion of various matters pertinent to C-200 Article 9.

J. *Instructions to Bidders, Article 10—Substitute and “Or Equal” Items*

C-200 Article 10 governs potential requests for the Engineer’s approval of substitutes and “or-equal” materials or equipment during the Project’s bidding or negotiating phase. In the effort to compete and win the award of the Contract, it is not unusual for some prospective Bidders or sub-bidders to request that the Engineer approve substitute or “or-equal” items, thus requiring clarity in the Bidding Requirements concerning such requests.

Once the Contract is underway, the Contractor may make similar “or equal” or substitute requests—those requests are governed by the provisions of the General Conditions (C-700 7.05 and C-700 7.06) and, in some cases, provisions in the Specifications. When CSI *MasterFormat* is used for organizing the project manual, such requirements will typically be located in Specifications Section 01 25 00, Substitution Procedures, and Section 01 62 00, Product Options (for “or-equals”).

EJCDC’s presumptive case, as stated at C-200 10.01, is that a Contract is awarded on the basis of the materials and equipment specified in the Drawings and Specifications, without consideration of possible substitutes or “or-equals,” and that such substitutes or “or-equals” are considered only after the construction Contract is underway (i.e., after the Effective Date of the Contract). If the presumptive rule will apply, retain C-200 10.01 and delete C-200 10.02.

The basis for EJCDC’s presumptive case is that many engineered construction projects include significant design-phase evaluations to identify materials and equipment that the Engineer concludes are appropriate for the Project’s design intent. The limited time available during the bidding phase often precludes a similar level of evaluation by the Engineer of proposed substitute and “or-equal” materials and equipment.

On the other hand, some Laws and Regulations require owners to consider Bidder requests for substitutes and “or equals” during the bidding or negotiating phase, and in other cases owners elect to consider such requests in the interest of increasing price competition. Some funding or financing entities also require that the Owner and Engineer consider bidding phase requests for approvals of substitutes and “or-equals” to promote the maximum level of price-based competition for the Work.

Therefore, EJCDC provides alternative wording, set forth in C-200 10.02, establishing a process for accepting prospective Bidders’ and sub-bidders’ requests for approval of substitutes or “or equals” prior to submittal of Bids. If such request will be allowed during the bidding phase, delete C-200 10.01 and retain C-200 10.02. Then, if a substitute or “or-equal” is approved by the Engineer prior to the deadline for receipt of Bids, all plan holders must be advised of such approval in a formal Addendum.

If more-detailed requirements for submitting bidding-phase requests for approvals of substitutes and “or-equals” are necessary, incorporate such requirements by one of the following: (1) add the necessary language in the Project’s Instructions to Bidders at Article 10; or (2) include requirements in a separate Document “00 26 00, Bidding Substitution Procedures” (when CSI *MasterFormat* is used for organizing the project manual); or (3) include in Article 10 of the Project’s Instructions a cross-reference to the location in the Bidding Documents where such additional requirements are included (such as the requirements of C-700 7.05 and 7.06, Specifications Section 01 25 00, Substitution Procedures, and Section 01 62 00, Product Options (for “or-equals”). The Project will be well served when such requirements for bidding-phase requests are substantively the same as the

requirements for considering substitute and “or-equal” requests submitted after the Effective Date of the Contract.

Regardless of whether C-200 10.01 or 10.02 is chosen for the specific Project, the Contract will be awarded on the basis of materials and equipment specified in the proposed Contract Documents (including duly issued Addenda). The import of this is set out in C-200 10.03. Bidders should submit Bids that account for the fact that they will be contractually obligated to furnish the specified/approved items. Subsequent approval during the construction phase of an “or-equal” or substitution request is possible under C-700 7.05 or C-700 7.06, but cannot be counted on when the Bid price (and initial Contract Price) is established.

The primary purpose of this requirement is to assure that all Bidders are basing their prices on the same scope of Work. It also forecloses subsequent arguments by the Contractor that a request must be granted because Contractor (as a Bidder) assumed when the bid price was developed that an approval would be forthcoming. Thus, C-200 10.03 is an important provision to establish mutual expectations regarding the required materials and equipment to be furnished or provided, and to protect the quality standards inherent in the design.

K. *Instructions to Bidders, Article 11—Subcontractors, Suppliers, and Others*

C-200 Article 11 addresses the selection and acceptance of proposed Subcontractors and Suppliers during the Project’s bidding phase. The provisions of C-700 7.07, and sometimes certain provisions of the Specifications, govern Subcontractors and Suppliers after the Effective Date of the Contract.

When the Owner requires the Contractor to retain specific Subcontractors or Suppliers—because of their known expertise, highly specialized knowledge, or familiarity with the Owner’s facilities—EJCDC recommends that the drafter of the Bidding Requirements list the specific Subcontractors and Suppliers on the Bid Form, or in a separate supplement to the Bid Form, before the Bid Form is distributed to prospective Bidders. When CSI *MasterFormat* is used for organizing the project manual, such supplements to the Bid Form may include Document 00 43 33, Proposed Products Form, and Document 00 43 36, Proposed Subcontractors Form.

More commonly, the selection of Subcontractors and Suppliers is left to the Contractor. However, some owners may require that Bidders identify their proposed Subcontractors and Suppliers during the bidding process, both as a quality control measure and to discourage the practice of bid shopping. For public construction projects, the Laws and Regulations regarding requirements to list proposed Subcontractors and Suppliers, either before submittal of the Bid, with the Bid, or at some point afterward, vary significantly by jurisdiction.

Under the model language of C-200 Article 11, the Bidder is not required to indicate proposed Subcontractors or Suppliers in the Bid. The preparer of the specific Project’s Instructions should discuss with the Owner (which should consult with its legal counsel) whether Owner concurs with this approach, and whether Laws and Regulations require a different course.

C-200 11.03 requires the apparent Successful Bidder (and other Bidders upon request by the Owner) to submit a list of proposed Subcontractors and Suppliers, which the Owner may require be accompanied by experience statements. If the Owner objects to a proposed Subcontractor or Supplier, the Successful Bidder (Contractor) is required to use an alternative Subcontractor or Supplier. The drafter of the Project’s Instructions to Bidders, after consultation with the Owner, must indicate whether such a required substitution will result

in a price adjustment (which is EJCDC’s default assumption, as indicated in the last sentence of C-200 11.03), or will be at the Contractor's risk and expense (this possibility is addressed in Guidance Note 3 at the beginning of C-200 Article 11). It is believed that alternative language that does not allow a change in the Bid price when a substitute Subcontractor or Supplier is required would be acceptable under most public Bidding laws; it could, however, result in higher Bid prices because Bidders would be inclined to include a contingency to cover the possibility that a substitute Subcontractor or Supplier would have a higher subcontract price than the unacceptable listed Subcontractor or Supplier.

For owners and engineers, becoming involved in the Subcontractor and Supplier selection process has the potential to be misconstrued as unwarranted involvement in the Contractor's core business, and could result in unwanted expense, claims, or complaints. As stated in the General Conditions, neither the Owner nor the Engineer is to assume any of the Contractor's responsibilities.

L. *Instructions to Bidders, Article 12—Preparation of Bid*

EJCDC strongly recommends using *EJCDC® C-410, Bid Form for Construction Contract*, as the basis for drafting each specific Project’s Bid Form.

C-200 Article 12 provides specific details for completing the Bid Form and, thus, for each specific Project this article must be coordinated closely with the specific Project’s Bid Form. C-200 Article 12 is largely based on the premise that the Bidder will submit a Bid that has been entered on a paper document. When Bids are allowed to be, or are required to be, submitted electronically, the model language of C-200 Article 12 and C-200 Article 14 (“Submittal of Bid”) will have to be edited significantly. Whether Bids may, or must be, submitted electronically will be governed by the Owner’s preference, statutory requirements, and validity of electronic signatures and seals. There are various ways in which an electronic Bid can be prepared and submitted. When it is desired to solicit or allow electronic Bids for public work, the preparer of the Project’s Bidding Requirements should consult with the Owner (which should consult its legal counsel) to ensure compliance with the Owner’s desired practices and Laws and Regulations.

M. *Instructions to Bidders, Article 13—Basis of Bid*

The proposed price to perform the Work is usually the most critical factor in determining the Successful Bidder. It is of paramount importance that the Project’s Instructions on this topic be clear and explicit, and that they be closely followed and enforced.

C-200 Article 13 contains instructions that can be used to call for a single lump sum Bid, a series of lump sums, unit price Bids, a base Bid with (additive) alternates, and sectional Bids. In some cases, the drafter of the Project’s Instructions to Bidders will select one of these for inclusion in the Project’s Instructions; in other cases, the basis for Bids may be a combination of one or more of the alternative types (e.g., a single lump sum with unit prices, or a base Bid comprised of a series of unit prices plus additive alternate items, etc.). When the basis for Bids will be a combination of types, the model language for both types will have to be combined to clearly indicate how the Bidder must complete the Bid Form and how the Owner will evaluate the Bids for the determination of the apparent low Bid (the latter is addressed in C-200 Article 18).

C-200 13.06 addresses cash allowances; see also C-700 13.02. Traditionally, the more-detailed requirements for cash allowances are indicated in the Specifications. When CSI MasterFormat

is used for organizing the project manual, such provisions may be located in Specifications Section 01 21 00, Allowances. When CSI *SectionFormat*[®] is used for organizing the individual Specifications sections, additional information on specific cash allowances may be specified in a Specification section's appropriate area of the "Part 1 – General" article titled "Price and Payment Procedures."

Refer to the discussion of C-200 Article 18 ("Evaluation of Bids and Award of Contract"), below, relative to evaluating the Bids to determine the apparent Successful Bidder for various forms of bidding, such as the situation of a base Bid with alternates.

C-200 13.07 is an instruction for "price-plus-time" (or "A+B") bidding, in which the Bidder is required to Bid on both price and the time of completion (in the more typical case, the owner sets the time in which the Work must be completed, so the Bidders are bidding only on price). In public work, use "price-plus-time" bidding only when enabled by Laws and Regulations, and after a review of the Guidance Notes (in C-200 Article 13) that discuss "price-plus-time" bidding. When the Owner elects to use C-200 13.07, the drafter of the Project's Instructions should indicate the Owner's stipulated minimum and maximum times for the proposed Contract Times to be indicated in the submitted Bid Form.

Documents to be submitted with the Bid are listed in the Bid Form (see C-410 2.01). Coordinate the provisions of C-200 Article 13 and C-200 Article 18 ("Evaluation of Bids and Basis of Award") with the required attachments to the Bid as listed in the Bid Form, relative to the specific information to be furnished with the Bid, and how such information will be considered in evaluating the Bids. EJCDC recommends avoiding requiring extraneous information with the Bids. Such extraneous information can cloud the process of evaluating the Bids, and may result in increased potential for bid protests.

N. *Instructions to Bidders, Article 14—Submittal of Bid*

C-200 Article 14 contains requirements for submitting the Bid.

Refer to this Commentary's Section 3.4.M, for a brief discussion of electronic submittal of Bids; when such bidding is used, edit the Project's Instructions at Article 12 and Article 14 accordingly.

O. *Instructions to Bidders, Article 15—Modification and Withdrawal of Bid*

C-200 15.01 and C-200 15.02 address the withdrawal of a submitted Bid before the deadline established for receipt of the Bids. This is a relatively uncontroversial subject; the most pressing issue is whether a Bidder that submits and then withdraws a Bid before the opening may submit a new Bid, assuming there is adequate time in which to do so. C-200 15.02 allows such resubmittals; but, for public work, such resubmittals are not allowed in all jurisdictions.

More difficult issues arise when a Bidder realizes after the Bid opening that it has made a Bid mistake (often as a result of seeing the Bid prices submitted by others). Many statutes and owner requirements, and a considerable body of case law, address such bid mistakes. As a matter of policy EJCDC supports the principle that a Bidder should be able to withdraw a Bid within a specified, limited time after the Bid opening, without a penalty (such as forfeiture of its bid security), if a "material and substantial mistake" was made in the Bid's preparation; this principle is embodied in C-200 15.03. However, for public work, governing Laws and Regulations must be the controlling factor in drafting Project-specific Instructions regarding Bid mistakes first discovered post-opening. For public work, the model language of

C-200 15.03 will frequently require editing for the Project, based on the direction of the Owner after consultation with its legal counsel.

It is difficult to summarize or state a clear-cut rule regarding how to handle Bid mistakes, in a Project's Instructions or as a matter of bidding administration. An assortment of factors may be relevant: the circumstances that led to the error (for example, a clerical error may be excusable while a negligent one may not); the gravity and implications of the mistake; and the conduct of the Bidder upon discovery of the error (prompt written notification of the Owner and submittal of supporting proof are almost always a requirement). Because of the importance of proper handling of a Bid mistake, the Engineer and other Owner representatives (if any) should immediately report any hint of a bidding error to the Owner and advise that the Owner involve its legal counsel.

Some Owners and Engineers may take the position that any Bid, regardless of whether it contains a substantial error, is binding; indeed, some Owners regard such Bids as an opportunity to obtain the Work at a bargain price. In fact, awarding a contract to a Bidder whose Bid was unusually low may lay the foundation for trouble during the construction phase. A contractor bound to a contract with insufficient compensation for the Work may be tempted to recover its financial losses through unjustified change proposals and claims. A contractor facing extreme financial adversity may take short cuts with the quality of the Work (or with its own means and methods) as a means of avoiding costs.

Owners sometime reason that awarding the contract to a low bidder that submitted an erroneous Bid is an opportunity to "force" the bidder to default in entering into the contract, thus entitling the owner to recovery on the bid bond or other bid security. Again, this is a viewpoint that has potential for generating trouble—the contractor and its surety may strenuously fight the refusal to excuse the bid error, or the contractor may confound expectations and risk entry into the contract at an unreasonably low price, perhaps leading to the unfortunate results outlined in the preceding paragraph.

To avoid these adverse potential outcomes when the Owner accepts an erroneous Bid, EJCDC endorses and supports the concept of allowing a Bidder that submitted an erroneous Bid to withdraw the bid, post-bid opening, upon prompt notice to the Owner with supporting documentation substantiating that the error was substantial and inadvertent. However, EJCDC acknowledges that governing Laws and Regulations, local custom, or Owner preference, may dictate the need for a stricter approach.

P. *Instructions to Bidders, Article 16—Opening of Bids*

The drafter of the Project's Instructions to Bidders should indicate at Article 16 whether the Bid opening will be public or private, unless such information is already presented in the Advertisement or invitation to bid. A public opening of Bids (which can be done on a project that is either publicly or privately funded) is mandatory for public projects in many jurisdictions, whereas private openings are common on privately funded projects. Coordinate Article 16 of the Project's Instructions with the provisions of the Project's Advertisement or invitation to bid.

Q. *Instructions to Bidders, Article 17—Bids to Remain Subject to Acceptance*

C-200 Article 17 requires that Bids are to remain subject to acceptance for the period of time stated in the Bid Form; see C-410 7.01 ("Bid Acceptance Period"). To reduce the potential for

conflicts in the Bidding Requirements, EJCDC recommends that such information be presented at only one location: in the Bid Form.

EJCDC's presumptive case is that Bids remain open and valid for 60 days after the Bid opening. Acceptance periods may vary based on the Owner's procedures or, for public work, on Laws or Regulations. In addition, requirements for funding or financing entity (if any) reviews and approval may require adjustments from EJCDC's presumptive time. See this Commentary's Section 6.3 for a discussion of C-700 4.01, where the Commentary presents additional information on the events upon which EJCDC's presumptive 60-day time are based.

R. *Instructions to Bidders, Article 18—Evaluation of Bids and Award of Contract*

C-200 Article 18 addresses how the Bids will be evaluated and states the Owner's basis for awarding the Contract. Its provisions must be reviewed carefully and revised as needed to state each specific Project's competitive bidding ground rules.

C-200 18.01 reserves the Owner's right to reject any and all Bids, and to waive minor informalities. These rights are generally regarded as narrow in scope, and are limited by public bidding case law. C-200 18.02 and 18.03 address the conditions under which the Owner may, or will, disqualify Bidders that are deemed not responsible, or reject a Bid if the Bidder attempts to add conditions or alter the terms or content of the proposed Contract Documents. The C-200 18.01, 18.02, and 18.03 clauses are standard in the construction industry; modifications (if any) are usually modest in scope.

The model language of C-200 18.04 indicates that the Owner will award the Contract to the responsible Bidder that submits the lowest-priced, responsive Bid. This is a fundamental commitment that is at the heart of the competitive bidding process: it assures prospective contractors that there will be an objective determination of the Successful Bidder. This objective commitment is typical in public work and is also common in private work. In public work, if the drafter is considering revisions to the model language of C-200 18.04, EJCDC strongly recommends that the Owner's legal counsel be consulted for advice and recommendations.

An alternative approach sometimes used in private work (but extremely rare in public work) is for the Owner to reserve the right to award the Contract to any Bidder not disqualified, regardless of whether that Bidder's Bid was mathematically low. Even if such an approach meets controlling Laws and Regulations or corporate standards, its subjectivity will usually reduce contractors' interest in bidding, and in striving to present the lowest price possible.

As discussed above in this Commentary's discussion of C-200 Article 3 and below concerning EJCDC® C-451, Qualifications Statement, an evaluation of the Bidder's "responsibility" (addressing qualifications, experience, record of performance, resources to perform the Work, and other considerations) is typically an important threshold element in determining whether a Bid will be disqualified or rejected.

C-200 18.05 is also a key provision, addressing the process by which Owner will evaluate the Bids for purposes of identifying the low bid. C-200 18.05 presents model language for various types of bidding, whether one or more lump sums, a base Bid with alternate items, sectional bidding, Unit Price Work, bidding when Contract compensation will be on the basis of cost-plus-a-fee, and price-plus-time ("A+B") bidding. The Owner should select and retain the wording that is applicable to the specific Project, and delete inapplicable clauses. Where the

basis for the Bids includes a combination of pricing provisions, the various components set out in C-200 18.05 will need to be edited and combined as appropriate for the Project.

Presented below is a brief discussion of considerations relevant to preparing Paragraph 18.05 of the Project's Instructions to Bidders:

1. *Alternative Evaluation Factors*

The preparer of the Project's Instructions to Bidders, acting on the Owner's direction, should determine whether evaluation factors other than determining the lowest-priced, responsive Bid by a responsible Bidder are (1) of importance to the Owner and (2) statutorily allowed in the jurisdiction of the Project, and edit Article of the Project's Instructions 18 accordingly. Such non-construction price evaluation factors might include the Bidder's proposed Contract Times (for price-plus-time bidding); equipment efficiencies; the chemical or energy consumption of an item of process equipment; life-cycle costs; and other items. Often, such information included with the Bid will be converted into either (a) a present-worth value, based on a specified period of assumed equipment or system life, with the resulting present-worth then added to the construction pricing indicated on the Bid Form; or (b) a system of "scores" is assigned for various types of information indicated in the Bid, based on weighted scoring criteria, which may involve the bid construction price and certain present-worth cost elements and possibly other factors. Either of these may be the basis for determining the apparent Successful Bidder based on non-construction price factors indicated in the Bid.

When such procedures are used in evaluating the Bids, the drafter of the Project's Instructions should clearly specify such criteria in Article 18 (usually in Paragraph 18.05) of the Project's Instructions. In many cases, it will be advisable to include sample calculations, to clarify the Bid evaluation procedures and reduce the potential for bid protests. Such criteria should also be coordinated with Article 13 ("Basis of Bid") of the Project's Instructions and the Project's Bid Form.

Where the Contract is awarded in part on the basis of factors other than construction price, it may also be appropriate to incorporate the non-price elements of the Bid into the Contract by appropriate editing of the Project's Owner-Contractor Agreement, together with appropriate contractual consequences (such as performance damages) if the Work as provided fails to comply with the promised equipment performance or other non-construction price factors indicated in the Bid. Thus, when the basis for award includes factors other than construction price, it may be appropriate to "put teeth" into the assertions and promises set forth in the Bid. Refer to C-520 5.01 Guidance Note 3 and C-525 5.01 Guidance Note 1 for advice on specifying performance damages.

2. *"Best Value" Awarding*

For public work, some jurisdictions allow the award to be based on "best value," which may include consideration of factors in addition to construction price. This is merely a variation on the discussion immediately above for "Alternative Evaluation Factors," although in public work the term "best value" is often used in enabling statutes. In some jurisdictions, subjective criteria may be used, on a weighted-scale basis, in ranking the Bids to determine which constitutes the "best value" for the Project. When the award is based on "best value" criteria, significant changes to the model language of C-200 Article 18 will be necessary, especially for C-200 18.04 and 18.05. C-200 does not include any model language for "best value" Bid evaluations, because of the wide range of criteria and evaluations that are possible. In public

work, EJCDC strongly recommends that “best value” provisions, when used, be thoroughly vetted by the Owner’s legal counsel before the Project is advertised for Bids.

3. *Base Bid Plus Alternates*

When using “base Bid with alternates,” it is recommended that the alternate bid/pay items on the Bid Form be either all additive (increases in the bid price) or all deductive (reductions in price). This will assist in reducing the potential for Bidder error in completing the Bid Form and will simplify the basis for evaluating the Bids. The text of C-200 18.05.B (for “Base Bid with alternates”) and the corresponding provisions in the Bid Form, have been developed only for additive alternates. The same format, with revisions, also could be used with deductive alternates.

Note carefully the wording of C-200 18.05.B which states that alternates will be considered in the order of priority listed on the Bid Form (this is also stated in C-200 13.02). Assuming that the alternates are additive, this means that the first alternate listed in the Bid Form is the one most desired by the Owner and that each succeeding alternate has an incrementally lower priority. When written for deductive alternates, the order of priority is reversed and the first alternate would be the least desired by the Owner.

Some project owners have been known to use alternate bid items to manipulate the selection of the Successful Bidder, by asking for base Bids with numerous alternates and then, after the bid opening, picking and choosing those alternates that would result in an award to a favored Bidder, or eliminate from consideration a disfavored Bidder. If an owner has a history of engaging in such chicanery, or issues Instructions that give Owner latitude to base the award on any combination of alternates the Owner desires after the revelation of all prices (to allow the Owner maximum flexibility in determining the final scope of the awarded Contract), some potential Bidders will be discouraged from competing for the Contract, and there will be an increased potential for bid protests. Introducing substantial subjectivity into the Bid evaluation process, or creating a potential perception of nefarious intent in the award of a public contract, are rarely in the best interests of the Owner or the Project.

EJCDC’s model provisions of C-200 13.02 and 18.05.B for determining the apparent low Bidder under “base Bid with alternates” are similar to clauses used by several United States federal government agencies and, when formally challenged, have been upheld by several boards of contract appeals. It represents the fairest method of determining the apparent low Bid in the context of multiple alternate bid/pay items, based on EJCDC’s review of possible approaches. When followed precisely, including the Owner’s announcement of the “budget” available for the Work (usually just prior to opening the Bids, although such “budget” should likely be correlated with the opinion of probable bid price published in the Project’s Advertisement developed using the model language of C-111) the determination of the low Bid should be impartial, and a Bidder or other entity with a substantial interest in the award of the Contract will have little basis to challenge an award with a claim that the Owner manipulated the order of the Bids by a post-bid selection of specific alternate items or a post-bid determination of the order in which the alternates are selected.

4. *Sectional Bids*

Model wording is provided in C-200 13.03 and at C-200 18.05.C for sectional bidding, in which the Bidder is allowed to bid on either a portion of the Work (or “section,” as specifically

established in the Bidding Documents) or the entire Work, if available. Sectional Bids sometimes are referred to as "combination Bids."

As an example, consider a project that involves 10 miles of large-diameter water transmission main. The owner chooses to use sectional bidding to encourage greater utilization of smaller, local firms, or perhaps to determine if there are economies of scale available. In this example, the owner may designate Miles 1 through 3 as Section A; Miles 4 through 7 as Section B; and Miles 7 through 10 as Section C. In this scenario, the Bid Form would be set up to require separate pricing for each Section, and Bidders allowed to submit bids on one, two, or three Sections. One or more contracts would be awarded, based on the combination of bids that provides the lowest overall price for the entire project.

As with the basis for evaluating Bids for "base Bid with alternates," the criteria established for evaluating the basis for award of Contract(s) for sectional bidding should be clear and objective.

5. *Unit Price Bidding*

This is addressed at C-200 13.05 and C-200 18.05.D. The term "Unit Price Work" is defined at C-700 1.01.A.48 and is contractually addressed, among other provisions, at C-700 13.03. Unit Price Work bidding is typically used where the general extent and scope of the Work is known in advance (and shown on the Drawings) but the exact quantities of the Work cannot be accurately determined (by Owner, Engineer, or Bidders) in advance of pricing. In contrast, lump sum bidding is used when the scope and extent of the Work is known in advance for pricing and is considered relatively unlikely to change. Unit Price Work is most-often used in linear utility work and civil/site work, such as roadway construction and site grading.

Bidding of Unit Price Work is very common and the procedures are well established. The Bid Form, as distributed to the Bidders, lists the various pay items of Unit Price Work and stipulates a reasonable estimated quantity for each pay item. The Bidders then bid a unit price for each pay item. To compare the Bids, the unit price bid for each pay item is multiplied by the stipulated (estimated) quantity, and the resulting products (Bid Amounts) for the pay items are summed. The total of the Unit Price Work items is added to the amount of lump sum items, if any, to establish the as-bid price on which the Bid as a whole is evaluated.

Unit Price Work is discussed further in this Commentary's Section 3.6, in the discussion of C-700 13.03 ("Unit Price Work").

6. *Cost-Plus-Fee Bidding*

Cost-plus-fee bidding is addressed in C-200 13.04 and C-200 18.05.E. Although not common in public work, construction contracts where the basis of compensation paid to the contractor will be on the basis of "Cost of the Work" (a term defined at C-700 1.01.A.17 and C-700 13.01) plus a fee may be bid and awarded by competitive bidding. In such cases, the most-obvious way to evaluate the Bids is by the lowest proposed Guaranteed Maximum Price (GMP). Another option is price competition based on the fee proposed by the Bidders.

7. *Price-and-Time ("A+B") Bidding*

For most competitively bid projects, the Owner establishes the date by which (or number of days in which) the Contractor must complete the Work ("Contract Times"), and states the same in the Owner-Contractor Agreement that is provided as one of the Bidding Documents. Each Bidders prepares its Bid based on the same, stipulated Contract Times and competes

only as to price. As an alternative to the typical practice, EJCDC provides model wording for a competitive process in which both time-to-complete and price-to-construct are factors (see C-200 9.02, C-200 13.04, and C-200 18.05.F). The criteria for determining the apparent “low” Bid for price-plus-time bidding are specified in C-200 18.05.F.

Price-plus-time bidding may be beneficial when the Owner has a strong desire to minimize the duration of construction operations, or when the Owner has the potential to realize benefits, financial or otherwise, from having Bidders competitively bid on the time of completion (in addition to bidding on the construction price). Price-plus-time bidding may encourage Bidders (thus ultimately, the Contractor) to adopt innovative and aggressive scheduling and construction management approaches that will shorten the construction duration and reduce inconvenience, or sooner deliver a worthwhile benefit (such as a new bridge) to the Owner and, often, the public. However, before electing to use price-plus-time Bidding, the Owner and Engineer should identify the specific benefits of, and reasons for, using this bidding approach; price-plus-time bidding should not be used routinely where price-only bidding is sufficient.

In price-plus-time bidding, the Bidder submits both a construction price plus the time in days to complete the Work. In evaluating the Bids to determine the apparent low Bid, the proposed Contract Time (typically that for Substantial Completion) proposed in the Bid is converted into a dollar amount by multiplying the Bidder-proposed number of days by a cost-per-day amount, determined by the Owner (or Engineer) prior to issuing the Bidding Documents, and stated (or cross-referenced) in the Bid Form that the Owner provides. The product of the completion time proposed in the Bid and the Owner-stipulated cost-per-day is then added to the construction price indicated in the Bid, and the sum is used to compare the Bids and determine the low Bid.

There are various ways of establishing the cost-per-day that is stipulated in the Bid Form: the cost-per-day could be an amount calculated by the Owner or Engineer based on predetermined formulas for inconvenience, such as the value of having a highway open a day sooner; or cost-per-day could be established simply by adopting the same daily amount specified in the Owner-Contractor Agreement for liquidated damages for late completion. Price-plus-time bidding can also be used in conjunction with a bonus/penalty clause in the Owner-Contractor Agreement, if desired by the Owner.

Some projects are not suitable for price-plus-time bidding. These include projects: (1) with short probable construction Contract Times; (2) with a low cost-per-day value; (3) that have significant potential for work progress to be affected by others, such as a third-party utility company, that are beyond the control of both the Owner and Contractor; (4) that have inflexible completion times (for example, a school building that is not of value to the Owner if completed early); (5) where acceleration might compromise safety or quality of the Work; or (6) for public work, where enabling legislation does not support price-plus-time bidding.

C-200 18.06 asserts the Owner’s right to consider the qualifications of proposed Subcontractors and Suppliers, and should be coordinated, for the Project, with the Project’s Instructions Article 11.

C-200 18.07 asserts the Owner’s right to investigate the qualifications of Bidders and proposed Subcontractors. The model language of C-200 18.07 is standard wording that rarely requires editing for a specific Project.

The Bids may be evaluated by either the Owner or the Engineer. In public work, it is common for the Owner to retain the Engineer to assist with tabulating the Bids, performing an initial review of the Bids, and furnishing the Owner with written recommendations concerning award of the Contract. While a full discussion of recommended approaches for the Engineer's evaluation of the Bids and recommendations on the Contract award is beyond the scope of this Commentary, a few points may be useful:

- The written recommendation should be drafted professionally and dispassionately, without opinion or bias.
- If submitted to a public owner, the recommendation will become part of the public record and has the potential to be an exhibit in a bid protest.
- Determination of a Bidder's "responsibility" and whether to reject or disqualify a Bid are subjective matters that should typically, in public work, be undertaken by the Owner and its legal counsel.
- Irregularities or non-responsiveness in the Bids should be brought to the Owner's attention so that the Owner can make the determination as to whether such irregularities or non-responsiveness are minor (and can be waived) or are substantive and therefore should result in rejection of the Bid.
- It is often useful for the Engineer to discuss bid issues with the Owner or the Owner's legal counsel before finalizing the Engineer's written recommendations concerning award of the contract.
- Engineer's recommendations regarding award of public contracts should typically include an express statement making the recommendations subject to the review and approval of the Owner's legal counsel.

C-200 Article 18 is the final provision of the Instructions that addresses bidding. The remaining standard provisions of C-200 address awarding and signing the Contract, and the Successful Bidder's concurrent submittal of required contract bonds and evidence of insurance. Project-specific Articles may be added to the Project's Instructions following C-200 Article 20; model language for common add-on provisions is included in C-200.

S. *Instructions to Bidders, Article 19—Bonds and Insurance*

C-200 Article 19 is used primarily to refer Bidders to the bond and insurance requirements in the General Conditions (C-700 2.01 and C-700 Article 6) and associated provisions of the Supplementary Conditions (for which model language is presented in C-800).

In coordination with C-700 2.01, C-200 19.01 also requires that the Successful Bidder deliver bond and insurance documentation to the Owner at the time the executed Contract is submitted; refer to the discussion immediately below on C-200 Article 20 ("Signing of Agreement").

For completeness, C-200 19.02 includes a cross-reference to the Instructions Article 8 for requirements on bid bonds furnished as bid security.

The drafter of the Project's Instructions may desire to include a cross-reference in Article 19 of the Project's Instructions to applicable requirements regarding other contract bonds, if any, required by law or the Owner. For example, if the Owner requires a warranty bond to cover an extended correction period (correction period is addressed in C-700 15.08), the drafter

may potentially include a new Paragraph 19.03 to read, “Provisions concerning a required warranty bond are set forth in Paragraph SC-6.01.B of the Supplementary Conditions.”

Typically, required performance and payment bond forms are bound with the Bidding Documents. In the relatively rare circumstance where such bonds are required but are not bound in the Bidding Documents, specify the required bond forms in the Project’s Instructions or in SC-6.01 of the Supplementary Conditions, and indicate where they may be obtained by the Successful Bidder or its surety.

As discussed elsewhere in this Commentary, to achieve the required coordination between the date of the performance bond and payment bond and the Effective Date of the Contract (as indicated in the Agreement), it is often advisable to establish the Effective Date of the Contract (by filling in the appropriate blank in the Agreement) prior to finalizing the Agreement, and transmitting it to the Successful Bidder for signature.

T. *Instructions to Bidders, Article 20—Signing of Agreement*

On many projects, as discussed above regarding C-200 Article 18, the Owner retains the Engineer to assist in evaluating the Bids and prepare a recommendation concerning award of the Contract. After the Engineer’s issuance of its written recommendation, the Owner, often in consultation with its legal counsel, will make a final decision concerning award of the Contract. In public work, this often requires a formal vote by the Owner’s governing board (such as a city council, county board, or utility authority board) at a public meeting.

Assuming no bid protests, the next steps after the Owner makes its final decision regarding the award of the Contract will typically include the Owner’s issuance of a written Notice of Award (see EJCDC® C-510, Notice of Award), and preparation of the Contract Documents for signature. Concerning the latter action, refer to this Commentary’s Section 3.5 and its discussion of C-520 (Owner-Contractor Agreement—Stipulated Price), for a discussion of preparation of the Agreement and other Contract documents for signature by the parties.

In some cases the award process may be more protracted. For example, if the Project has public funding or financing, the Owner may need to obtain the funding or financing agency’s approval of the award before issuing the written notice of award to the Successful Bidder. Some owners have internal procedures that may necessitate issuance of a document known as a “notice of intent to award” as a precursor to the owner’s formal award of the Contract. EJCDC’s C-Series documents do not address any such permutations on the award and Contract signing process, and it may be necessary for the drafter of the Project’s Instructions to Bidders to make appropriate revisions to suit the Project.

The timing of the award and the Contract signing is important, and must be coordinated with the period that Bids are to remain valid and subject to acceptance (as set forth in the Bid Form, C-410 7.01). On public contracts, it is likely that the award must also be coordinated with the Owner’s board’s meeting schedule. The period the Bid is to remain valid and subject to acceptance must—in addition to being in accordance with Laws and Regulations (for public work)—be sufficient until the Agreement is fully signed and effective (i.e., through the Effective Date of the Contract).

Under EJCDC’s C-Series documents, the time in which the Contractor must complete the Work (the Contract Times) begins at a specific time that is related to other key events. This Commentary’s Section 6.3, in its discussion of C-700 4.01, presents a discussion of the

chronology of events from the date of the Bid opening to the date when the Contract Times begin to run. The signing of the Owner-Contractor Agreement is part of that chronology.

C-200 Article 20 requires that the Successful Bidder sign the Owner-Contractor Agreement within 15 days of the Owner's issuance of the Notice of Award, and return signed counterparts (copies) of the Agreement to the Owner, together with the executed performance bond and payment bond, and insurance documentation, as discussed in this Commentary's Section 3.4.R.) Although the Successful Bidder may be able to accomplish this in less than 15 calendar days, at least 10 days are required for the Successful Bidder to obtain the necessary bonds and insurance documents. EJCDC recommends against reducing the standard 15-day time period.

When Owner receives the bond and insurance documentation, Owner should carefully review the documentation for compliance with the Contract's requirements. Contractor should be required to make any necessary corrections and furnish missing endorsements—all of which may take several days. Many owners prefer to not sign the Agreement until Contractor has fully complied with the bond and insurance requirements of the Contract.

If the date on the performance bond and payment bond is earlier than the Effective Date of the Contract, the validity of the bonds may be in question. In situations where the Owner does not sign the Owner-Contractor Agreement for several days or perhaps weeks after signature by the Successful Bidder, extra care should be taken to avoid conflicts between the Effective Date of the Contract and the dates of the executed performance bond and payment bond. If the time frame for submitting the signed Contract Documents and bonds is extended beyond EJCDC's presumptive case of 15 days, it may be necessary for the preparer of the Bidding Documents to consider other time provisions in the Bidding Documents that may need to be revised accordingly.

Following signature of the Agreement by the Owner, it is necessary to return to the Contractor one original of the fully signed Agreement, together with the number of copies of the Contract Documents as set forth in C-700 2.02 (as may be modified by the Supplementary Conditions). The time for Owner to accomplish this is stipulated in C-200 20.01 as 10 days.

When the fully signed Contract Documents are transmitted to the Contractor, they are usually accompanied by a Notice to Proceed, signed by the Owner, that establishes the date the Contract Times start to run and may indicate certain requirements or restrictions on the start of the Work. EJCDC recommends using EJCDC® C-550, Notice to Proceed. When alternative forms for the Notice to Proceed are used, EJCDC recommends that they be clearly labeled as "Notice to Proceed" and that they clearly indicate the date on which the Contract Times will start to run.

When a Notice to Proceed is issued, it is a Contract Document, as set forth in C-520 7.01 and C-525 11.01. If a Notice to Proceed is not issued, the Contract Times will automatically commence to run as provided in C-700 4.01.

U. *Instructions to Bidders—Additional Articles*

In addition to the basic provisions required on most projects (C-200 Articles 1 through 20), C-200 also includes suggested language for special instructions regarding (a) sales or use tax exemptions applicable to the Work; and (b) direct purchase by the Owner of goods or services (via a separate materials or equipment procurement contract) and assignment of such procurement contract to the Contractor. As with several other Instructions to Bidders, the

primary goal of instructions regarding sales tax or Owner procurement contracts is to provide a short summary and a cross-reference to the actual contract provision in the Owner-Contractor Agreement, General Conditions, and/or Supplementary Conditions. Such cross-references to non-standard contract clauses, such as those concerning sales tax exemptions and assignment of procurement contracts, are included as a convenience to Bidders. The drafter may wish to include additional instructions in the same vein, such as a cross-reference to special funding/financing contract provisions.

Another topic that may be addressed in a Project Instructions article subsequent to C-200 Article 20 is partnering. Partnering is a formal process whereby the Owner and the Contractor work together throughout the Project to achieve harmonious relations, particularly relative to resolving disagreements to reduce the potential for Contract changes and Claims. An article on partnering in the Project's Instructions would identify the Owner's interest in partnering on the Project, and would indicate how the Owner will pay for the facilitator and the facilities necessary for the initial partnering meetings. In some cases, the Owner will prefer to select a facilitator of its choice and, having done so, it is reasonable that the Owner bear the full cost of the initial partnering sessions. If the Owner wants essentially all costs related to the Project, including the costs associated with partnering, to be included in the Bid price, such should be indicated in the Instructions. The full requirements for partnering during the course of the Project should be included at an appropriate location in the proposed Contract Documents, such as the Supplementary Conditions.

3.5 EJCDC® C-410, Bid Form for Construction Contract

A. *The Bid's Integral Role in Contract Formation*

The Bid Form on which the Bidder submits its price commitment and selected other information is a significant document. When completed, signed, and submitted, the Bid Form will typically function as a legally binding offer to enter into a contract on the terms and conditions stated in the Bidding Documents. *EJCDC® C-410, Bid Form for Construction Contract*, is a useful foundation for preparing a Project-specific Bid Form, and is coordinated with EJCDC® C-200, Instructions to Bidders for Construction Contract.

The primary purpose of the Bid Form is to ensure a uniform arrangement of pricing and other information required of bidders, to facilitate comparison of Bids, and to foster and allow equal consideration of all Bidders during the evaluation of Bids. The Bid Form also includes a series of representations or promises made by the Bidder (C-410 Article 8). These include actions the Bidder stipulates that it has or has not taken prior to the submittal of the Bid, and actions that the Bidder will take if it is awarded the Contract.

The simultaneous use of "Bid" and "proposal" in various parts of non-standard construction documents is often confusing because their meanings differ depending on context. The term "proposal" often implies an opportunity for further discussion and negotiation between the Owner and the proposer; commonly a proposal is not binding on the proposer.

In contrast, the term "Bid" (a term defined at C-700 1.01.A.4) suggests a greater degree of formality and legal significance. Typically, a Bid is a binding offer; in most instances the Owner will accept one of the Bids, without further conditions or negotiation, and by doing so a binding legal relationship is formed. Based on these general concepts, for the design-bid-build project delivery method, EJCDC has standardized the terms "Bid" and "Bidder" (the latter

defined at C-700 1.01.A.5) both of which are used in C-410, in EJCDC® C-200, Instructions to Bidders for Construction Contract, and throughout other EJCDC C-Series documents. This usage is also consistent with the American Institute of Architects (AIA) standard contract documents (including AIA® A701™—2018, Instructions to Bidders) and the procurement practices of many owners, and is endorsed by the Construction Specifications Institute (CSI), as set forth in the *CSI Project Delivery Practice Guide*, and the *CSI Construction Specifications Practice Guide*.

Provided that the Bids are to be submitted on paper, the Issuing Office should furnish to each prospective Bidder at least one copy of the Bid Form, and all supplements, exhibits, or attachments to the Bid Form with the Bidding Documents. It is common practice to include a copy of the Bid Form and its supplements in the bound project manual, and also provide a separate unbound copy for the Bidder's ease of use when the Bid is to be submitted on paper. It should normally not be necessary or desirable for Bidders to complete a Bid Form while it is bound into the project manual—thus necessitating submittal of the entire bound project manual with the Bid, although at times this awkward practice is required by some owners. Requiring submittal of the entire bound project manual with the Bid not only results in a physically awkward need to carry several, usually voluminous, bound manuals from the bid opening and increases the effort to scan a copy of each Bid to a PDF file for record purposes, but also deprives the apparent Successful Bidder (and other Bidders that may have a reasonable chance of being awarded the Contract) of their copy of the project manual until they receive the signed Contract.

There should be only one “original” of each Bid—all additional copies should be reproduced from the “original” to avoid mistakes and conflicts in the information submitted.

In the case of bidding on Unit Price Work, the Project's Instructions to Bidders should state that the estimated quantities set forth in the Bid Form are approximate only; the resultant prices in the submitted Bid for the items of the Unit Price Work are estimates and subject to adjustment based on actual quantities (C-700 13.03.B). The Contract Documents should provide for an equitable adjustment of unit prices in the event of a specified over-run or under-run of estimated quantities; see C-700 13.03.E and the related optional Supplementary Condition (C-800 SC-13.03.E).

Competition for the construction Contract is enhanced when the issued Bidding Documents contain reasonably accurate estimates of quantities for Unit Price Work. Additionally, the Bidding Documents should clearly establish the scope of each item of Unit Price Work and the criteria for eligibility for payment. As established in C-700 10.05 and C-700 13.03.D, Engineer determines the quantities of Unit Price Work eligible for payment. The provisions on measurement for payment should be clearly set forth in the proposed Contract Documents, including a Project-specific Specifications Section 01 22 00, Unit Prices; in the Division 02-49 Specifications section for a given item of Unit Price Work in the “Price and Payment Procedures” Article in that section's “Part 1—General” (when the section's content is organized in accordance with CSI *SectionFormat*®); and, potentially, on the Drawings in the typical details associated with an item of Unit Price Work.

Editions of C-410 published prior to 2007 required Bidders to insert prices in both words and numbers. To streamline the bidding process, to simplify completion of the Bid Form, to reduce the potential for conflicts in bid prices, and because there is no prevailing legal necessity to

use both words and numbers, EJCDC eliminated requiring prices written in words in its 2007 C-Series and subsequent editions.

B. *Preparation for Signature of Agreement*

In the case of a straightforward lump sum Bid, the amount of the Bid is entered into the proper location in the Owner-Contractor Agreement (see C-520 Article 5, C-522 Article 5, or C-525 Article 5). In the case of a Bid with both lump sum and Unit Price Work, particularly one with numerous unit price items, or other complex Bids, the Successful Bidder's pricing schedule in the Bid (C-410 Article 3) may be inserted into the Owner-Contractor Agreement, using an electronic cut-and-paste process that eliminates transcription errors. In the alternative, provisions are included in the Owner-Contractor Agreement (C-520 7.01; C-525 11.01) to attach and incorporate a copy of all of, or a portion of, the Bid Form submitted by the Successful Bidder as an exhibit to the Owner-Contractor Agreement.

In the case of certain other types of Bids (such as base Bid with alternates), and in the case of the private owners that engage in price negotiations with the Successful Bidder prior to signing the Owner-Contractor Agreement, there can be a significant difference between the submitted Bid and the final, agreed-upon Contract Price. In such cases, it may be prudent to create a document that lays out the final pricing and scope (for example, documenting the chosen alternates), and include that document as an exhibit to the signed Owner-Contractor Agreement. CSI *MasterFormat*[®] assigns suggested numbers and titles for several types of Agreement exhibits under "00 54 00, Agreement Form Supplements."

C. *Article-by-Article Discussion of Bid Form*

1. *Bid Form Introductory Information*

Project identification, usually consisting of the Project name and, when applicable, the Contract name and/or number and facility name, should be centered under the document title, "BID FORM." Prompts for adding Project identification are not included in the template of C-410, and should be added by the Project Bid Form's drafter.

Some drafters of a Project's Bid Form may wish to include a list of the Bid Form's articles on the first page. It is not necessary to indicate in the list the page numbers for each individual article.

2. *Bid Form Article 1—Owner and Bidder*

C-410 Article 1 identifies the name of the Owner, to which the Bidder will submit the Bid and with which the Successful Bidder will enter into the Contract. The Bidder's name and contact information is presented at the bottom of the Bid Form.

C-410 Article 1 also contains a core element of the Bid: the Bidder's binding commitment (offer) to perform the Work in accordance with the terms and conditions of the Bidding Documents and at the prices set forth in the Bid.

3. *Bid Form Article 2—Attachments to this Bid*

C-410 Article 2 enumerates the individual documents that, when submitted together, constitute the Bid. To assure submittal of complete Bids, the drafter of the Bidding Requirements should carefully review and if necessary revise and supplement Article 2, and coordinate it with other elements of the Bidding Documents, especially the Project's Instructions to Bidders.

4. *Bid Form Articles 3, 4, and 5—Basis of Bid*

For ease of drafting a Project Bid Form, C-410 includes three articles that present model language for different types of bidding. Article 3 addresses lump sum and unit price items (and selected permutations, such as alternates, allowances, and sectional bids) and will be used on the majority of projects. Article 4 covers cost-plus-fee bidding. When drafting a Project's Bid Form, retain the preferred article, Article 3 or Article 4 (and edit to suit the Project), and delete the other article.

Article 5 covers price-plus-time ("A+B") bidding, which may be used as a supplement to either a stipulated price basis of bid, or a cost-plus-fee basis of bid.

5. *Bid Form Article 3—Basis of Bid: Lump Sum Bid and Unit Prices*

C-410 Article 3 contains suggested formats for lump sum (including lump sum for base Bid, lump sum for additive and deductive alternates, lump sum sectional Bids, lump sum cash allowances, and lump sum contingency allowances) and Unit Price Bids. In preparing the Project's Bid Form for distribution to prospective Bidders, the drafter of the Bid Form should determine which of the various bidding formats presented in C-410 Article 3 are needed, and delete the remainder.

C-410 Article 3 includes model language for both lump sum and Unit Price Work. Lump sum should be used when the scope and extent of the Work is known in advance of pricing. In contrast, Unit Price Work is required where the scope and general extent of the Work is known (and, typically, is shown on the Drawings), but the exact quantity of certain Work items will vary depending on actual conditions in the field.

a. *Lump Sum*

There is usually little advantage gained by requiring Work that should be a lump sum to be one or more unit prices, for the same reasons—set forth immediately below—why multiple lump sums are often undesirable and, occasionally, counterproductive.

Although for some projects a large number of bid/pay items cannot be avoided, especially on projects that are primarily civil/site work in nature, the drafter of the Project's Bid Form should typically endeavor to use the least number of bid/pay items possible for the needs of the specific Project. Too many bid/pay items may unnecessarily complicate the preparation of Bids. A balanced decision, based on experience and knowledge of the design and the specific Project, must be made in determining the number and types of bid/pay items to include in the Bid Form, with a reasonable understanding of the intended uses of lump sum and unit price items.

b. *Unit Prices*

For Unit Price Work items, estimated quantities indicated on the Bid Form should be as accurate as reasonably possible, based on the scope and extent of the associated Work shown on the Drawings. Naturally some variation in quantities will occur—this is the point of calling for a Unit Price. However, if the quantities stated are significantly underestimated or overestimated, the resulting unit price may be unfair to either the Owner or the Contractor. Therefore, it is important for the Engineer, a construction cost estimator, or other entity to provide due diligence in establishing quantity estimates.

Use of unit prices is often accompanied by increased administration during construction, as the Engineer is required by the General Conditions (and perhaps the Specifications) to

measure actual quantities of Unit Price Work eligible for payment. This may entail an ongoing, daily effort. The Contract should clearly set forth requirements on measurement of quantities for payment. This is often set forth in the Specifications: when CSI *MasterFormat* is used for organizing the project manual, in a Section 01 22 00, Unit Prices; and/or, when CSI *SectionFormat*® is used for organizing the content of individual Specifications sections, in the “Price and Payment” Article of “Part 1—General” of the section in which the associated Unit Price Work is specified. Such provisions of the Specifications must be coordinated with the Project’s Bid Form.

It is very important for the drafter of the associated Specifications (and, sometimes, the Drawings), to clearly indicate the pay limits for Unit Price Work and criteria for measurement for payment. Clarity regarding measurement and payment will allow the Bidders to make Unit Price Bids that will be competitive and provide adequate compensation.

c. *Multiple Bid Items*

Many projects require bidding on multiple lump sum bid/pay items, as opposed to requiring bidding on a single lump sum item. This practice apparently stems from a belief that the requirement to state a price for a number of items during the bidding process will result in lower prices, and in a more balanced price structure for schedules of values and progress payments during construction. Contractors regularly complain about this practice—understandably objecting to its use. During the frenetic one- to two-hour period before Bids are submitted, the Bidders, and potential Subcontractors and Suppliers, are receiving last-minute quotes and price adjustments and are adjusting their prices. When this happens, multiple lump sum bid/pay items present too many opportunities for errors. Contractors have commented that multiple lump sum items actually tend to encourage unbalanced pricing because Bidders tend to apply all last-minute price cuts to one or two big-dollar bid/pay items, for simplicity’s sake. EJCDC recommends that the use of multiple lump sum items in the Bid Form be kept to a minimum.

Regarding the ultimate need to subdivide a lump sum price for progress payment purposes, refer to the requirements for a Schedule of Values in C-700 1.01.A.36 (definition of “Schedule of Values”), C-700 2.03.A and 2.05.A, and C-700 15.01.A. Detailed requirements for the Schedule of Values are also frequently included in the Division 01 Specifications (e.g., *Section 01 29 73, Schedule of Values*, when CSI *MasterFormat* is used for organizing the project manual). Because the Schedule of Values must provide a reasonable allocation of the Contract Price to the component parts of the Work to be acceptable to the Engineer, the Schedule of Values provides for a more realistic and more flexible basis for equitable progress payments than requiring multiple lump sum items in the Bid Form. Finally, the Schedule of Values, acceptable to the Engineer, must be in place prior to the first Application for Payment, as set forth in C-700 2.05.

d. *Alternates*

Regarding a base Bid plus alternates, as indicated in this Commentary’s discussion of C-200 Article 13 and C-200 18.05, for increased objectivity in how the Bids will be evaluated (and, thus, to reduce the potential for a bid protest based on subjective evaluation criteria), for additive alternates, the alternate items should be listed in the order of preference, with the most-desired alternate listed first. For deductive alternates, the alternate least desired by the Owner should be listed first in the Project’s Bid Form.

e. *Allowances*

C-410 Article 3 includes model language for both cash allowances—which are relatively rare in engineer-led work—and contingency allowances.

A cash allowance is a mechanism used by an Owner to defer decisions on the required quality of certain specified elements of the Work until after the Bids are received and bid prices are known. A cash allowance, when used, should be associated with a specific item of material. An example of a cash allowance would be establishment of an Owner-stipulated amount, whether a lump sum or on a per-unit basis, for the facing on concrete masonry units (CMU). The base bid for the Work would likely require furnishing plain-faced CMU, with a cash allowance for the Owner to select, at the Owner's option, a more expensive (and presumably more attractive) facing on the CMU. Specific limitations of cash allowances are addressed in the Guidance Notes of C-410 Article 3 and in C-410 Article 3's model language, and at C-700 13.02.B. Further discussion on cash allowances is presented in this Commentary's Section 3.6 in the discussion of C-700 13.02.

A given project may contain one or more contingency allowance—however, in general a single contingency allowance is more practical and more useful than a series of compartmentalized contingency allowances.

An Owner's contingency allowance is a stipulated amount available to be used by the Owner to cover unanticipated Work. Contingency allowances are discussed in greater detail in this Commentary's Section 3.6, in the discussion of C-700 13.02.

When one or more allowances are included in the Contract, the Owner and drafter of the Project's Bid Form must understand and properly use the two different types of allowances; they are not interchangeable and each has its own, unique, intended purpose. It may be appropriate for the Project team to discuss the concept of allowances with the Owner's governing board (such as a city council or utility authority board) well in advance of issuing the Bidding Documents to prospective Bidders. Some owners, especially public owners, may view the use of allowances as infringing on the governing board's fiscal responsibility for the Owner's funds.

As indicated in the Guidance Notes for C-410 Article 3, the drafter of the Project's Bid Form (acting on the Owner's direction), not the Bidder, fills in amounts for allowances, prior to issuance of the Bid Form to prospective Bidders.

f. *Assigned Procurement Contract*

Similarly, if the Contractor is contractually required to accept the assignment of a buyer-seller procurement contract, the lump sum price is pre-determined by the Owner (based on the contract price of the buyer-seller procurement contract) and should be inserted in the Bid Forms prior to distribution of the forms to prospective Bidders. Further guidance on such an assignment is provided in C-410 Article 3, Guidance Notes 13 thru 18). If types of bidding are required other than the those indicated in C-410 Article 3, the drafter of the Project's Bid Form should edit the article accordingly; provide related guidance to Bidders on completing the Bid Form; and edit or supplement the model language of C-200 Article 13 ("Basis of Bid") and C-200 Article 18 ("Evaluation of Bids and Awards of Contract") to provide instructions regarding completion of the Bid Form and how the apparent Successful Bidder will be determined.

g. *Form of Agreement*

The stipulated prices required through the use of the model language of C-410 Article 3, such as lump sum or Unit Prices, should be paired with an appropriate form of Agreement, presumably either: EJCDC® C-520, Agreement between Owner and Contractor for Construction Contract—Stipulated Price, or EJCDC® C-522, Contract for Construction of a Small Project.

6. *Bid Form Article 4—Basis of Bid: Cost-Plus-Fee*

C-410 Article 4 contains model language for bidding a contract when the Contractor's compensation will be on the basis of "Cost of the Work" (a term defined in C-700 1.01.17 and C-700 13.01) plus a fee (for the Contractor's combined overhead and profit), as opposed to requiring Bids of stipulated prices (lump sum and unit prices). Use of cost-plus-fee compensation is more common in private work than in public work.

Cost-plus-fee contracts have two different permutations: (1) contracts with a Guaranteed Maximum Price (GMP) and (2) contracts without a GMP. While many owners using the cost-plus-fee compensation method require a Guaranteed Maximum Price to establish some degree of pricing certainty, some owners will elect to not require a GMP when there is a significant degree of trust between the Owner and Contractor, and when the contract is awarded when the design is, perhaps, not fully complete.

An owner may desire to use cost-plus-fee compensation for a construction contract as a means of encouraging prospective Bidders to compete on the basis of their fee alone, or to attempt to encourage innovative construction methods and schedules to complete the Work for a final Contract Price less than the Guaranteed Maximum Price.

An owner employing cost-plus-a-fee as the construction contract compensation method may elect to require that the fee (Contractor's overhead and profit) be either a fixed fee or a percentage of the Cost of the Work. A fixed fee may be desired by contractors because it provides greater certainty as to the Contractor's reward for the Work. A fixed fee also incentivizes the Contractor, to a certain extent, to complete the Work for an amount less than the Guaranteed Maximum Price, because the Contractor's reward is not linked to the final Cost of the Work, and the Contractor can move on to other assignments upon completing the Work aggressively and for less than the GMP. In contrast, many owners also prefer to that the Contractor's reward be linked to the final Cost of the Work, and thus require that the fee be a fixed percentage of the Cost of the Work. A detailed evaluation of the advantages and drawbacks of the various permutations of cost-plus-fee compensation is beyond the scope of this Commentary.

Although cost-plus-fee contracts are more common in private work, and are often negotiated rather than bid, in some cases (public and private) the cost-plus-fee Contractor is selected based on competitive bidding—the basis for such competitive bids is set forth in the model language of C-410 Article 4. Perhaps the most common method of bidding cost-plus-fee contracts is by simple comparison of the Guaranteed Maximum Price proposed by each Bidder, which is somewhat similar to comparing Bids on the basis of lump sums. As an alternative (and especially when there is no GMP), Bids for cost-plus-fee contracts can be compared on the basis of the fee proposed by each Bidder.

C-410 Article 4 includes alternative provisions for the various permutations of cost-plus-fee bidding. C-410 4.02 includes an optional provision for indicating separate fee markups

(percentages) for different elements of the Cost of the Work; this mirrors the stipulated fee markups set forth in C-700 11.06.C.2 (used when compensation is on the basis of stipulated prices but one or more items of Work are compensated on the basis of Cost of the Work plus a fee, such as Work ordered by a Work Change Directive). However, EJCDC does not intend that the Bidder-proposed percentages in project bid forms developed from C-410 4.02 must or should be the same as those indicated in C-700 11.06.C.2. For all the alternative types of fee structure indicated in C-410 Article 4, the fee proposed by Bidders should be appropriate for the Work, considering the associated risks, commensurate rewards, and the local and regional market for such construction services.

When the Contract will be compensated on the basis of cost-plus-fee, the Contract typically does not include stipulated lump sum or unit prices and, therefore, typically the Bid Form will include either Project-adapted language from C-410 Article 3 or C-410 Article 4, but rarely will the contents of Article 3 and 4 be combined in a Project Bid Form.

When cost-plus-fee compensation is used, the drafter of the Bidding Documents' Division 00 should (1) review with the Owner the various compensable and non-compensable elements of the "Cost of the Work" set forth in C-700 13.01 and, where necessary, make appropriate revisions in the Project's Supplementary Conditions (see the model language of C-800's provisions at SC-13.01); and (2) use the appropriate form of the Agreement: EJCDC® C-525, Agreement between Owner and Contractor for Construction Contract—Cost-Plus-a-Fee.

7. Bid Form Article 5—Price-Plus-Time Bid

C-410 Article 5 is an optional provision for price-plus-time ("A+B") bidding, in which the Bidder bids on both the construction price and the time of completion. For public work, this type of bidding may not be available by statute in all jurisdictions. A thorough discussion of price-plus-time bidding is presented in this Commentary's Section 3.4 regarding C-200 13.04 and C-200 18.05, and in Guidance Notes at C-200 13.04 and 18.05, and C-410 Article 5.

As suggested by the model language of C-410 Article 5, the price element of price-plus-time bidding may be either a stipulated price—as set forth in C-410 5.01—or cost-plus-fee (typically based on Guaranteed Maximum Price)—as set forth in C-410 5.02. The appropriate provision (C-410 5.01 or 5.02) should be retained and the other deleted.

The alternative provisions of C-410 5.01 and 5.02 are solely for the "price" element of price-plus-time bidding, although both include model language for converting the proposed time of completion (indicated in the Project Bid Form's Article 6) to a total monetary amount, for the comparison of Bids.

8. Bid Form Article 6—Time of Completion

The time available to the Contractor to complete the Work ("Contract Times") is obviously a strong influence on the prices indicate in the Bid Form; thus, C-410 Article 6 addresses the topic of the Contract Times.

C-410 Article 6 presents three alternatives in Paragraphs 6.01, 6.02, and 6.03 for addressing the issue of the time in which Contractor must complete the Work. As indicated in the Notes to User in C-410 Article 6, the drafter of the Project's Bid Form should retain one provision of Article 6 and delete the unused provisions.

C-410 6.01 is the most-commonly used alternative in Article 6 and simply provides a cross-reference to the location in the Owner-Contractor Agreement where the Owner has already

set forth the Contract Times that Bidders must commit to meeting. To reduce the potential for conflicts and errors, EJCDC recommends stating the Contract Times in one location: the Owner-Contractor Agreement. Refer to EJCDC® N-122/AIA® A521™, Uniform Location of Subject Matter (2012 or later edition) for substantiation of this concept, based on common practice in the industry.

C-410 6.02 and C-410 6.03 are alternatives for use in price-plus-time (“A+B”) bidding. One of these alternatives should be used only when the Project’s Bid Form includes A+B language adapted from C-410 Article 5. C-410 6.02 calls for specific completion dates (“November 30, 2021”), and C-410 6.03 calls for the number of calendar days to substantially complete the Work (“180 days”). When one of these two versions is used, the Bidder will need to fill in the specific date by which it will substantially complete the work, or the number of days that it needs for substantial completion of the Work.

Regardless of whether the drafter of the Project’s Bid Form uses Paragraph 6.01, 6.02, or 6.03, when the Contract will include liquidated damages for late completion, the model language of C-410 6.04, edited to suit the Project, should be retained as the Bidder’s express acknowledgement that the Bidder understands and accepts that the Contract includes damages for late completion and that the Bidder has considered such damages in preparing its Bid.

9. *Bid Form Article 7—Bidder’s Acknowledgements: Acceptance Period, Instructions, and Receipt of Addenda*

C-410 7.01 is the location where Bidder commits to keeping the Bid subject to Owner’s acceptance (“on the table”) for a specified period of time. As indicated in this Commentary with respect to C-200 Article 17, EJCDC’s presumptive case is that such period is 60 days after the Bid opening. When Owner chooses a duration other than 60 days, edit the Project Bid Form’s Paragraph 7.01 accordingly; it may also be necessary to modify other time periods indicated elsewhere in the Bidding Requirements, including those at C-200 20.01 (regarding issuance of the Notice of Award, signing the Contract, and issuance of a Notice to Proceed).

Ideally, the period of time that the Bid is to remain subject to the Owner’s acceptance will be sufficient not only for Owner to make an award of contract, but will also provide sufficient time for both parties to sign the Contract. A Bid is prepared based on limited pricing information that is valid only for a finite period, and a delay by the Owner in signing the Contract—such as for internal administrative processes to play out, or while awaiting the approval of a third-party funding or financing entity—may create challenges to the Successful Bidder (Contractor) with respect to sub-bids and quotes obtained while putting the Bid together. Refer to this Commentary’s Section 6.3 for the discussion of C-700 4.01, (“Commencement of Contract Times”) where the Commentary presents a detailed timeline of events between the opening of Bids and the Effective Date of the Contract, based on EJCDC’s presumptive 60-day period at C-410 7.01.

For public work, the period that the Bid is to be valid and subject to the Owner’s acceptance is often prescribed or limited by statute. When drafting a Bid Form for public work, the drafter of the Project’s Bid Form should verify with the Owner (which should consult with its legal counsel) the period of time allowed by Laws and Regulations for keeping Bids subject to binding acceptance.

C-410 7.02 is the Bidder's express acknowledgement that Bidder accepts the terms and conditions of the Instructions to Bidders.

C-410 7.03 provides space for the Bidder to expressly acknowledge receipt of each Addendum issued prior to the deadline for receipt of the Bids. It is very important that Bidders clearly acknowledge receipt of each Addendum; the consequences of accepting (and perhaps awarding the Contract to) a Bidder that has failed to acknowledge receipt of all Addenda can be serious, as explained in detail in this Commentary's Section 3.4 in the discussion of C-200 Article 7 ("Interpretations and Addenda"). In public work, awarding the Contract to a Bidder that failed to acknowledge receipt of all Addenda may be potential grounds for a bid protest.

10. *Bid Form Article 8—Bidder's Representations and Certifications*

C-410 8.01 presents the Bidder's representations in submitting the Bid. These representations are consistent with the parallel representations in the construction Contract—specifically, in the Owner-Contractor Agreement (C-520 Article 8; C-522 Article 16; C-525 Article 12). Accordingly, a change in the representations in the Project Bid Form may necessitate a parallel revision in the Owner-Contractor Agreement (and vice versa). The Bidder's representations at C-410 8.01 and the Contractor's representations in the Agreement are significant assurances to the Owner, and should not be modified without careful consideration.

In C-410 8.02, the Bidder is specifically required to certify to the Owner that the Bidder has not engaged in bribery, fraud, collusion, or coercion with respect to preparing and submitting the Bid. Such practices tilt the playing field and discourage honest contractors from bidding, to the long-term detriment of the competitive bidding process. The wording of the certifications in C-410 8.02 tracks the language found in many public bidding laws and professional standards. The certifications are carried forward and repeated in the Owner-Contractor Agreement, as a final check on illicit tactics in securing the Contract.

While the language of C-410 8.02 is sufficiently broad and applicable to both public work and private work, and generally does not require editing or deletion, public bidding in certain jurisdictions requires a separate non-collusion affidavit or very specific non-collusion wording. When a separate affidavit is required and the project manual is organized in accordance with CSI *MasterFormat*, the appropriate document would be "00 45 19, Non-Collusion Affidavit". When such a document is required, the drafter of the Project's Bid Form should verify that the model language of C-410 8.02 does not conflict with any separately required non-collusion affidavit.

11. *Bid Form: Bid Submittal*

The last page of C-410 provides for the identification of the Bidder and its contact information, and the signature of the person authorized by the Bidder to submit the Bid. Additional, more-detailed information on the Bidder may be obtained by using EJCDC® C-451, Qualifications Statement.

3.6 *Bid Security/Bid Bonds*

As indicated above in this Commentary's Section 3.4 (concerning C-200 Article 8), the Project's Instructions to Bidders will usually require that the Bid be accompanied by bid security; EJDC's standard instruction, C-200 8.01, requires that this security be in the form of a Bid bond. The purpose of bid security is to give the Bidder to which the Contract is awarded a strong incentive to follow through with its obligation to sign the Owner-Contractor Agreement (and having done so, to then proceed with performance of the Work): a Bidder that walks away from the award (i.e., "defaults" on signing the Contract) will, if bid security was furnished, lose some or all of the bid security.

The concept of bid security is based largely on the idea that the Owner will typically award the Contract to the responsible Bidder submitting the lowest-priced, responsive Bid. Thus, if the Successful Bidder defaults and fails to enter into the Contract, the Owner is likely to suffer financial loss ("damages") by either having to award the Contract to another Bidder (which, presumably, submitted a higher-priced Bid than that of the defaulting Successful Bidder) and possibly other costs (such as having to rebid the Contract).

In public construction, the requirement to submit bid security is often mandated by Laws or Regulations. The amount of the bid security is most commonly five to ten percent of the maximum amount of the Bid, including all additive alternates (if any).

When the Successful Bidder does not default and signs the Contract—which is, by far, the most-common outcome—the bid security becomes null and is not forfeited to the Owner. When the form of bid security is a bid bond, the Owner may release the bond by either returning the bond to the Bidder or destroy the bid bond and advise the Bidder, in writing, that the bond has been released.

Any Project requirements that amplify or modify the model bid security requirements should be indicated in Article 8 of the Project's Instructions to Bidders, not in the Supplementary Conditions, because of the relevance of such requirements to the bidding and Contract formation process, and because they will have no legal effect after the Owner-Contractor Agreement is signed by the parties.

A bid bond is the most common type of bid security. A bid bond is a commitment to the Owner (as the "obligee") by the Bidder (as "principal") and the Bidder's surety. A surety bond, such as a bid bond, is essentially a tri-party agreement between the surety, principal, and obligee, in which the surety promises that, should the principal (Bidder) fail to perform its obligation—in the case of a bid bond, the obligation for the Successful Bidder to enter into the Contract with the Owner—then the surety will pay to the obligee (Owner) the damages stipulated in the bond.

Typically, a construction contractor is underwritten by a single surety. Based on a detailed evaluation of the contractor's resources and finances, the surety determines, at the outset of a potential relationship with a given contractor, whether to underwrite the contractor and, if so, to what extent. The extent to which the surety will provide bonding, expressed in dollars, is often termed a contractor's "bonding capacity."

When a surety decides to underwrite a contractor, the contractor will procure its performance bonds and payment bonds from that surety; these are purchased on a project-by-project basis for a premium (amount paid by the contractor to the surety). As a matter of custom in the surety industry, an underwritten contractor typically has access to bid bonds from its surety at no cost, or very low cost. Thus, requiring a bid bond as a bid security (1) is not a financial burden on the Bidder, and does not discourage a contractor from bidding on a given project, and (2) submittal of a bid bond as bid security is, itself, evidence that the Bidder is underwritten by a surety and is very likely able to furnish required performance

and payment bonds. These are primary reasons why bid bonds are the only acceptable type of bid security in the model language of C-200 Article 8.

Bid bonds in widespread use in the United States, such as EJCDC® C-430, Bid Bond (Penal Sum Form), EJCDC® C-435, Bid Bond (Damages Form), and AIA® A310™, Bid Bond (a damages form of bid bond), include detailed requirements regarding the obligations and responsibilities of the parties to the bond. Other bid bond forms may be more basic, without the detailed provisions of the standard bid bond forms.

A bond's force and effect rests squarely on the underlying financial resources and duty of the surety. However, contractors are highly motivated not to let a situation deteriorate to the point where there is a default to which the surety must respond. As with other types of surety bonds (such as performance bonds and payment bonds), the surety typically has an indemnity agreement with its client, the contractor, that allows the surety to recover from the principal any amounts paid out by the surety, as well as the surety's legal fees and costs. In many cases these indemnities are backed up by the principal's equipment and real estate, and sometimes by the personal assets of the individual owners of the construction company. Moreover, a default and surety intervention can lead to loss of access to bonding, which may be a crippling blow for a contractor's business. Thus, requiring a surety bond provides a strong incentive for the principal (i.e., Bidder or Contractor) to fulfill its obligations.

Other forms of bid security, such as a cashier's check, bank money order, or other collateral are feasible, but are much less common. The model language of C-200 Article 8 does not allow such forms of bid security, although the drafter of the Project's Instructions to Bidders, acting at the Owner's direction, may allow types of bid security other than a bid bond.

EJCDC's two bid bond forms are described in Paragraphs A and B below; Paragraph C discusses factors for Owners to consider when deciding whether to require the Penal Sum Form versus the Damages Form bid bond.

A. *EJCDC® C-430, Bid Bond (Penal Sum Form)*

C-430 sets a fixed monetary amount to which the Owner will be entitled as damages in the case of default by the Successful Bidder. Proof or determination of the Owner's actual damages, whether greater or less than the fixed amount specified in the actual bid bond, is irrelevant under C-430. If the Owner can show that the Successful Bidder has defaulted on the commitment to enter into the Contract, then the Owner is entitled to recover from the surety the pre-determined amount (the "penal sum") set forth in the bid bond as issued.

By C-430's express terms, recovery of the penal sum amount is the Owner's sole remedy in the case of such a default; the Owner may not recover damages beyond the fixed amount under the bid bond.

The penal sum form of bid bond is sometimes also referred to as the "forfeiture approach."

B. *EJCDC® C-435, Bid Bond (Damages Form)*

C-435 entitles the Owner, in the case of default by the Successful Bidder, to recover from the surety actual damages, subject to a specified monetary cap consisting of the maximum amount of the bid bond. The model language of C-200 8.02 stipulates that this is "to the extent of Owner's damages in the case of a damages-form bond." C-435 Paragraph 1 further states that the damages are "any difference between the total amount of Bidder's Bid and the total amount of the Bid of the next lowest, responsible Bidder that submitted a responsive Bid, as determined by Owner, for the work required by the Contract Documents." The extent of the Owner's damages must be documented to the surety. Other potential elements of

financial damage to the Owner resulting from a default, such as additional administrative or legal costs, are not expressly recoverable under the terms of C-435.

Similar to C-430, EJCDC® C-435 Bid Bond (Damages Form) expressly states that recovery within the scope of the bid bond is the Owner's sole remedy in the case of a default, and the Owner may not recover damages beyond the capped amount of the bid bond.

The damages sum form of bid bond is sometimes also referred to as the "security approach."

C. *Selection of Form of Bid Bond*

The Owner should indicate to the Engineer (or other entity preparing the Bidding Documents), preferably in writing, the form of bid bond required; this can be documented using EJCDC® C-052, Owner's Instructions to Engineer Concerning Bonds and Insurance. EJCDC recommends that owners give careful consideration to both bid bond approaches. Below are considerations in selecting the form of bid bond to be required:

- The form may be dictated by applicable Laws and Regulations, or by rules imposed by lenders or grantors.
- Some Owners prefer the forfeiture approach (Penal Sum Form) because its provisions are straightforward and clear.
- The forfeiture approach may result in a significant inequity to a defaulting Successful Bidder on a large project where the bid security amount is large and, in comparison, the Owner's actual damages are small. Such inequity may create difficulty in collecting on the bid security as the defaulting Bidder or its surety may force the Owner to sue to collect such a disproportionate amount.
- In addition, the forfeiture approach may pressure the low Successful Bidder into entering into the Contract and attempting to perform the Work at a price that it cannot meet, to avoid forfeit a large bid security. Such an attempt to perform by the low Successful Bidder is likely to result in unsatisfactory performance, claims by and against that Bidder (as the Contractor) during construction, and commensurate legal, substantive, and administrative problems for the Owner and Engineer.
- Many contractors prefer the security approach (Damages Form) because damages may be less (if the difference between the low bid and the second low bid is small) and because they perceive it as a fairer solution to the problem.
- The security approach has some advantages to the Owner in that:
 - (1) damages are easier to collect because they are likely to be smaller so that the Successful Bidder and surety are not as likely to contest the damages;
 - (2) if the collection is contested, resolution may be simpler because the damages are "actual" as opposed to liquidated, eliminating arguments based on ostensible inequity; and
 - (3) a low Successful Bidder that discovers after the Bid opening that it cannot perform the Work at the price in its Bid is more likely to default because its damages are smaller. A default by a low Bidder that cannot perform the Work at the price in its Bid could work to the advantage of the Owner, as the Owner might then be able to award to another Bidder that is capable of performing the Work at its price.

3.7 EJCDC® C-451, Qualifications Statement

As discussed above in this Commentary's Section 3.4, in the discussion of C-200 Article 3 and C-200 Article 18, Bidders are required to be experienced and qualified to perform the Work required, and the Owner has an express right to reject the Bid of any Bidder that is not a "responsible" Bidder because it lacks sufficient experience and qualifications. Determining whether a Bidder is "responsible" should be conducted in an objective manner, based on factual information regarding each Bidder's construction capabilities, experience, resources, and technical qualifications. The ultimate decision to award the Contract to a Bidder is made by the Owner.

A responsible Bidder is usually defined as a Bidder that is experienced and qualified to perform the Work for which the Bid was submitted. If the Owner determines and can adequately document that the Bidder that submitted the lowest-priced, responsive Bid is not responsible (is not qualified, or does not possess sufficient experience or resources), there is legal justification for disqualifying the Bid and awarding the Contract to the second-low Bidder—assuming the second-low is determined to be responsible.

To obtain an indication of how a Bidder, as the potential Contractor, may perform on a given Project, the Owner gathers information with respect to the Bidder's financial capacity, other current workload, availability of key personnel (such as project managers and site superintendents), past experience with similar work, quality and record of performance, claims history (including compliance with schedules), bonding capacity and financial resources, proposed Subcontractors, safety record, and other considerations.

When the Engineer is retained by the Owner to assist in evaluating the Bids, including Bidder qualifications, the Engineer should report to the Owner regarding objective facts involving a Bidder's qualifications, based on direct knowledge or reliable sources of information. The Engineer should limit its involvement to reporting on a Contractor's technical construction and organizational abilities, and not comment on matters such as financial capability, claims history, compliance with safety or ethical standards, or reputation. It is EJCDC's view that the Engineer should refrain from making recommendations regarding whether a Bidder is or is not responsible, and from making recommendations about which Bidder should receive the award of a given contract: these are decisions to be made by the Owner, based on a range of factors, many of which are outside the scope of an Engineer's expertise. In those instances in which an Owner requires the Engineer to prepare a recommendation for award—especially for public work—the Engineer should proceed with caution, perhaps by seeking guidance from legal counsel on how best to assist the Owner without straying beyond prevailing professional boundaries. Similar concerns apply when a third party, such as a construction manager, is retained by the Owner to evaluate Bids and recommend award of the Contract.

Deeming a Bidder as "not responsible" is a serious matter. On public work, Bidders deemed as non-responsible may have legal recourse under applicable statutes and can file what is typically termed a bid protest. While the term "bid protest" is often used to mean any contesting of bidding procedures or award of a contract by any entity with a substantial interest in the outcome of the bidding process and award of the contract, and in some cases an informal "protest" in the form of a letter to the Owner's senior management or executive personnel may be construed as a "bid protest," in this section, the term "bid protest" will mean a formal legal action brought by an aggrieved bidder to contest the bidding procedures and award of a public contract.

In the context of an Owner's decisions regarding responsibility, common bid protest scenarios include a protest by an apparent low Bidder that has been deemed not responsible, or by a second-low Bidder that believes the low Bidder should have been deemed not responsible.

Bid protests can be expensive and disrupt project schedules; thus, there is a high incentive for owners, especially public owners, to make careful, well considered, and defensible decisions about a contractor's ability to perform the contemplated work.

The Owner and the Engineer (when retained to assist the Owner in evaluating the Bids) have much greater flexibility on private projects, where public bidding statutes do not apply. The process of evaluating the Bids and the Bidders is limited only by the principles of good faith, and the rules and procedures adopted by the Owner's organization and relied upon by Bidders.

The purpose of EJCDC® C-451, Qualifications Statement, is to provide a platform for obtaining uniform types of information from prospective contractors. C-451 has provisions for the Bidder to list the Bidder's past experience and current project commitments to others, and includes a series of questions on the personnel, organization, past history, safety record, bonding capacity, and financial resources of the Bidder or contractor. In some cases, the information from the prospective contractors will need to be verified through independent investigation.

C-451 addresses typical subjects of inquiry: more specific or detailed questions may be needed for some projects. Before altering the model language of C-451 for a specific use, the drafter of a Project's Qualifications Statement form should consider that many contractors will have stock responses to C-451 already prepared, because of the common use of C-451, especially on engineer-led projects and for public work—if possible, C-451 as modified should be sufficiently consistent with the published standard to allow efficient responses.

In preparing the Project-specific C-451, the drafter should consider deleting any provision that requests information that Owner will not review or consider in the Contractor selection process.

As a final general comment regarding Bidder responsibility, keep in mind the important role a surety can play in providing a cross-check on a Bidder's qualifications. If performance and payment bonds are required for the Work, the Bidder will need to have established to a surety's satisfaction that the Bidder can perform the Work and pay its Subcontractors and Suppliers. Sureties tend to be cautious and sophisticated in their analysis of contractors' capabilities. The ability to obtain bonding is a positive indicator that a Bidder is responsible—though not the only factor to consider.

Below are comments on the content and use of EJCDC® C-451, Qualifications Statement:

A. Use of Document

The Owner's team can use C-451 in the following ways: (1) as part of a request for qualifications to prequalify prospective contractors, either for a specific project or to establish eligibility for future work for the Owner; (2) for completion by all Bidders and submittal with the Bid, or (3) for completion after Bids are received, solely by those Bidders having a reasonable chance of being awarded a contract. When used for prequalifying prospective contractors, the Qualifications Statement will typically be issued as part of a request for qualifications; when used as a Bidders' Qualifications Statement, C-451 will typically be distributed with the Bidding Documents.

Depending on the intended use, the Project's Qualifications Statement may be distributed as a separate document, or included in the project manual as part of the Bidding Requirements. Even when used as a Bidder Qualifications Statement when only selected Bidders are required to complete and submit a Qualifications Statement, it is good practice to provide a copy to all prospective Bidders with the Bidding Documents, so they will have an advance look at the scope of questions they will answer when ultimately requested to submit a Qualifications Statement.

For additional discussion on contractor qualifications and prequalification, see this Commentary's Section 3.4 (regarding C-200 Article 3) and the Guidance Notes at the beginning of C-200 Article 3.

B. *Detailed Contents of C-451*

The following paragraphs provide information on select provisions of C-451.

1. *C-451 Article 1—General Information*

C-451 Article 1 requires indication of the respondent's name and contact information, the respondent's business organization structure, other firms with which the respondent is affiliated, whether a parent company, different divisions of the same parent company, or otherwise, and the respondent's business officers, partners, and limits of authority (including indication of which officers are empowered to sign binding contracts on behalf of the firm).

2. *C-451 Article 2—Licensing*

At C-451 2.01, the respondent is to indicate the relevant licenses held by the contractor's organization. In some jurisdictions, a contractor is required to have certain types of licensing to submit a Bid for consideration; in such jurisdictions, it is important for the person reviewing the Bidder's qualifications to be aware of such statutes and to evaluate the information presented at C-451 2.01 accordingly.

3. *C-451 Article 3—Diverse Business Certifications*

At C-451 3.01, the respondent is asked to indicate whether it is a state-certified or locally-certified diverse business—one whose ownership profile entitles it to encouragement and support in pursuing business opportunities. In many cases this information will be used in an established diverse business utilization program, in which specific diverse business goals, requirements, or incentives for the Contractor are stated in the Bidding Documents.

Many types of diverse businesses are certified by various governmental and private entities. C-451 3.01 lists the most-common types: Disadvantaged Business Enterprise (DBE), Minority Business Enterprise (MBE), Women's Business Enterprise (WBE), Small Business Enterprise (SBE), Disabled-owned Business Enterprise, (DBE), Veteran-owned Business Enterprise (VBE), Service-Disabled Veteran-owned Business Enterprise (SDVBE), and Historically Underutilized Business (HUBZone). Space is allowed for indicating either other types of diverse business certifications, or "none."

4. *C-451 Article 4—Safety*

A good safety record has become an important factor in selecting a Contractor. The information furnished at C-451 Article 4 allows the Owner to evaluate the safety record of the prospective Contractor and, when so required, principal proposed Subcontractors and Suppliers. (Before asking for Subcontractor/Supplier information here or elsewhere in C-451, the Owner should account for any Laws or Regulations that prohibit requiring the identity of Subcontractors and Suppliers prior to award of the Contract.)

C-451 4.01 requests the name of the respondent's safety officer—necessary for any follow-up inquiries for additional information concerning the respondent's safety record—and a location to indicate the respondent's safety certifications.

C-451 4.02 requires the respondent to furnish information normally required by or determined by any workers' compensation insurance carrier. Workers' compensation insurance statistics are useful as an indicator of a contractor's safety record.

A firm's workers' compensation insurance "Experience Modification Rate" (EMR) is a computation by the contractor's workers' compensation insurance carrier, universally used in the United States insurance industry, that compares an insured's annual losses in workers' compensation insurance claims against its policy premiums over a three-year period, excluding the current year. An EMR of 1.0 is considered average, and the lower a firm's EMR the safer the insurance carrier considers that firm and, hence, the lower its workers' compensation insurance premiums will be. An EMR above 1.0 suggests a less-desirable safety record, and, therefore, a higher risk for the workers' compensation insurance carrier.

An insured contractor's "Total Recordable Frequency Rate" (TRFR) (sometimes labeled the "Total Recordable Injury Frequency Rate") is a calculation of a firm's total number of OSHA-recordable injuries and illnesses over a given period (usually a year). The rate is determined by applying the industry-standard formula, which takes into account the total number of labor hours (man hours, or MH) worked at the company. The higher a firm's TRFR the more risk-prone that firm may be, relative to worker safety.

"Total Number of Recorded Manhours" (MH) is a record of the total labor hours worked by a firm during the calendar year. MH is used in determining the EMR and TRFR and provides a reviewer with an indication of the extent of labor performed by the contractor during the year. For example, a contractor with three OSHA recordable incidents/injuries during the prior year where only 500 labor hours were worked would certainly be a greater risk than a contractor with three OSHA-recordable incidents/injuries over 700,000 labor-hours. Thus, the MH statistics required by C-451 Article 4 provide a valuable benchmark for placing into context a contractor's OSHA-recordable incident/injury record.

Other safety-related information may be required by the Owner, but are not part of the model language of C-451 Article 4. OSHA Form 300—Log of Work-Related Injuries and Illnesses, and its related OSHA Form 300A may provide useful information; however, many owners and engineers are inexperienced at interpreting the information presented on OSHA Form 300. Similarly, an Owner may desire information on any OSHA-recordable incidents/injuries by the prospective contractor or their major proposed subcontractors during the prior year or three years. While desiring such information on recent incidents is natural, it is not required by the model language of C-451 because it has strong potential for a myopic focus on one or two, possibly isolated, incidents, rather than the contractor's overall safety record. However, the safety record information required in Article 4 of the Qualifications Statement may be tailored to suit the needs of the Project and the Owner.

The Owner or a safety-knowledgeable advisor, not the Engineer, should evaluate the safety information furnished under C-451 Article 4. Ultimately, the Owner must determine the weight to place on the Bidders' safety records, and whether a specific prospective contractor's safety record is sufficient, or disqualifying.

5. *C-451 Article 5—Financial Information*

A prospective contractor's financial stability and history of satisfactorily paying its business-related debts and obligations is obviously of significant interest to an owner considering entering into a contract with such contractor. A contractor with a record of poor financial

stability or a record of not paying its creditors in a timely manner may be a significant risk for a project owner. Indeed, other than poor quality construction and delayed completion, perhaps the next-greatest owner concern is a contractor that fails to pay its subcontractors and suppliers, resulting in disruptions to progress and liens against the owner's property or project funds.

The information required at C-451 5.01 is intended to be reasonable for the respondent to furnish, but sufficiently comprehensive for a typical owner to make a reasoned evaluation of the respondent's financial stability. As with other elements of C-451, the drafter of the Project's Qualifications Statement form is free to edit or supplement the model language of C-451.

C-451 5.01 requires the respondent to submit with the Qualifications Statement an audited financial statement for the prior year. As described below, an audited financial statement is often voluminous and may contain information unfamiliar to the average employee of a typical Owner and Engineer.

C-451 5.01 requires other information to be submitted in tabular format, including indication of the respondent's accredited banking institution, dates of the respondent's most recent financial statement and most recent audited financial statement, financial indicators from the most-recent audited financial statement, ratio of the respondent's current assets to current liabilities, and quick ratio (cash and cash equivalents plus accounts receivable plus short-term investments, divided by current liabilities).

The drafter of the Project's Qualifications Statement should consider the Owner's capability to evaluate information furnished by the respondent at C-451 5.01; where such capacity is either limited or does not exist, consider deleting from C-451 5.01 the requirement to submit an audited financial statement, or consider using outside professional resources (such as a certified accountant or financial advisor) to conduct the financial stability evaluation. Often, obtaining contact information for the respondent's accredited banking institution and surety, and a reference from a construction materials or equipment supplier, will allow Owner to confirm basic information sufficient to enable the Owner to verify a respondent's financial viability.

6. *C-451 Article 6—Surety Information*

Regardless of whether the Contract will require the Contractor to furnish a performance bond and a payment bond, it may be advantageous for an Owner to obtain information on a prospective contractor's surety. A surety performs significant evaluations of a contractor, including its resources and financial stability, before the surety elects to underwrite the contractor and issue bonds for the contractor. Therefore, obtaining basic information on the surety that has decided to underwrite the respondent and, where performance and payment bonds are required for the Contract, will be required to honor the Contractor's obligations in the event of a default by the Contractor, is of inherent interest to the Owner. A prospective contract that is backed by a surety that is not both reputable and qualified in accordance with the requirements of the General Conditions (C-700 6.01) would likely be a significant concern to an Owner contemplating the award of a Contract.

C-451 6.01 requires the respondent to indicate, in tabular format, various information about the respondent's surety with which the responding contractor regularly does business. C-451

requires the full name of the surety, its physical address, and whether the surety is compliant with the surety qualifications requirements set forth in in C-700 6.01.

The model language of C-451 6.01 does not require the respondent to indicate their bonding capacity, however, some owners or drafters of a Project's Qualifications Statement form may desire to require such information, such as the respondent's total bonding capacity, available bonding capacity on the date the Bid was submitted, and anticipated bonding capacity on the anticipated Effective Date of the Contract.

Reviewers of a submitted Qualifications Statement furnished by a large contractor, such as a firm with a national or global business, should bear in mind that very large contractors, with a bonding capacity in the billions of dollars, may have multiple "co-sureties" instead of a single surety.

7. C-451 Article 7—Insurance

Similar to the rationale presented immediately above concerning the prospective contractor's surety, a prudent owner will be interested in the name and qualifications of the respondent's primary insurance carriers. Certainly, no owner wants to award the contract only to find, after issuance of a notice of award, that the Successful Bidder or its insurance carrier are unable to comply with the Project's insurance requirements as set forth in C-700 Article 6 and associated provisions of the Supplementary Conditions. The time frames for the Successful Bidder's submittal of acceptable insurance documentation (C-200 19.01 and C-200 20.01; C-700 2.01) are relatively short. Having access to basic insurance information via the Qualifications Statement gives the Owner additional time to consider the acceptability of the insurance that is being furnished.

Most Owners will use C-451 7.01 to obtain information on commercial general liability insurance, automobile liability insurance, and workers' compensation insurance. The form may also be drafted to request information for other types of insurance, such as builder's risk insurance, that the Contractor on a specific project is required to furnish.

8. C-451 Article 8—Construction Experience

The information furnished by the respondent at C-451 Article 8, together with the project experience references furnished on the various schedules attached to C-451, is typically among the most useful information used in evaluating a prospective contractor's responsibility and qualifications.

C-451 8.01 requires basic information about the respondent's business experience, in terms of number of employees, annual revenue, years of experience, and areas of general expertise.

C-451 8.02 requires information on the respondent's business performance record, addressing matters such as predecessor entities, claims history, bid defaults, surety bond defaults, and similar matters that are, understandably, of significant interest to an Owner contemplating award of the Contract.

C-451 8.03 through 8.05 require the respondent to provide information on current projects, past projects, and key personnel on Schedules A, B, and C, attached to C-451. The drafter of the Project's Qualifications Statement should note that C-451 8.04 requires information on a minimum of three and a maximum of six past projects; where necessary, edit the minimum and maximum limits to suit the Project. It may also be useful to edit the model language of C-

451 8.04 to require information only for past projects that were similar in type of work and/or size (amount of work for which the respondent was directly responsible).

As indicated above in this Commentary's Section 3.5 in its discussion of evaluating a prospective contractor's responsibility, the evaluation should be as objective as possible. When the Engineer is retained to assist the Owner in evaluating Bids and Qualifications Statements, the Engineer should typically limit its written responses and recommendations to factual information. Ultimately, the final determination of the responsibility of a prospective contractor is the Owner's.

C-451 formerly required a prospective contractor to indicate on an attached schedule a list of respondent-owned construction equipment. The current edition of C-451 does not require listing of the respondent's construction equipment for the following reasons: (1) construction equipment ownership is rarely an indication of the types of equipment readily available to a contractor; many contractors rent construction equipment from equipment rental firms; (2) in actual practice, respondents often tend to attach their own list of owned equipment rather than fill in a schedule that is part of a required Project Qualifications Statement form, and such pre-printed listings are often voluminous and may include considerable extraneous information; (3) in practice, it is common for submitted lists of respondent-owned construction equipment to include many equipment items that are irrelevant to the contemplated project (for example, listing numerous items of earthmoving equipment for a project that is largely electro-mechanical in nature); and (4) a respondent's listing of owned equipment may include old, outdated, or non-operable equipment, or other equipment not relevant to the contemplated project.

9. *C-451 Article 9—Required Attachments*

The final provision prior to the signature page is a listing of the required attachments to be submitted with the Qualifications Statement. C-451 9.01 presents model language for a list of suggested attachments, but the list should be edited to suit the Project.

Where additional required attachments are indicated for a Project's Qualifications Statement, it is advisable for corresponding revision to be made elsewhere in the Project's Qualifications Statement so that complete requirements for all required attachments are indicated at an appropriate location.

10. *C-451—Signatures*

C-451 includes a signature page for the completed Qualifications Statement to be signed by an authorized official of the responding organization. The signature page also includes spaces for the respondent to indicate basic contact information for inquiries concerning the submitted Qualifications Statement.

11. *C-451—Schedules A, B, and C*

Completion of C-451's Schedules A, B, and C is required in, respectively, C-451 8.03, 8.04, and 8.05. The information required on Schedules A, B, and C is typical and consistent with C-451 8.03, 8.04, and 8.05.

The drafter of the Project's Qualifications Statement and, possibly, other provisions of the Bidding Requirements, should consider that many contractors have pre-printed lists of current projects, past projects, and key personnel, and it is not unusual for a respondent to replace C-451 Schedules A, B, and C with the respondent's own pre-printed listings. In some

cases the replacement submittals will adequately accomplish the goals of Schedules A, B, and C. Occasionally, however, such pre-printed listings contain types of information that differ significantly from what is required in Schedules A, B, and C. In some cases a non-uniform submittal will be so divergent that the Bid should be deemed non-responsive.

There are benefits to flexibility; but in other cases it may be appropriate to edit the model language of C-451's Schedules A, B, and C, or C-451 Article 8, to require that only Schedules A, B, and C, as issued with the Project Qualifications Statement, will be acceptable for responses. If this is done, it may also be wise to indicate this at any pre-bid conference for the Project.

3.8 *EJCDC® C-510, Notice of Award*

EJCDC® C-510, Notice of Award, is a one-page form used by the Owner to officially notify the Successful Bidder (a term defined at C-700 1.01.A.43) that the Owner has awarded the Contract to the Successful Bidder, and that the Contract Documents are enclosed for signature by the Successful Bidder. The form also addresses other administrative requirements associated with the signature of the Contract. Use of a Notice of Award is required by C-200 20.01. Project-specific revisions to the model language of C-510 must be coordinated with the Project's Instructions to Bidders, including C-200 20.01. A timeline that includes the events between the award of the Contract and the Effective Date of the Contract is set forth in this Commentary's Section 6.2, concerning C-700 4.01 ("Commencement of the Contract Times").

While a third party, such as the Engineer, will often assist the Owner with preparing the Project's Notice of Award, the Project's Notice of Award should be signed only by an authorized official of the Owner's organization—often an executive official empowered to sign binding contracts on behalf of the Owner.

For public work, the Notice of Award is typically transmitted promptly following the public meeting of the Owner's governing board (such as a city council, utility authority board, or other governing body) at which the board votes to award the Contract to the apparent Successful Bidder. Administratively, it is often advisable to have the Project's Notice of Award drafted prior to the meeting so that the Owner's executive official may sign the Notice of Award immediately upon the board's vote to award the Contract.

Because it is an official "notice," the Project's Notice of Award should be transmitted in accordance with the provisions of C-700 18.01 ("Giving Notice") The most-common ways to transmit the Notice of Award are either in-person delivery, delivery via certified or registered mail (typically "return receipt requested"), or via a courier/delivery service.

In many jurisdictions, the Contract will be deemed legally enforceable by both parties at the time the Notice of Award is delivered to the Successful Bidder. In other cases, the Contract is not formed until fully signed by both parties. C-510 serves its purpose regardless of the controlling Law regarding contract formation.

Some owners or engineers use an ordinary letter as a Notice of Award in place of a standard form such as C-510. When this is done, EJCDC recommends that the notice of award letter or other form used be fully coordinated with the Project's Bidding Requirements. Using C-510 as a model for topics to be addressed in drafting such a letter may be appropriate. EJCDC recommends that only the Owner's authorized official sign such a letter.

As addressed in this Commentary's Section 3.2 (regarding C-200 20.01) and Section 3.3 (regarding C-410 7.01), some owners' administrative procedures include issuance of a "notice of intent to award" as

a preliminary step; C-510 may be edited for the Project to serve as a “notice of intent to award” with appropriate changes.

4.0 THE EJCDC OWNER-CONTRACTOR AGREEMENT FORMS

4.1 *The Agreement is a Critical Contract Document*

EJCDC has prepared its Owner-Contractor Agreement forms for use as part of an integrated set of Contract Documents. The substance of the Agreement is brief because it only covers basic and essential Project-specific matters such as: identification of the parties; Project identification Contract Times, Contract Price; liquidated damages and other specific damages (if any); core payment terms; retainage (if any); the Contractor's representations; an enumeration of the specific documents that comprise the "Contract Documents" for the Project; and a closing section for the signatures of the parties. Such provisions are part of the Agreement in accordance with EJCDC® N-122 / AIA® A521TM, Uniform Location of Subject Matter (2012 Edition). Such provisions are subject to significant variation from one owner and project to the next. By contrast, provisions that are typically uniform for most projects, such as Change Order procedures, for instance, are addressed in the General Conditions.

4.2 *Preparation of the Agreement*

The Owner-Contractor Agreement is prepared in two stages.

- A. *Stage 1:* Completed by the drafter at the same time that the remainder of the Bidding Documents are drafted, because the information provided in the Agreement is needed by Bidders to prepare their Bids. The Owner's name and address are inserted in the preamble and the following are completed:
 1. EJCDC® C-520, Agreement between Owner and Contractor for Construction Contract (Stipulated Price): Articles 1, 2, 3, 4 (unless completion dates will be determined through Bidding process), 6, and 7.
 2. EJCDC® C-525 Agreement between Owner and Contractor for Construction Contract (Cost-Plus): Articles 1, 2, 3, 4 (unless completion dates will be determined through Bidding process), 7, 8, 10, and 11.
- B. *Stage 2:* Completed after the Contract is awarded and before being sent to the Successful Bidder (Contractor) for signature. The Contractor's name and address are inserted in the preamble, and the following are completed:
 1. C-520: Articles 5 and 9, and signature pages.
 2. C-525: Articles 5, 7, 8, and 14, and signature pages.

4.3 *Signing of the Agreement*

It is rare that both parties will execute the Agreement on the same date. EJCDC's Agreement forms contemplate that Owner will deliver the Agreement (fully prepared, but unsigned; usually in multiple counterparts) to the Contractor with the Notice of Award. The Contractor is to return it (or the multiple counterparts) to the Owner within 15 days, duly signed (executed) and accompanied by other required documents, such as bonds and insurance documentation. The Owner will then sign the document (or multiple counterparts) within 10 days and return one fully signed counterpart to the Contractor. These are typical assumed procedures; the parties are free to follow other steps to achieve the result of full execution of the document.

See this Commentary's discussion of C-700 4.01 *Commencement of Contract Times; Notice to Proceed* for information on the schedule of events between the opening of Bids and the date the Contract Times commence to run. The date that the Agreement is executed by the Owner (under the assumed procedures

the second of the two parties to sign) is often used as the “Effective Date of the Contract” (a term that is defined at C-700 1.01.A.19 of the General Conditions), though other dates may be used; a space is provided above the parties’ signatures to indicate the Effective Date of the Contract. The Effective Date of the Contract starts the clock ticking as to when the Contract Times start to run, and is a date to which other contractual events are keyed. The dates on the Performance Bond and Payment Bond should not be earlier than the Effective Date of the Contract; accordingly, often the Effective Date of the Contract is established in advance of obtaining the Contractor’s signature on the Owner-Contractor Agreement.

4.4 *Effective Assignment of a Procurement Contract*

When a procurement contract is assigned to the Contractor there are additional considerations for executing the Owner-Contractor Agreement. EJCDC® P-520, Agreement Between Buyer and Seller for Procurement Contract, includes two exhibits:

- A. *Exhibit A, Assignment of Procurement Contract, Consent to Assignment, and Acceptance of Assignment:* This document is signed by Owner (as the initial Buyer and assignor), Seller, and Contractor (as assignee), authorizing the assignment. The Owner and Seller will commonly sign Exhibit A at the time the procurement contract is first executed, typically well before the construction contractor selection process begins. Later, after the award of the construction contract, the Contractor signs Exhibit A, at the same time Contractor signs the Owner-Contractor Agreement.
- B. *Exhibit B, Surety’s Consent to Assignment:* This exhibit documents the Seller’s surety’s consent to the assignment. After the assignment is effective, the Seller’s surety’s obligations run to the benefit of the Contractor/Assignee (which as the result of accepting the assignment has become the Buyer, taking the place of the Owner).

The two exhibits indicated above should be enumerated as exhibits to both the Buyer-Seller Agreement (in the procurement contract documents; see P-520 6.01.A.8) and the Owner-Contractor Agreement (at C-520 7.01.A.9 and C-525 11.01.A.9).

A sufficient number of counterparts of Exhibits A and B should bear original signatures for each party to the assignment (Owner, Seller, Contractor), and others as required for the Project, to have a complete set of fully executed originals. After Owner (as Buyer and assignor), Seller, and Seller’s surety have executed Exhibits A and B, the documents should be retained at a safe location until such time as the Contractor is selected and signs Exhibit A. Subsequent to the Contractor’s signature of Exhibit A, the fully executed original exhibits are to be distributed to the parties to the assignment.

4.5 *EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price)*

A. *The Preamble*

The preamble is the Agreement’s “introduction” which includes the identification of the parties to the Contract. Including a date in the preamble was discontinued with the 2007 edition of C-520 in favor of exclusive reliance on the Effective Date of the Contract, located just prior to the signatures near the end of the Agreement.

B. *C-520 Article 1—Work*

C-520 Article 1 should broadly describe the Work to be performed by the Contractor. The purpose of this description is merely to designate the general scope of Work, and use of

detailed descriptions of the extent of the Work in this location should be avoided to assure that the substantive descriptions presented in the Drawings and Specifications are not inadvertently undermined or contradicted.

C. *C-520 Article 2—The Project*

C-520 Article 2 is the location for a brief description of the entire project that the Owner is undertaking. By EJCDC definition, the term “Project” encompasses a full range of components, including design, construction, and more. Thus, in most cases the Work under the specific construction Contract, described in C-520 Article 1, will be a mere subset of the Project described in C-520 Article 2.

D. *C-520 Article 3—Engineer*

C-520 3.01 asks the drafter to identify the Engineer, as the term is used in the C-Series documents, particularly in C-700—the Owner’s representative during construction, with specified construction-phase responsibilities. In C-520 3.02, the drafter should identify the engineering entity that designed the Work that is the subject of the Contract. In many cases this will be the same firm that has been listed as Engineer in C-520 3.01. Note that Article 3 the previous (2013) edition of the Agreement requested the same information, but in a different order.

If more than one entity will perform different elements of the Engineer’s construction-phase responsibilities, each should be identified in C-520 3.02 using appropriate labels. As an example, a construction manager might perform some construction phase administrative tasks, while an engineering firm (ideally, the design engineer) reviews Shop Drawings. To the extent relevant to the Contractor, the apportionment of responsibilities of the two (or more) entities should be clearly indicated in the Contract Documents, through revisions to the General Conditions or appropriate Supplementary Conditions. Adopting the EJCDC documents to account for a division of some or all of the responsibilities contemplated by the default provision of one entity serving as the construction phase “Engineer” is a task that requires careful, thorough review and revision of the standard documents.

The name of the “Engineer” indicated at C-520 Article 3 should generally be the engineering firm’s legal/contractual name and should be identical to the Engineer’s legal/contractual name used in the Project’s Owner-Engineer Agreement. Avoid use of brand names and abbreviations that are not legal/contractual names.

E. *C-520 Article 4—Contract Times*

EJCDC’s documents use the plural term “Contract Times” to reflect that specific times are contractually stated for Milestones (if any), Substantial Completion, and completion and readiness for final payment. (“Contract Times,” “Milestone,” and “Substantial Completion” are defined terms—see C-700 1.01 and C-001 Exhibit A).

1. *C-520 4.01, Time is of the Essence*

Users may be familiar with contractual language to the effect that time is the essence of the Contract. Language to this effect emphasizes the critical importance of timely performance, and helps to ensure the effectiveness and enforcement of specific completion-related provisions, such as liquidated damages clauses. Because it is not the intent to automatically impose the burden of a material breach of contract on every failure to meet a deadline, the “time of the essence” clause in C-520 4.01.A is limited to critical completion events: the times

for Milestones (if any), Substantial Completion, and completion and readiness for final payment. As an example, the Owner would not automatically be in material breach of contract for failing to perform one of the responsibilities imposed on it in a timely manner (e.g., missing a progress payment by a day).

2. *C-520 4.02, Contract Times: Dates, and 4.03, Contract Times: Days*

The drafter will choose one of these two clauses, and delete the other. The Contract Times may be stated using dates, or as a number of days. The date (or number of days) for Substantial Completion is important because it represents the point at which the Work can be utilized or occupied by the Owner for the purposes for which it is intended; Substantial Completion is also the point at which the correction period commences running, is typically when the Owner assumes responsibility for insurance and utilities at the completed facilities, and is a milestone at which the Contractor is typically due a portion of the withheld retainage. The date (or number of days) for completion and readiness for final payment is essential to provide a basis for a breach of contract claim against a Contractor that fails or refuses to perform the remaining Work required after Substantial Completion.

The period between Substantial Completion and the date that the Work is complete and ready for final payment should be of sufficient length to allow the Contractor to complete anticipated “punch list” Work (the list of uncompleted Work items that is attached to the Engineer’s certification of Substantial Completion), but sufficiently short that the Contractor’s continued occupation of the Site does not significantly interfere with the Owner’s operations. In most cases, 60 days between Substantial Completion and when the Work is to be complete and ready for final payment will be sufficient.

3. *C-520 4.04, Milestones*

When used, Milestones (defined in C-700 1.01) are part of the Contract Times and should be specified at C-520 4.04. Not all projects have Milestones; for such projects, delete C-520 4.04, or indicate “None.” Milestones should only cover principal events of major importance to the completion of the Project and should not encroach or impinge on the Contract’s scheduling procedures.

4. *C-520 4.05, Liquidated Damages*

C-520 4.05 presents standard language for establishing liquidated damages for untimely performance. Liquidated damages are used to encourage timely completion of the Work and to compensate the Owner for costs incurred by the Owner for the Contractor’s failure to comply with the Contract Times for Substantial Completion (C-520 4.05.A.1), completion and readiness for final payment (C-520 4.05.A.2), and Milestones (C-520 4.05.A.1). Damages for delay in completion can be difficult to quantify even after the fact, and proof of actual damages can require costly expert analysis and legal fees. Avoidance of these costs and uncertainties are among the reasons for agreeing to liquidated damages, rather than deferring the issue to a dispute over actual damages.

C-520 4.05.A.4 makes clear that if the multiple liquidated damages are established by contract, only one is imposed for any given day of late completion. For example, suppose under C-520 4.05.A.1 the Contract establishes \$500 per day for failing to meet Substantial Completion; under C-520 4.05.A.2 the Contract establishes \$100/day for failing to meet the deadline for readiness for final payment; and the dates for these two objectives are May 1, 2015, for Substantial Completion, and July 1, 2015, for final readiness. If the Contractor attains

Substantial Completion on August 1, there will be 92 days of LDs at \$500; a further 20 days to reach readiness for payment as of August 20 will result in 20 days at \$100/day. The days from July 1 to August 1 will not be double-charged at \$600/day.

On some projects, interim Milestones are of such importance that the use of liquidated damages may also be appropriate relative to one or more of the Milestones, and model language for such is also included at C-520 4.05.A.3.

If it is the intent that the damages for failing to achieve more than one of the Contract Times will be cumulative, the Agreement should be revised or supplemented to clearly indicate when liquidated damages are meant to be cumulative.

Damages for delay in completion can be difficult to predict when the Contract is drafted. Nonetheless it is prudent to make a good faith effort to establish Project-specific liquidated damages daily amounts that reasonably reflect the anticipated actual damages that the Owner would incur if the Work is not completed within the Contract Times. The Owner should make the decision on the amount of the liquidated damages, although many Owners will obtain assistance from the Engineer on estimating the potential damages for each day of delay in completion. Courts will typically not enforce a penalty-only disincentive provision and, if the amount provided as liquidated damages is supportable only as a penalty against the Contractor's tardy performance, there is risk that a liquidated damages provision will prove unenforceable. Similarly, liquidated damages that are arbitrary numbers, selected without any logical process or analysis, may be hard to justify.

The factors that Owner and Engineer consider in establishing liquidated damages (such as loss of use or production; extended administrative, engineering, or financing costs; inconvenience to the public or to Owner's employees; and so on) should be recorded. All records of the process, and that thus support the reasonableness of the amount stipulated as liquidated damages, including any reports, meeting minutes, or written calculations, should be preserved in the Owner's and Engineer's project files.

C-520 4.05.B confirms the fundamental nature of liquidated damages for late completion: the Owner is entitled to recover the specified liquidated daily rate as its damages, but is precluded from recovering other types of damages for the same late completion. This point is inherent in the term liquidated damages, and as of 2018 is now expressly stated in the Agreement.

C-520 4.05.C gives the Owner the opportunity to establish a specific bonus that Contractor can earn through early completion. See the Note to User preceding C-520 4.05.C for a discussion of the relationship of the bonus amount to the liquidated damages amount for late completion. A well devised and coordinated program of incentives and disincentives can yield substantial benefits to the Project.

5. *C-520 4.06, Special Damages*

This paragraph is optional text that may be used for "special damages," which are in addition to liquidated damages. As the related Guidance Notes indicate, the general recommendation is to rely on comprehensive liquidated damages under C-520 4.05, and delete the optional C-520 4.06 text.

If used, the model special damages text is intended to allow the Owner to recoup the cost of actual engineering and inspection forces associated with a delay in completion, together with any actual fines or penalties imposed on Owner for the tardy completion; such special

damages may be applied both for the Contractor's failure to achieve Substantial Completion and for failing to achieve the Contract Time for completion and readiness for final payment.

The "special damages" provision is provided to accommodate Owners that wish to use liquidated damages for indefinite delay damages, while charging the Contractor for hard-dollar outlays for engineering, construction observation, inspection, and administrative costs. The impetus for providing the option has its roots in the disputes that arise between owners and engineers over post-deadline costs. Owners often object to continuing to pay for engineering and inspection services when the Contractor is continuing to work beyond the time for Substantial Completion, and sometimes attempt to blame the engineer for the delay, or argue that the engineer should take the risk of late completion and absorb the extra costs. The special damages provision is intended to fully compensate the Owner (and hence encourage full payment of the Engineer) for the reasonable cost of engineering and inspection forces employed by the Owner on the Project when the Work is delayed beyond the Contract Times for reasons within the Contractor's control.

In other instances, the special damages provision may be further extended to incorporate provisional damages whose incurrence is uncertain at the time of construction pricing; for example, when the Owner is under a consent decree, the amount of civil penalties or fines imposed on the Owner by an authority having jurisdiction for the Contractor's failure to complete the Work within a specified deadline. Incorporating such "provisional" damages into liquidated damages will increase the liquidated damages amount regardless of whether the provisional event is triggered, which in turn may unnecessarily increase the pricing Bid to the Owner. On the other hand, as explained in the Guidance Notes preceding C-520 4.06, there is considerable merit to producing a straightforward liquidated damages amount that accounts for a full range of possible losses; adding an additional "special" surcharge for certain hard-dollar damages frequently results in Contractor complaints about overreaching and double-charges, and may raise questions about the reasonableness of the entire approach to late-completion damages.

F. *C-520 Article 5—Contract Price*

The Contract Price is filled in at Article 5 of the Owner-Contractor Agreement upon Owner's award of the Contract. For C-520, the stipulated price version of the Owner-Contractor Agreement, there will typically be only one or two categories of price: lump sum, unit prices, or both.

Alternative subparagraphs of C-520 5.01 allow the user the flexibility to specify the Contract Price in the manner most appropriate for the Contract. For projects that have a limited number of payment items, the model language incorporates provisions for a single lump sum (C-520 5.01.A) and for unit prices that are to be entered at C-520 5.01.B. The blanks are to be filled in upon award of the Contract, when the Agreement is being prepared for execution. When the Contract pricing is comprised of multiple lump sums, C-520 5.01.A may be edited to specifically indicate the lump sum items, in coordination with the lump sum Bid items indicated in the Bid Form.

Alternatively, C-520 5.01.D may be used in the following circumstance: By standard definition, the Contractor's Bid is not a part of the Contract Documents and it should not be included as such in the assembled set of Contract Documents. In most cases it will be relatively simple to insert the price information from a Bid directly into Article 5 of the Agreement—for example,

by electronically cutting the unit price table from a PDF of the Bid and pasting into the Agreement.

However, it is recognized that there are situations where it may be more convenient to attach to the Agreement a copy of either the entire Bid Form submitted by the Bidder, or the Bid pricing schedule from the submitted Bid Form. For more information on implementing this approach, see C-001 3.5.B regarding the Bid Form. If the submitted Bid Form (or a portion of the Bid Form) is used as an exhibit to the Owner-Contractor Agreement, then the exhibit should be specifically identified as "Exhibit 1" at C-520 7.01.A.9.

Guidance Note 3 preceding C-520 Article 5 discusses performance requirements and damages. Provisions for performance damages concern the consequences of a failure of a specific item of equipment or system to perform in accordance with the criteria specified in the Contract Documents (for example, when the efficiency of a large pump, as furnished, is less than specified and will therefore result in long-term, increased electrical costs to the Owner). When performance damages provisions are included in the Contract, they should optimally be located in the Specifications section where the equipment or system is specified, and cross-referenced in the Owner-Contractor Agreement. As the Guidance Note indicates, C-520 Article 5 is a suitable location for such a cross-reference (because of the potential monetary consequences of the performance requirements).

G. *C-520 Article 6—Payment Procedures*

C-520 Article 6 provides broad, basic requirements regarding obligations for payments to the Contractor, including provisions on retainage. Detailed procedures for submitting Applications for Payment are included in C-700 Article 15 and these may be supplemented in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, such provisions would typically be located under *Section 01 29 00, Payment Procedures*.

C-520 6.02 deals with the amount and timing of progress payments. Obviously, during preparation of the Bidding Documents C-520 6.02 must be coordinated with the Owner's typical schedule and process for disbursements to creditors.

C-520 6.02.A provides for insertion of the day of the month when the Owner will pay the Contractor's monthly progress payments; final payment is covered at C-520 6.03. Note that C-700 15.01.B.1 requires the Contractor to submit progress payment applications to the Engineer not less than 20 days before the date indicated at C-520 6.02.A. The 20-day period is based on the Engineer having a 10-day period to review applications for progress payments (C-700 15.01.C.1) and the Owner having 10 days to issue payment after the Owner's receipt of the Engineer's recommendation regarding payment (C-700 15.01.D.1). (To issue final payment, the Owner has 30 days in accordance with C-700 15.06.E) When either the Owner or Engineer, or both, will be unable to comply with the time frames for payment as indicated in the General Conditions, appropriate revisions should be made.

Retainage protects the Owner against overpayment resulting from errors in estimating the value of the Work completed, and against defective Work. Retainage can also serve as an incentive to complete the performance of the Work, and as a resource for settling third-party claims arising from the Work.

The percent of retainage, and duration that retainage is withheld, are addressed in C-520 6.02. Several jurisdictions have statutory limitations on the maximum percentage that

can be retained from progress payments. In addition, some authorities have issued policy statements that support the concept that retainage should not exceed 10 percent during the first 50 percent of the Work, and that assuming steady performance no additional routine retainage should be withheld thereafter. C-520 6.02.A.1.a reflects this position. It may be necessary to revise the C-520 6.02.A.1 to accommodate Owner preferences and applicable laws and regulations. A useful resource in this respect is the American Subcontractors Association's paper, *Retainage Law in the 50 States*.

The Owner and Engineer should understand that if the Contractor defaults in its obligations and there is a performance or payment bond, the surety will expect to have access to the retainage as partial compensation for completing the Contractor's obligations. Owner should not release or return retainage other than as required by the Agreement; even a contractually-required release should be done with the knowledge and written consent of the surety, as stated in C-520 6.04. Obtaining such consent is a routine practice and ordinarily will not require special formalities. However, if the Owner desires to incorporate detailed obligations for this, an appropriate location would be Specifications Section 01 29 76, Progress Payment Procedures. The American Institute of Architects publishes a form useful in this respect: AIA® G707A™ *Consent of Surety to Reduction in or Partial Release of Retainage*.

C-520 6.02.B provides that, upon Substantial Completion, retainage is paid in full, minus an amount equal to a multiplier times the Engineer's estimate of the value of the uncompleted, or punch list, Work. C-520 6.02.B includes a Note to User suggesting that the multiplier be 200 percent. The multiplier may be subject to statutory limitation, and the user should be aware of applicable statutes and prepare C-520 6.02.B accordingly; for example, on public works projects in one mid-Atlantic state the multiplier is restricted to 150 percent.

Refer to this Commentary's discussion of C-700 15.01.C (Review of Applications) and C-700 15.06 (Final Payment) for commentary related to consent of the surety to reduction in or partial release of retainage in an amount greater than that required by the Contract. The discussion of C-700 15.06 also comments on the reason for the General Conditions requirement that the Contractor furnish a consent of surety to final payment.

The interest rate indicated in C-520 6.05 applies to late payments to the Contractor by the Owner, and may be subject to statutory requirements and limitations.

H. C-520 Article 7—Contract Documents

It is essential that all of the Contract Documents be listed at C-520 7.01.A to preclude any misunderstanding between the parties as to what does and does not constitute the Contract Documents. This necessitates a careful organization of the Project Manual and identification of all the miscellaneous documents that comprise the Contract Documents. In C-520 7.01.A, each Contract Document should be carefully listed by name; best practice also will include clearly indicating the number of pages for each listed item.

To avoid conflicting lists of the Contract Documents, the definition of "Contract Documents" at C-700 1.01.A.13 merely refers the reader to the list in the Agreement.

C-700 1.01.A.37 and 41 clarify that Shop Drawings and other Contractor submittals are not Contract Documents. C-700 5.03.C and 5.06.B make the same point regarding reports and drawings on existing conditions at the Site.

C-520 7.01.A.5 includes the Specifications as listed in the Project Manual's table of contents. For this reason, it is important that the person preparing the final Agreement for signature

carefully reviews the Project Manual table of contents to verify that it adequately lists the Specifications. Revise C-520 7.01.A.5 if some other document is used to list the Specifications.

In C-700 7.01.A.8, the only Addenda that should be listed as Contract Documents are those that clarify, interpret, or modify the Contract Documents. Exclude Addenda dealing solely with the Bidding Requirements or other non-contractual subject matter—for example, exclude an Addendum that merely rescheduled the time and date of the bid opening.

See C-001 4.5.F concerning C-520 Article 5, regarding inclusion of the Successful Bidder's Bid Form (or a portion of the Bid Form) as one of the Contract Documents.

See C-001 4.4, Effective Assignment of a Procurement Contract, relative to including as exhibits to the Agreement (Contract Documents) the assignment consent forms for an assigned procurement contract.

The listing of the various documents, exhibits, and attachments to the Agreement, all of which together comprise the Contract Documents, include reference to various documents that may be issued after the Effective Date of the Contract, but are to be considered as Contract Documents. Such post-execution Contract Documents include the Notice to Proceed, Change Orders, Work Change Directives, and Field Orders, but do not include Shop Drawings or other Contractor submittals, or written clarifications.

I. *C-520 Article 8—Representations, Certifications, and Stipulations*

The Owner-Contractor Agreement contains the Contractor's representations regarding the Contractor's examination of the Contract Documents, Site conditions, and legal requirements applicable to performance of the Work, and the Contractor's agreement that it does not consider that any additional examinations, investigations, or tests are required.

The Contractor's representations made in C-520 8.01 are similar in content to those stated in C-410 Article 8. A change in the representations in one of these two documents (Bid Form, Owner-Contractor Agreement) will necessitate a corresponding change in the other. One noteworthy change in the 2018 edition of the C-Series is that the representations no longer require the Contractor (in C-410 the Bidder) to represent that it has reviewed all reference documents that were made available; such documents are made available as possible sources of aid to the Contractor (Bidders), but are not intended to create obligations for the Contractor (Bidders). However, the Contractor (Bidders) do remain responsible for carefully studying reports and drawings that contain Technical Data.

C-520 8.02 is an anti-corruption certification by the Contractor.

C-520 8.03 includes a statement regarding Owner stipulations with respect to revisions of C-700. If the statement is not relevant to the specific Project, it should be deleted.

J. *C-520—Effective Date of the Contract*

Immediately preceding the signature section near the end of the Owner-Contractor Agreement is a statement that "This Agreement will be effective on _____ (which is the Effective Date of the Contract)." Signature by both parties on the same date, or on the Effective Date, is not necessary. In establishing the Effective Date, refer to the time frames presented in this Commentary's discussion of C-700 4.01.

4.6 *2018 Relocation of Agreement Clauses and Notes*

Several items in C-520 (2013 edition), including the entire contents of former Article 10, Miscellaneous, have been relocated, either within C-520 (2018 edition), or in C-700.

4.7 *EJCDC® C-525, Agreement between Owner and Contractor for Construction Contract (Cost-Plus-Fee)*

The cost-plus-fee (“cost-plus”) basis of payment is commonly used on private construction projects, and sometimes used on public works projects. Cost-plus contracts call for compensation for the actual cost of direct construction expenses, plus an additional fee for the Contractor’s overhead and profit. The fee is usually a percentage of the direct costs of construction, but also may be a fixed fee amount (e.g., a specific, stipulated dollar amount). Cost-plus contracts also typically include provisions that establish a guaranteed maximum price (GMP).

Although a cost-plus contract allows greater flexibility to make changes during construction and, when used with a fixed fee, encourages the Contractor to complete the Work for the lowest possible cost, it has a more uncertain outcome relative to the final Contract Price than do stipulated price contracts, and entails a significant recordkeeping effort by Contractor to document the actual construction costs incurred, and a significant monitoring effort by Owner and its representatives to assure that costs are reasonable and reimbursable.

Most commonly cost-plus is used when contract terms can be negotiated. However, it is possible to let cost-plus contracts by competitive bidding, and EJCDC® C-200, Instructions to Bidders for Construction Contract, and EJCDC® C-410, Bid Form for Construction Contract, include optional provisions allowing for such bidding.

The comments in C-001 Article 4 (above) regarding C-520 generally have equal application to C-525, which differs only to the extent necessary to cover additional requirements applicable to the cost-plus method of compensation. Obviously, some of the references to specific C-520 paragraphs are not directly applicable to C-525, but C-520 and C-525 are sufficiently similar in structure and content to allow the reader to readily translate the C-520 comments to the corresponding clauses in C-525.

The following are comments on provisions that are unique to C-525:

A. *C-525 Article 5—Contract Price*

C-525 Article 5 consists of a single basic paragraph that states how the Contractor will be compensated: for the Cost of the Work (which is defined in detail in C-700 13.01), plus a fee, subject to stated additions, deletions, and limitations. The details regarding the Contractor’s fee and the Guaranteed Maximum Price (if any) are found in the cross-referenced articles (Articles 7 and 8) of C-525. In most cases it will not be necessary to modify C-525 Article 5: substantive changes would more likely be made in the cross-referenced articles, or in C-700/800.

In previous editions of C-525, the Contract Price provisions included a location for Unit Prices. Based on research and analysis, EJCDC concluded that Unit Prices are generally inapplicable in cost-based contracts, and therefore the Unit Price provisions have been removed from C-525 2018. If the user decides that Unit Prices should be included in a specific cost-plus contract, the Unit Price provisions of C-520 5.01.B may be inserted in C-525 Article 5.

B. *C-525 Article 6—Cost of the Work*

C-525 Article 6 refers to the procedures contained in C-700 13.01 for computing the Contractor's Cost of the Work.

C. *C-525 Article 7—Contractor's Fee*

C-525 Article 7 is completed upon Owner's award of the Contract, using the fee-related information contained in the Successful Bidder's Bid, or agreed to during the negotiation or proposal process. The Notes to User provide instructions regarding completion of this section, which will involve deletion of inapplicable provisions.

- The fee option at C-525 7.01.A is a fee based on a stated percentage of the Cost of the Work. The subparagraph, C-525 7.01.A.1, is used to place a hard cap (in dollars) on the percentage fee. Note that the Guaranteed Maximum Fee is not the same as the Guaranteed Maximum Price, discussed in C-525 Article 8. If there will not be a cap on the fee, delete C-525 7.01.A.1.
- The fee option at C-525 7.01.B is also a percentage-based fee—more specifically a set of separate percentages, applied to specific portions of the Cost of the Work. Differing percentages are applied to the various cost categories, as shown, to generate the Contractor's fee. For example, a higher percentage might be applied to labor costs (payroll costs) than to materials costs. As with the percentage option in C-525 7.01.A, a hard dollar cap can be placed on the total fee, by retaining subparagraph C-525 7.01.B.1.
- Another common approach is to agree to a specific fixed fee (a stipulated dollar amount), rather than basing the fee on a percentage of the Cost of the Work. For this approach, use C-525 7.01.C, and delete C-525 7.01.A and C-525 7.01.B. As noted, if the scope of the Work changes, the fixed fee will be subject to revision.

D. *C-525 Article 8—Guaranteed Maximum Price*

Without a Guaranteed Maximum Price, a Contract based on C-525 is essentially a “time and material” (T&M) contract, with the distinction that the Contractor's overhead and profit is in a separate fee under C-520 Article 7, rather than being built into the “time” component of a true T&M contract. Some projects are suited to such an uncapped approach; however, the majority of substantial cost-based construction is conducted with a Guaranteed Maximum Price in place. When used, C-525 Article 8 is completed following Owner's award of the Contract, using the GMP that has been agreed to during a bidding or negotiation process.

The term Guaranteed Maximum Price is sometimes misunderstood. It is not a rigid, absolute, and immutable number. The GMP is “subject to increases or decreases for changes in the Work.” See comments regarding C-525 Article 9 immediately below for discussion of GMP changes.

C-525 8.02, Allocation of Savings, is a new provision (as of 2018) that is intended to create express incentives for Contractor to deliver the Work at a cost well under the GMP. Contractor is granted a percentage of the savings (difference between Contract Price and the GMP); presumably in a typical case the percentage to which Contractor is entitled will be set higher for larger cost savings (for example, 10% to Contractor if the price is only 5% below the GMP, but 20% to Contractor if the price is more than 10% below the GMP).

E. *C-525 Article 9—Changes in the Contract Price*

C-525 9.01.A sets forth rules for making changes in the Contractor's fee, and in the GMP (if applicable), as the result of a Change Order that changes the Contract Price. Such changes will be recorded in that Change Order. The fundamental principle behind these rules is that the Contractor's fee and the GMP are based on an assumed scope of Work. If that scope of Work changes, the fee and GMP are likewise subject to change.

F. *C-525 Article 10—Payment Procedures*

C-525 Article 10 is similar to C-520 Article 5, with the additional need to indicate how progress payments of the Contractor's fee will be made.

G. *Relocation of Provisions Regarding Accounting Records (Former C-525 Article 13)*

The 2013 edition of C-525 (and previous editions) contained an article (in 2013, Article 13) detailing the Contractor's obligation to retain and grant Owner access to accounting records regarding Cost of the Work. This article was similar to provisions already contained in the General Conditions. As of 2018 the subject has been removed from C-525 and is addressed comprehensively in a single location, C-700 13.01.E, Documentation and Audit.

4.8 *Comment: Construction Cost Fluctuations*

On stipulated price contracts, including any stipulated unit prices, the Contractor bears the risk that its costs may rise after the Contract Price has been contractually stipulated; the Contractor also may reap a windfall if costs decline sharply. The risk of price fluctuations may be managed by using cost-reimbursable type agreements such as C-525. Another approach is the use of price indexing, for example by referring to construction and material cost indices published by the Engineering News-Record, or by public agencies (most typically, fuel price indices). If price fluctuations and volatility are a concern, users may wish to refer to ConsensusDocs 200.1, Potentially Time and Price-Impacted Materials. It may be used as an exhibit to the Agreement.

5.0 COMMENCEMENT OF CONSTRUCTION

5.1 *EJCDC® C-550, Notice to Proceed*

The Effective Date of the Contract, which is stated immediately above the signatures in the Owner-Contractor Agreement, establishes the date on which the terms of the Contract take effect, whereas EJCDC® C-550, Notice to Proceed, establishes the date upon which the Contract Times commence, and documents the dates by which the Work is to be completed. If a Notice to Proceed is not issued, in accordance with C-700 4.01 Commencement of Contract Times; Notice to Proceed, the Contract Times will commence running on the 30th day after the Effective Date of the Contract.

Prior to the Contractor beginning the Work at the Site, all rights-of-way and Site access should be made available to the Contractor by the Owner; refer to C-700 5.01, Availability of Lands.

EJCDC® C-550 includes a location for listing any other conditions that are to be satisfied prior to commencing the Work at the Site.

5.2 *EJCDC® C-610, Performance Bond*

A performance bond provides an Owner with a degree of security against the possibility of a serious default in performance by the Contractor. The surety's bond obligation is a "safety net" that is deployed if the Owner finds cause to formally terminate the Contractor's right to complete the contract (see C-700 16.02, setting forth the grounds for termination for cause arising from a failure to perform). In such a case the surety must act to complete the performance of the Contract through one of several measures prescribed in C-610, including performance through a replacement contractor or tendering payment to the Owner. If surety completes the Work, it is entitled to the remaining balance of the Contract Price.

5.3 *EJCDC® C-615, Payment Bond*

EJCDC® C-615, Payment Bond, protects Subcontractors and Suppliers against the risk of non-payment for the labor, materials, and equipment they furnish for the benefit of the Project and the Owner. Only first-tier (those having a direct subcontract with the Contractor) and second-tier (those having a direct subcontract with a subcontractor to the Contractor) Subcontractors and Suppliers may make a claim under the terms of EJCDC's payment bond. The payment bond form includes notice requirements and states that a legal action on the bond must commence within one year of the earlier of either 1) the date a claim was sent to the surety, or 2) the last provision of labor, materials, or equipment for the Work. These terms may be affected by state laws requiring a longer period in which to commence claims against the payment bond.

C-615 also directly protects the Owner: the Surety agrees to "defend, indemnify, and hold harmless" the Owner against liens and similar claims by unpaid Subcontractors and Suppliers.

5.4 *The 2010 Performance and Payment Bonds; 2013 and 2018 Re-issues*

The provisions of EJCDC® C-610 Performance Bond, EJCDC® C-615 Payment Bond, and AIA A312™ (combined performance and payment bond), were drafted jointly in the 1980s, and were revised in 2009-10 to conform to prevailing industry practices and developments in surety law. The drafting team received input from owner groups, surety industry representatives, and other construction stakeholders. The terms and paragraph numbering of the AIA and EJCDC versions of the bonds are virtually identical for the sake

of consistency within the construction industry. The new versions of the bonds were published in 2010. In 2013 EJCDC reissued the same two bonds with a 2013 date, to synchronize with the remainder of the 2013 Construction Series documents; the same re-issue process was followed in 2018.

6.0 GENERAL CONDITIONS AND SUPPLEMENTARY CONDITIONS

6.1 *EJCDC® C-700, Standard General Conditions of the Construction Contract*

The General Conditions define the basic rights, responsibilities, risk allocations, and relationships of the Owner and Contractor, and establish how the Contract is to be administered. Although not a signatory to the Contract, the Engineer has many duties and responsibilities under the General Conditions, as Owner's representative during construction; therefore, the wording and content of the General Conditions are of importance not only to Owner and Contractor but also to the Engineer. Insurers, sureties, Subcontractors, Suppliers, and others also have a strong stake in the General Conditions.

Because of the fundamental importance of the terms of the General Conditions, and the advantages of standardization of the text, the carefully chosen and coordinated language of the General Conditions should be modified and supplemented only when necessary, as a result of specific requirements of the Project, locale, or Owner, or negotiation by and between the parties. When revision of the requirements of the General Conditions is necessary, the drafter must take care to avoid conflicting with, or weakening, the remaining provisions of the General Conditions.

Revisions to the General Conditions may be made by modifying the text of C-700 itself, or by the use of Supplementary Conditions (see C-001 6.2). If revisions are made to the C-700 text, they should be shown or highlighted in some fashion (most commonly by Track Changes or similar word processing techniques) so the other party, or third parties who rely on the content of the document, are able to see the changes prior to submitting a Bid, making a commitment to enter into a contract, providing a bond or insurance, or making other binding decisions. If this is done, the final version of the revised General Conditions need not show the changes, resulting in a clean, Project-specific, uncluttered document that is easy to read and use during construction. Users should consult the C-700 License Agreement for details on making revisions to the document as published. See also C-800 SC-2.02, regarding the furnishing by Owner of conformed Contract Documents (most notably including conformed Drawings and Specifications).

6.2 *EJCDC® C-800, Supplementary Conditions of the Construction Contract*

Traditionally, owners, attorneys, and other contract drafters did not make any changes to the General Conditions document itself: all changes were made through separate Supplementary Conditions (SCs). This continues to be an approach that EJCDC supports. However, if there are numerous changes, or non-routine changes that are not pre-drafted as available SC options, this can be awkward and more time consuming than making changes directly to the General Conditions document (C-700) itself, as described in C-001 6.1. In most cases, there is good cause for at least some use of the Supplementary Conditions format, for example for specifying insurance coverages and identifying Site information resources.

This Commentary contains references throughout to making necessary revisions or additions to the General Conditions in a corresponding Supplementary Conditions provision. In all such cases the user may choose instead to make the revision in the General Conditions text itself, subject to applicable licensing agreement restrictions that require the user to show changes to the General Conditions under defined circumstances.

When Supplementary Conditions are used, modifications to, or deletions from, the provisions of the General Conditions should be arranged in the Supplementary Conditions in the same order as the corresponding provisions appear in the General Conditions. Each modification or deletion should be referenced specifically to the article, paragraph, subparagraph or sentence to which it relates in the

General Conditions. Additional articles should be added and referenced by using the next consecutive article number beyond that used in the General Conditions.

Certain topics are “mandatory” in the Supplementary Conditions. Such requirements are topics that are essential on all projects, but are Project-specific and therefore cannot be fully addressed in the General Conditions as published. Several provisions of the General Conditions expressly indicate that essential Project-specific information will be indicated in a corresponding Supplementary Condition. Note that although EJCDC refers to mandatory Supplementary Conditions, what is actually mandatory is the need to address the topic. The EJCDC Supplementary Conditions document (C-800) provides a place and convenient format for doing so; however, some drafters may choose to address the topic in an insert in the text of the General Conditions document (C-700), rather than in a Supplementary Condition.

The “mandatory” Supplementary Conditions are so identified in C-800. Among the most prominent:

- A. C-800 SC-5.03, concerning reports and drawings of conditions at the Site that contain Technical Data on which the Bidders and the Contractor may rely.
- B. C-800 SC-5.06, concerning reports and drawings regarding Hazardous Environmental Conditions at the Site, and any Technical Data in those reports and drawings on which the Bidders and Contractor may rely.
- C. C-800 SC-6.03, regarding required types and coverages for the Contractor’s liability insurance.
- D. C-800 SC-10.03, to specify whether there will be a Resident Project Representative (RPR), and if so to define the RPR’s authority and responsibilities.

Other suggested Supplementary Conditions are mandatory under specific circumstances. For example, on projects in which the Contractor will be responsible for complying with the Owner's safety program, C-800 7.13 would be mandatory; and on projects that include a Geotechnical Baseline Report, the alternative version of C-800 5.03 that incorporates such provisions would be necessary, together with C-800 1.01.A provisions to include the defined terms “Geotechnical Baseline Report” and “Geotechnical Data Report.”

6.3 C-700: Detailed Discussion of Terms and Conditions

The following narrative discusses a broad range of issues addressed in the General Conditions (C-700) and the Supplementary Conditions (C-800). In general, the discussion follows the sequence of the articles in the General Conditions.

A. C-700 ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1. Defined Terms

When using defined terms, it is essential to use initial capitals, as indicated in C-700 1.01.A. Indicating defined terms with an initial capital letter provides consistency and helps reduce the potential for ambiguities. To the extent practicable, EJCDC attempts to retain consistent defined terms between EJCDC’s various document families; for example, the defined terms in EJCDC’s professional services agreements (such as EJCDC® E-500, Agreement between Owner and Engineer for Professional Services), are generally the same as or consistent with the terms defined in C-700.

For the convenience of the reader, the C-700 definitions are included in this Commentary, as C-001 Exhibit A.

Although not categorized as “defined” terms, or indicated with initial capital letters, certain terms that are frequently used in C-Series documents are always used with precisely the same meaning; such terminology is indicated in C-700 1.02, including terms such as “day,” “defective,” “furnish,” “install,” “perform,” and “provide.”

When preparing other Contract Documents—including Supplementary Conditions, Drawings, Specifications, and others—it is important to be aware of and conform to the definitions and terminology established in the General Conditions. To ensure consistent interpretations throughout the course of a Project, it is advisable to use the defined terms and terminology in documents that are not Contract Documents, such as correspondence, clarifications and interpretations, submittal review comments, meeting minutes, and others.

CSI SectionFormat™ allocates an optional provision in “Part 1 – General” of each Specifications section for indicating defined terms that are used in and are unique to the particular section.

In addition, other terms, not specifically defined, are also used consistently through C-Series documents, and in other portions of the Contract Documents. An example is “materials and equipment,” referring to items that the Contractor furnishes and provides. By consistently using the term “materials and equipment” it should not be necessary to refer to “products,” “supplies,” “goods,” and the like. If common construction terms and phrases are used inconsistently, their intended meaning may be subject to varying, and possibly unintended, interpretations.

Below is Commentary on selected terms defined under C-700 1.01.A.

2. C-700 1.01.A.13, Contract Documents

The definition of “Contract Documents” at C-700 1.01.A.13 is merely a cross-reference to the items designated as Contract Documents in the Owner-Contractor Agreement C-520 7.01 and C-525 11.01. To reduce the potential for conflicting interpretations of what constitutes the Contract Documents, EJDC strongly recommends indicating what constitutes the Contract Documents at only one location—the Owner-Contractor Agreement. The Owner-Contractor Agreement is confirmed as the location where the Contract Documents should be listed and enumerated in EJDC® N-122 / AIA® A521™ *Uniform Location of Subject Matter*, 2012 Edition). See C-001 3.2 for a discussion on the differences between the defined terms “Contract Documents,” “Bidding Documents,” and “Bidding Requirements,” all of which are defined at C-700 1.01.A.

C-700 5.03 and C-700 5.06 expressly state that reports and drawings of existing conditions and Hazardous Environmental Condition at the Site are not Contract Documents. The definition of Shop Drawings (C-700 1.01.A.37) and C-700 7.16.C.7 emphasize that approved Shop Drawings, even if approved, are not Contract Documents.

Editions of C-700 prior to 2013 indicated at C-700 1.01.A that only printed copies of the Contract Documents were “Contract Documents.” This provision was deleted starting with the 2013 edition of C-700. Note that the provisions of C-700 2.02 and C-700 3.01.C are relevant to this topic. If the Owner intends that only printed copies constitute “Contract Documents”, amend the definition, or include a controlling provision at C-520 7.01 or C-525 11.01.

3. *C-700 1.01.A.11, Constituent of Concern, and A.24, Hazardous Environmental Condition*

These two definitions are critical to C-700 5.06, Hazardous Environmental Conditions at Site. The term “Constituent of Concern” is defined as including, but is not limited to, substances containing asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), and hazardous waste, and other substances that are hazardous or dangerous to humans and the environment. The adoption of this defined term in the 2013 edition streamlined references to these six pollutant categories. The definition itself has been streamlined as of 2018 by deleting the specific references to various federal environmental statutes, in favor of the simple term Laws and Regulations.

The definition of “Hazardous Environmental Condition” is essentially the presence at the Site of one or more Constituents of Concern in such quantities or circumstances that they may present a danger to persons or property. If other substances are to be considered as “Constituents of Concern,” and/or if other conditions are to be considered “Hazardous Environmental Conditions,” they should be so indicated via C-800 SC-1.01.A.11 and/or C-800 SC-1.01.A.24, as appropriate.

As a result of revisions in 2013 and 2018, the Hazardous Environmental Condition definition has been expanded to point out that (a) the Contractor may intentionally bring certain hazardous materials to the Site, as part of the Work (for example, solvents used in preparing a surface for painting)—if properly contained, these do not constitute a Hazardous Environmental Condition; (b) Constituents of Concern that have been identified as requiring removal, as part of the Work, do not give rise to a Hazardous Environmental Condition; and (c) anticipated conditions that routinely accompany construction are not a Hazardous Environmental Condition. The usefulness of these clarifications will be seen when reviewing the provisions in C-700 5.06 regarding the response required to a genuine Hazardous Environmental Condition.

The C-Series documents do not contemplate that the Work includes significant environmental remediation. Customized clean-up contracts are recommended. Such work is often done on the equivalent of a design-build basis, and with detailed attention to the unique risk factors posed by hazardous sites.

4. *C-700 1.01.A.20 and 21, Electronic Document and Electronic Means.*

These definitions were added in 2018 in connection with revised provisions regarding electronic transmittals (C-700 2.06) and use of an Electronic Documents Protocol (C-800 SC-2.06).

5. *C-700 1.01.A.22, Engineer*

The EJCDC C-Series documents are drafted assuming that there will be an independent engineer or engineering firm (a consulting engineer) serving in the role of “Engineer” and performing the Engineer’s services and duties as set forth throughout the General Conditions, other C-Series documents, and in the other Contract Documents and Bidding Requirements documents. EJCDC recommends that the same engineering entity provide both design-phase and construction phase engineering services, to enhance coordination and continuity of professional services, especially relative to the Project’s design intent as expressed in the Contract Documents. The EJCDC documents assume a contractual or organizational framework that includes an independent Engineer; the documents should be carefully

reviewed and revised as necessary if the Owner's in-house engineering staff will conduct Engineer's construction-phase functions.

As previously discussed in the discussion of the Owner-Contractor Agreement (in C-001 Article 4), C-700 1.01.A.22 is merely a cross-reference to Article 3 of the Owner-Contractor Agreement where the Engineer is identified by name.

When the Engineer's construction-phase responsibilities will differ from those presented in C-700, such responsibilities should be appropriately revised. When more than one entity will fulfill the Engineer's role, revise C-700 (and other Contract Documents as necessary) to clearly designate which entity fulfills each responsibility, and include a Supplementary Condition at C-800 SC-1.01.A to define the second entity, potentially using terms such as "Construction Manager," "Program Manager," "Owner's Agent," or other appropriate term.

6. *C-700 1.01.A.41, Submittal*

The definition of Submittal was added to C-700 in 2018. The definition is based on current Construction Specifications Institute (CSI) terminology, and includes not only Shop Drawings but numerous other items that the Contract Documents may require the Contractor to submit to the Engineer. As is true for Shop Drawings specifically, Submittals, whether approved or not, are not Contract Documents. The definition also clarifies that various administrative items that the Contractor will submit, such as Change Proposals and Applications for Payment, are not Submittals.

Submittals are further discussed below, in the comments relating to C-700 7.16, Submittals.

7. *C-700 1.01.A.47, Underground Facilities*

This definition was re-ordered somewhat in 2018, and some additional detail was added for clarification, but the fundamental definition of what constitutes an Underground Facility remains the same.

B. *C-700 ARTICLE 2—PRELIMINARY MATTERS*

1. *C-700 2.01, Delivery of Bonds and Evidence of Insurance*

If Contractor will not be required to furnish a performance or payment bond, it may be desirable to modify C-700 2.01.A, Delivery of Performance and Payment Bonds; Evidence of Insurance, and modify or delete SC-800 6.01 Performance, Payment, and Other Bonds. Further changes may be necessary (or at least beneficial) in other locations in the General Conditions and other Contract Documents where reference is made to the surety.

Regarding C-700 2.01.B, Evidence of Contractor's Insurance, at a minimum the evidence of insurance submitted by the Contractor should include an insurance certificate and the associated endorsements. An insurance certificate, such as the common ACORD forms, may not itself be conclusive evidence of insurance, as indicated in numerous (though not all) court cases on the subject, and as often indicated on the reverse side of the ACORD insurance certificate forms. In some cases, the parties may agree to provide one another with copies of the actual insurance policies; this option is addressed at C-700 6.02.D. If other insurance information or documentation is to be provided, such requirement should be indicated at C-800 SC-2.01.

2. *C-700 2.02, Copies of Documents*

If owner will furnish other than the specified quantity of printed copies (four), make the appropriate changes at C-800 SC-2.02. Also, make changes at C-800 SC-2.02 when it is intended either to not furnish an electronic copy of the Contract Documents, or when the file format for the electronic copy is other than portable document format (“.PDF”). With respect to the latter, see the Guidance Notes and optional text regarding Requests by Contractor for Electronic Documents in other Formats, at C-800 SC-2.06.D, in the Electronic Documents Protocol, and related discussion in this Commentary.

On some projects, the Engineer’s services under the Owner-Engineer Agreement will include “conforming” the Contract Documents: putting together a comprehensive set of Contract Documents, in particular the Drawings and Specifications, that integrate all changes that have been made by Addenda (and, if applicable, in final negotiations). Such conformed documents, if prepared properly, can be very useful to Owner and Engineer in administration of the construction contract.

The drafter of the construction documents should consider whether the Contract Documents that have been conformed by the Engineer will be distributed to the Contractor, and, if so, whether the conformed documents should be considered to be “Contract Documents” for legal and contractual purposes. Because the potential exists that “conformed” documents may, via an inadvertent oversight during the conformance process, differ from the original, “pre-conformed” Contract Documents, some owners and engineers are reluctant to designate such documents as “Contract Documents.” On the other hand, the usefulness of conformed documents during the course of construction is maximized if the Contractor may rely on them as the governing Contract Documents. If the Owner intends to invest in preparation of conformed documents that may be relied upon as “Contract Documents,” incorporate appropriate provisions at C-800 SC-2.02.

3. *C-700 2.04.B, Authorized Representative*

Paragraph C-700 2.04.B requires each party to designate in writing its authorized representative. A common and practical approach is to designate the Owner’s and Contractor’s authorized representatives at the preconstruction conference. The Owner’s “authorized representative” is not intended to be the Engineer, but rather is intended to be an individual authorized to act directly on behalf of the Owner.

4. *C-700 2.03, Before Starting Construction, and C-700 2.05, Acceptance of Schedules*

The General Conditions set up a standard process for the Progress Schedule, Schedule of Submittals, and Schedule of Values: the Contractor prepares the preliminary drafts of these schedules (C-700 2.03.A, Preliminary Schedules); the schedules are discussed at the preconstruction conference (C-700 2.04.A); and the schedules are finalized and accepted by Engineer following the process set out in C-700 2.05, Acceptance of Schedules, which includes a conference (meeting) regarding the schedules and, if necessary, resubmittals.

Supplemental, detailed requirements with respect to the schedules required by C-700 2.03.A, are administrative in nature and should be covered in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, the additional, detailed requirements for the Progress Schedule will typically be located at *Section 01 32 16 Construction Progress Schedule*; requirements for the Schedule of Submittals will typically be

under *Section 01 33 00 Submittal Procedures*; and requirements for the Schedule of Values will typically be under *Section 01 29 73 Schedule of Values*.

Note that the terms “Progress Schedule,” “Schedule of Submittals,” and “Schedule of Values” are all defined in C-700 1.01.A and therefore should be indicated with initial capital letters. If the schedules called for, or the time for submitting such schedules for review, are to be changed, such requirements should be included at C-800 SC-2.03.A and C-800 SC-2.05, as appropriate. The wording of C-700 2.03.A allows time frames for submitting the initial schedules to be superseded by provisions elsewhere in the Contract Documents, such as the Division 01 Specifications, without additional changes via C-800 SC-2.03.A.

The Engineer should be aware of the differences between the Engineer's "acceptance" of the Contractor's schedules, as required under C-700 2.05, and the implications of "approving" them. Because the means, methods, techniques, procedures, and sequences of construction are solely the Contractor's responsibility (in accordance with C-700 7.01), the Engineer should not “approve” such schedules, and should recognize that an “approval” may unintentionally provide support for an argument that Owner or Engineer has undertaken a certain amount of responsibility for the Contractor's procedures and sequences of construction.

5. *C-700 2.06, Electronic Transmittals*

The majority of data and information exchanged during a contemporary construction project is transmitted by electronic or digital means. When the Bidding Documents are prepared, the Owner and Engineer should discuss the means for exchanging electronic or digital data among Project participants during the Project's construction phase, and incorporate appropriate provisions in the Contract Documents. As part of this process, applicable laws and regulations regarding electronic signatures and seals should be identified and understood by the Owner and the Engineer, and ultimately by the Contractor and its Subcontractors and Suppliers.

Protocols or procedures for transmitting electronic or digital data may be as formal as a protocol document that is part of the Contract Documents, or as informal as basic procedures agreed upon by the Project's participants and memorialized in meeting minutes.

Starting with its 2018 edition, C-700 includes provisions to both promote and regulate the exchange of electronic data during the construction phase. Two new defined terms have been added: C-700 1.01.A.20 (“Electronic Document”) and C-700 1.01.A.21 (“Electronic Means”). The latter expressly excludes informal methods of electronic communication, such as text messages and messaging via social media. C-700 2.06 confirms that the parties may transmit Electronic Documents via Electronic Means, as legitimate Project transmittals. Furthermore, C-700 18.01 allows formal, contractually required notices to be delivered via e-mail, subject to certain restrictions and requirements as set forth in C-700 18.01.

To assist the drafter of the Contract Documents in further stipulating optional, detailed requirements for electronic transmittals, C-800 SC-2.06 presents model language, and extensive guidance notes, for drafting and including an “Electronic Documents Protocol” (EDP) in the Contract's Supplementary Conditions. As noted at C-800 SC-2.06, the model EDP also includes an Exhibit A—Software Requirements for Electronic Document Exchange, which is located with other C-800 exhibits, at the end of the document as published.

An EDP provides an opportunity for improved clarity for Project participants regarding:

- acceptable types of electronic transmittals

- which entities may transmit certain types of Electronic Documents
- what recipients may do with Electronic Documents (read, store, modify, retransmit, etc.)
- required software systems (such as required use of an online document management system)
- stipulation of the required form of an Electronic Document, such as in a portable document format (PDF) file or as a certain type of executable file
- responsibility for file maintenance
- the duration that any Project electronic document system, whether a Project website or other, will be maintained and which entity is responsible for such maintenance

When CSI *MasterFormat*[™] is used for organizing the Project Manual, the EDP may be located in the Supplementary Conditions, as contemplated in C-800 (see above), or in the alternative the EDP or similar provisions may be located at Document 00 54 33, *Digital/Electronic Data Protocol Exhibit*, Document 00 54 36, *Building Information Modeling Exhibit*; and/or Specifications Section 01 31 26, *Electronic Communication Protocols*.

C. C-700 ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

1. C-700 3.01, Intent

C-700 3.01.A indicates that the Contract Documents “are complementary; what is required by one Contract Document is as binding as if required by all,” indicating that the Contract Documents are an integrated whole. Accordingly, C-700 3.01 obviates the need for any “order of precedence” provisions within the Contract Documents. An order of precedence clause establishes a ranking of the various contract components, requiring for example that in the case of conflicting provisions the terms of the Drawings will prevail over those of the Specifications (or vice versa). EJCDC generally discourages use of “order of precedence” provisions, because a rigid, predetermined order of precedence will work against the correct intent and a fair result as often as it works to their benefit. The limited exceptions to this are: 1) C-700 3.01.C, which indicates that in the event of a discrepancy between printed or electronic/digital versions of the Contract Documents, the printed version shall govern; and 2) C-700 3.03.B, which establishes that the Contract Documents drafted or furnished by the Engineer (essentially the Drawings and Specifications) take precedence over reference standards, standard specifications, manuals, and similar items whose requirements have perhaps been incorporated by reference.

Few, if any, Contract Documents are so complete that they do not require clarification for guidance of the parties that have been selected to implement the design concept and to carry out the requirements of the Contract Documents. Each Contractor brings its own experience and approach to the Work, will use its own construction equipment and methods, its own labor, and its own Subcontractors and Suppliers. No set of Contract Documents can address all of the issues or answer all the questions that may arise as a particular Contractor reviews the Contract Documents preliminary to submitting the Bid, or when the Contractor actually starts to perform the various parts of the Work. A set of Contract Documents that is so precisely and rigidly drawn as to allow no flexibility in the means and methods of construction

or the selection of items of materials and equipment would not be in the interest of any of the parties.

The Contract Documents are intended “to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents,” as indicated by C-700 3.01.B. Accordingly, any Work that may reasonably be inferred as being required to produce the intended result is to be supplied by the Contractor. However, Engineers and Owners should not rely on the language in C-700 3.01.B stating that the Contractor is to provide “a functionally complete Project (or part thereof)” as a means of curing significant omissions in the Contract Documents.

2. *C-700 3.02, Reference Standards*

In preparing the Drawings and Specifications, the Engineer will frequently make reference to standard specifications, manuals and codes of technical societies, organizations or associations, and Laws and Regulations, to amplify the description of the materials, equipment, construction systems, and other Work to be provided, but in doing so there is no intention to revise or supersede the carefully prepared terms and conditions of the Contract Documents or the relationships of the parties as expressed therein. The documents so referenced are constantly being revised by their custodian organizations, and sometimes it is uncertain to which specific edition reference has been made. C-700 3.02.A.1 states that the reference is made to the latest edition of the reference document in effect at the time the Bids are opened (or, if no Bids are taken, on the Effective Date of the Contract). Changes in such standards, codes, or the like after that date are subject to changes in the Contract Price, Contract Times, or both.

The wording of C-700 3.02.A.1, “except as may be otherwise specifically stated in the Contract Documents,” most commonly would refer to a change or supplement added in the Specifications, or less commonly in the Supplementary Conditions.

In special circumstances, the Contract Documents, particularly the Specifications, should clearly indicate which provisions of the Contract Documents are meant to be superseded by the referenced standards.

3. *C-700 3.03, Reporting and Resolving Discrepancies*

The overall intent of C-700 3.03.A is for the Contractor to perform due diligence in studying the details of the Drawings and Specifications and evaluating actual conditions at the Site before performing the associated Work. As a general matter, this requirement should promote the successful execution of the Work. In some cases, this required diligence will reveal problems that require the Engineer’s resolution; typically, it will be much more cost-effective to address such problems before significant construction labor and resources have been expended.

If special Contractor field verification requirements specific to some element of the Project are necessary, such requirements should be indicated at an appropriate location in the Specifications. Other approaches include a greater investment in pre-contract investigation by Owner (via its staff, consultants, or other specialists) or, in certain circumstances by delegation to Bidders or other prospective contractors (for example, by requiring excavation of required test pits in the Instructions to Bidders).

C-700 3.03.A requires the Contractor to evaluate the Site (via field observations and measurements) and study the Contract Documents before undertaking each part of the Work

and to immediately advise the Engineer of any conflict, error, ambiguity, or discrepancy which Contractor discovers or of which the Contractor has actual knowledge. C-700 3.03.A.1 and C-700 3.03.A.2 make the reporting of any error, ambiguity, discrepancy, etc., in the Contract Documents or relative to Site conditions a continuing obligation of the Contractor throughout the performance of the Work. However, C-700 3.03.A.3 clarifies that the Contractor is not liable to the Owner or the Engineer for failure to report an error, ambiguity, or discrepancy in the design unless it is one that Contractor has actually discovered. The ultimate responsibility for the Contract Documents lies with the Owner and Engineer, and language to the contrary, attempting to shift too much responsibility to the construction contractor, generally is considered by the courts as unfair, and may be unenforceable.

4. *C-700 3.04, Requirements of the Contract Documents*

C-700 3.04 establishes that the Engineer is the entity that renders initial interpretations regarding the requirements of the Contract Documents and the acceptability of the Work. This includes conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, such as those arising from the review and verification procedures of C-700 3.03, as well as other issues raised by either Contractor or Owner. C-700 3.04 expressly confirms that this contract procedure is one and the same with what is often commonly referred to as the RFI process (requests for information or interpretation).

C-700 3.04.B establishes that the Engineer is to respond to such requests for interpretations with reasonable promptness, and that the Engineer's interpretation rendered thereby is final and binding, unless either Owner or Contractor elects to appeal the interpretation, 1) the Contractor by submitting a Change Proposal (see C-700 11.09), or 2) the Owner by submitting a Claim for relief (see C-700 Article 12). See also C-700 10.06, establishing the Engineer's authority and status in rendering decisions. Note that the 2013 EJCDC General Conditions represented a departure from prior procedures; the new (2013) procedures have been continued in the 2018 General Conditions. As discussed below, the Contractor is allowed a full opportunity to present its position to the Engineer in what is called a Change Proposal proceeding. The less common situation of an Owner disagreement with Engineer's initial interpretation is channeled directly into the formal Claim process, a direct proceeding involving Owner and Contractor only.

C-700 3.04.C concerns situations when Owner or Contractor requests a clarification or interpretation regarding a non-technical matter that does not affect the Project's design intent or acceptability of the Work. For example, the Contractor may raise an issue regarding the insurance that Contractor is required to carry. Such issues are outside the Engineer's scope of service and therefore in such cases the Engineer would notify the parties that Engineer is unable to render an interpretation or clarification. Owner and Contractor would then attempt to resolve the matter through direct discussions, or if necessary through the formal procedures of the Claims resolution process described in C-700 Article 12.

A graphical presentation of C-700's provisions for actions relative to the interpretation and clarifications process is presented in C-001 Exhibit B, Figure 4.

Many projects include detailed administrative and procedural requirements for the RFI process. The appropriate location in the Contract Documents to indicate such requirements is the Division 01 Specifications. Under CSI MasterFormat™, such requirements will typically be under Section 01 26 00, *Contract Modification Procedures*, which includes assigned section numbers and titles specific to requests for interpretations and clarification notices.

5. *C-700 3.05, Reuse of Documents*

C-700 3.05 states that the Contractor, Subcontractors, and Suppliers do not have any rights or title to the Drawings, Specifications, or other Contract Documents, whether in printed or electronic form, and may not reuse the Contract Documents on other projects. Ownership of the Contract Documents, and the Owner's and Engineer's right to use them, are usually addressed in the professional services agreement between the Owner and Engineer; see E-500 Article 6.

D. *C-700 ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK*

1. *C-700 4.01, Commencement of Contract Times; Notice to Proceed*

C-700 4.01 provides that:

- a. the Contract Times (time limits for Contractor to attain Substantial Completion, intermediate Milestones, and readiness for final payment) will commence running not later than 30 days after the Effective Date of the Contract, or 60 days after Bid opening, whichever is earlier.
- b. by using a Notice to Proceed, the Contract Times may start running earlier than 30 days after the Effective Date of the Contract.

Given the importance to both Owner and Contractor of having complete clarity as to when the Contract Times commence, and what factors must be accounted for in arriving at the commencement point, it may be helpful for users of the C-Series documents to take a comprehensive look at the full timeline ranging from the opening of Bids to the day when the Contract Times start to run. This timeline, presented below, is derived from the application of time-related provisions in the Instructions to Bidders, Bid Form, Owner-Contractor Agreement, and Standard General Conditions.

C-700 1.02.C provides that the word "day" means a calendar day. A change to "working" day has ramifications throughout the documents. C-700 18.02 indicates that, when computing the times for certain deadlines specified in the Contract Documents, when such deadline falls on a weekend or legal holiday in the jurisdiction where the Project is located, the deadline is changed to the next business day.

The timeline below is based on a 60-day Bid acceptance period. The time that Bids are to remain open is often dictated by statute and should be verified for each Project. When statutes or other requirements dictate, such as when funding or financing entity approvals of conditioned awards are required, the various time frames in the various C-Series documents should be appropriately revised.

- a. Day 1: Bid opening.
- b. Day 6: Apparent successful Bidder submits to Owner a list of all intended Subcontractors, Suppliers, and others for acceptance by Owner and Engineer prior to Notice of Award as indicated in C-200 11.03. (As a separate requirement, C-700 7.07 requires that the Contractor identify to the Owner proposed Subcontractors and Suppliers before entering into the associated subcontracts or purchase orders, unless Owner has already deemed such Subcontractor or Supplier acceptable during the Bidding process.) Within the number of days specified in C-200 3.01 following a request by Owner, each Bidder shall

submit to the Owner written evidence of Bidder's qualifications and, when specified, Subcontractors' and Suppliers' qualifications.

- c. Day 36: Notice of Award should be given to the Successful Bidder by the 36th day after the Bid opening, to allow sufficient time to complete the two subsequent events (signing of the Contract by Contractor; signing by Owner) within the times specified, and not exceed the 60-day period for Bids to remain subject to acceptance. Notice of Award must be accompanied by the Owner-Contractor Agreement in a form ready for execution (signing by individuals with authority to bind the company) (refer to C-001 4.2, Preparation of the Agreement, and with all other Contract Documents attached.
- d. Day 51: By this date (assuming Notice of Award on Day 36; precise requirement is within 15 days of delivery of the Notice of Award), the Successful Bidder must return the signed Agreement and attached documents to the Owner (see C-200 20.01). Failure to do so will allow the Owner to declare forfeiture of the bid security under C-200 8.02 of the Instructions to Bidders.
- e. Day 61: By this date (or more precisely within 10 days of receipt of the signed Owner-Contractor Agreement and other documents from the Successful Bidder, whichever occurs first) the Owner shall sign and deliver to the Contractor one fully signed counterpart of the Agreement with all attachments (see C-200 20.01). Note that upon the Owner's execution of the Agreement the Successful Bidder becomes the Contractor. In accordance with C-200 8.03, the bid security of other Bidders that the Owner believed to have a reasonable chance of receiving the award may be retained by the Owner only until the earlier of 7 days after the Effective Date of the Contract or the 61st day after the Bid opening.
- f. Day 61: Latest day on which Contract Times may begin to run, per C-700 4.01.

The Owner may accelerate the timeline by issuing the Notice of Award sooner than Day 36; by taking less than 10 days for Owner's execution of the Contract; and by using a Notice to Proceed promptly after the Contract has been fully executed.

The time frames for the release of bid security are spelled out in C-200 8.02 and C-200 8.03 of the Instructions to Bidders. If the Successful Bidder is declared by the Owner to be in default on or prior to the 51st day, there probably will not be sufficient time to proceed through each of the required steps with the next-lowest responsive Bid from a responsible Bidder prior to the date when that Bid expires. In such a case, and in other circumstances when more than 60 days after the Bid opening is required as a consequence of delay in the Owner's award of the Contract, EJCDC recommends that the Owner obtain from the low Bidder and, as required, other Bidders that Owner believes have a reasonable chance to be awarded the Contract should the low Bidder fail to execute the Contract, a letter or other written document that extends the time in which the Bid is valid and binding. Such documents should be signed by the person from the Bidder's organization who executed the Bid Form, and should be notarized and accompanied by consent of the Bidder's surety.

Any change in this carefully integrated timetable will probably necessitate changes in all of the documents. In many publicly funded projects it is customary to give a tentative Notice of Award, and the actual award may be issued some time later. Amendments of C-700 4.01 should be accomplished in C-800 SC-4.01. Changes to the model language of the Instructions

to Bidders, Bid Form, and the Owner-Contractor Agreement should be accomplished directly in those documents.

2. *C-700 4.03, Reference Points*

C-700 4.03 requires that the Owner furnish to the Contractor reference points sufficient for the Contractor to lay out and perform the Work. Typically, an appropriate benchmark, indicating an elevation in accordance with the Project's elevation datum and, in some cases, planar coordinates, is indicated in the Contract Documents, often on the Drawings. Physically, the benchmark or reference point should be reasonably close to the area of the Work to preclude the need for extensive effort by the Contractor to establish a closer reference point for actual field use.

3. *C-700 4.04, Progress Schedule*

C-700 4.04 sets forth broad requirements, in conjunction with C-700 2.03 and C-700 2.05, for the Contractor to prepare and regularly update a Progress Schedule (defined term in C-700 1.01.A.31), and to perform the Work in accordance with the Progress Schedule. C-700 4.04 also requires that the Contractor continue to perform the Work in accordance with the accepted Progress Schedule during disputes or disagreements with the Owner and during any appeals process, except as allowed under C-700 16.04.

More detailed Progress Schedule requirements are common, and are typically specified in the Division 01 Specifications. Under CSI MasterFormat™, detailed Progress Schedule requirements are typically specified in Section 01 32 16, *Construction Progress Schedule*.

4. *C-700 4.05, Delays in Contractor's Progress*

C-700 4.05 is a very important provision that sets out the Contractor's eligibility for extensions of the Contract Times and adjustments in Contract Price in the case of delays. The language of C-700 4.05 has been prepared by EJCDC to be fair to both Owner and Contractor, and allocates risks to the party best able to control the risk of delays—in some cases by providing for a shared risk.

C-700 4.05.A indicates that if Contractor's progress is delayed by the Owner or Engineer, or others for whom Owner is responsible, then the Contractor is entitled to an equitable adjustment of both the Contract Times and the Contract Price.

At the other end of the spectrum, C-700 4.05.B indicates that delays caused by circumstances within the Contractor's control are not eligible for an extension of the Contract Times or a change in Contract Price. Among such reasons are delays, disruptions, and interferences attributable to and within the control of a Subcontractor or Supplier. While some contractors object to this latter aspect of this provision, contending that they have little or no control over Subcontractors, or, in particular, Suppliers, EJCDC has concluded that the entity best able to control the risk of properly coordinating Subcontractors, addressing and resolving issues with organized labor, and working with Suppliers to ensure the materials and equipment are delivered in a timely manner, is the Contractor. The Contractor can exert such control in the terms and conditions of the subcontracts and purchase orders, and exercise control through proactive administration of the subcontract and purchase order schedule.

Delays caused by events outside the control of either party are risks that ultimately should be shared by the parties. Accordingly, EJCDC has drafted C-700 4.05.C to allow Contractor an extension of the Contract Times, but no adjustment in Contract Price, as a means of allocating

a portion of the risk to both parties. C-700 4.05.C lists examples of delay events outside the control of either party, such as natural catastrophes and abnormal weather conditions. The 2013 edition updated the list to include earthquakes and acts of terrorism, which had not been expressly cited previously.

Because weather delays are such a common source of disputes, as of 2018 EJDC has furnished an optional Supplementary Condition, C-800 SC-4.05, that allows the drafter to establish an objective measure of what constitutes “abnormal weather conditions,” especially as to key factors such as precipitation and temperature. This new Supplementary Condition is discussed in detail in the Guidance Notes that accompany it. C-800 SC-4.05.C includes and incorporates the table identified as Exhibit B—Foreseeable Bad Weather Days (located with other exhibits at the end of C-800).

As noted in C-700 4.05.G, the consequence of delay caused by other work at or near the Site is specifically addressed at C-700 8.03. See this Commentary’s discussion of C-700 Article 8, Other Work at the Site. With respect to utility work, it is important to draw a distinction between utility work performed for Owner (the subject of C-700 8.03), and utility work conducted unilaterally by third-party utilities. The latter category is addressed in C-700 4.05.C.3, in which acts or failures to act by utility owners are listed as delays that may entitle Contractor to a time extension, but not to additional compensation.

- a. *Example 1:* During the course of the Project, an electrical utility elects to upgrade an underground transmission line that runs through the Site, delaying Contractor’s progress. As indicated in C-700 4.05.C.3, Contractor may seek a time extension, but has no contractual right to additional compensation from Owner.
- b. *Example 2:* After the Work is underway, Owner arranges to have a telecommunications utility install a high-speed data cable to provide service to the facilities to be constructed. The cable installation is repeatedly scheduled and postponed, resulting in disruption to Contractor’s Work. Under C-700 8.03.A, Contractor is entitled to an adjustment of Contract Times and or Contract Price or both.

C-700 4.05.D imposes two rules that apply to the provisions regarding time extensions and damages for delay: (1) A delay will result in a time extension only if the delay occurs on the critical path to completion; and (2) in the case of a concurrent delay (attributable in part to the Contractor, in part to the Owner), the Contractor may be entitled to additional time, but not additional compensation. The second rule has been added to C-700 as of 2018, based on the general construction industry trend for treatment of concurrent delay.

C-700 4.05.E is a new provision as of 2018. It establishes basic requirements for the Contractor’s back-up of a delay-related request for additional time or compensation.

E. C-700 ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

1. C-700 5.01, Availability of Lands

The drafter should review the definition of the Site and C-700 5.01, relating to the lands for the Work and restrictions on use, to identify matters to be addressed or supplemented on the Drawings, or in the Supplementary Conditions or the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, detailed information and

requirements on Site access and Site restrictions are typically specified under Section 01 14 00, *Work Restrictions*.

C-700 5.01.A contemplates that the Site will be available to the Contractor when the Contract Times commence running, and that there will be no encumbrances or restrictions on their use by the Contractor. A delay in making the Site available, or encumbrances or restrictions on the use of the Site, could affect the time and cost of performing the Work, and may entitle the Contractor to an adjustment in Contract Price or Contract Times or both. If there are known encumbrances or restrictions, or if a delay in being able to furnish access is anticipated, the circumstances should be described in Division 01 of the Specifications, or in C-800 SC-5.01.A. If the encumbrances or restrictions first come to light during the run-up to Bid opening, the Owner may choose to issue an Addendum, if time permits. Similarly, Owner should give the Successful Bidder (Contractor) notice of restrictions or access problems that emerge after the Bid opening, to provide an opportunity to make schedule adjustments or take other measures to mitigate the impact of the problem.

2. *C-700 5.02, Use of Site and Other Areas*

C-700 5.02.A contains an important statement of the Contractor's obligations with respect to damage to the Site and adjacent areas. Owner has furnished the Site; the Contractor controls the Site and thus is assigned full responsibility for damage to it. In addition, Contractor controls its construction activities and is assigned responsibility for damage or injuries caused by its activities on adjacent properties. C-700 5.02.A.2 requires Contractor to take corrective action; to attempt to settle claims made by neighboring landowners or occupants; and to indemnify Owner and Engineer against losses arising from such claims. C-700 5.02.A is intended to be congruent with the closely related safety duties set out in C-700 7.12.

The broad provisions of C-700 5.02.B, C, and D are frequently augmented by detailed, Project-specific information in the Drawings or the Division 01 Specifications, relating to debris removal, cleaning, and avoidance of overloading of structures.

3. *C-700 5.03, 5.04, 5.05: Subsurface and Physical Conditions; Differing Subsurface or Physical Conditions; and Underground Facilities*

One of the most common problems in construction is encountering unforeseen or unexpected conditions after the Work is started. Practices with regard to subsurface and physical conditions and Underground Facilities vary by type of construction and the Owner's preferences. The risks and costs associated with encountering an unexpected condition may be allocated in a variety of ways. C-700 addresses in detail the issues associated with underground construction, using a risk allocation approach that is consistent with typical, contemporary practices for engineered projects. Other approaches are possible, because there is no single, simple answer to this challenging contractual matter.

C-700 5.03 through C-700 5.05, and the corresponding Supplementary Conditions, collectively represent up-to-date thinking on contractually addressing the risk of differing site conditions. C-700 5.03, which is complemented by Article 5 of the Instructions to Bidders, is based on the premise that the Owner should share with prospective Bidders (and the selected Contractor) whatever information is available on subsurface conditions, and physical conditions at the Site, without a wholesale guarantee of the accuracy or completeness of such information. Part of the EJCDC philosophy is to encourage prospective contractors to take reasonable steps to determine all that they can about such conditions prior to submitting

their Bids, with the ultimate goal of a Contract Price that is realistic yet competitive and unburdened by excessive contingencies. The pre-contract obligations are limited yet serious; see the Bidder/Contractor's representations in the Bid Form and the Agreement (C-520 Article 8 and C-525 Article 12).

A discussion of the approach to differing site conditions in C-700 and C-800 may be helpful to better understanding the complex provisions on this subject.

First, a distinction is drawn between subsurface and physical conditions, Underground Facilities, and Hazardous Environmental Conditions. Subsurface conditions and physical conditions are not expressly defined. From the usage in C-700 5.03.A it is plain that physical conditions is the broader term, applying to surface and subsurface features; subsurface conditions is a subset of physical conditions. Underground Facilities is a defined term focused on underground utilities (pipelines, conduits, electrical vaults, and so on). Because of the need to protect these utilities from damage during construction, special rules apply to Underground Facilities; these rules are set out in C-700 5.05, discussed separately below. Hazardous Environmental Conditions is a defined term; see also the related defined term Constituents of Concern.

4. *Resource Documents and Technical Data*

EJCDC strongly recommends that the Owner advise Bidders (typically in the Supplementary Conditions) of the identity of all reports and drawings known to the Owner regarding subsurface conditions, environmental conditions, and physical conditions relating to surface and subsurface structures at, or adjacent to, the Site (sometimes referred to in the paragraphs that follow as resource documents). These known resource documents should include reports and drawings from the Owner's property files and facility records, as well as documents prepared or obtained during the planning, preliminary design, and final design phases of the current Project. During Bidding or contract negotiations, such documents should be made available for review under the provisions of the Instructions.

There are three categories of resource documents:

- a. Reports and drawings regarding the Site (but not relating to Hazardous Environmental Conditions) that contain "Technical Data"—data on which Contractor (Bidders) may rely. These documents, and the designated Technical Data, are to be listed in the Supplementary Conditions at C-800 SC-5.03.E and F.
- b. All reports and drawings regarding Hazardous Environmental Conditions at the Site, including those that contain Technical Data as well as those that do not. Because of the critical importance of Hazardous Environmental Conditions information (and because there will typically be only a limited quantity of such documents), all such documents are to be listed in the Supplementary Conditions at C-800 SC-5.06.A.4 and 5. If a Hazardous Environmental Conditions document contains Technical Data (entitled to reliance), such should be identified.
- c. Site-related documents that do not relate to Hazardous Environmental Conditions, and do not contain Technical Data. These documents 9often located in Owner's archives) should be made available to prospective contractors during the Bidding phase (or during negotiations or a proposal phase), for reference purposes. To separate this category from the others, as of 2018 these documents should not be listed in the Supplementary Conditions, but rather should be listed and made available when the Instructions to

Bidders are issued, or in a similar manner. To paraphrase Guidance Note 6 at C-800 SC-5.03, prospective contractors will perhaps glean information from these documents that is useful in fashioning a bid and planning the Work, but there is no requirement to review the documents, nor will either Owner or Contractor be held accountable for any data or information in such documents.

In C-700 5.03.C, the Contractor is entitled to rely on the accuracy of the expressly identified Technical Data contained in reports and drawings in the first category listed above (and a similar rule applies to Technical Data regarding Hazardous Environmental Conditions—C-800 SC-5.06B). Thus, an important drafting task is to expressly identify the reliable Technical Data in the resource documents that Owner has identified and made available via the Supplementary Conditions. C-800 SC-5.03, regarding identification of resource documents, is a mandatory Supplementary Condition for every project. This Supplementary Condition is structured to identify reports (C-800 SC-5.03.E) and drawings (C-800 SC-5.03.F), and to specify the Technical Data that Contractor may rely on (if any).

If the Owner neglects to identify which specific data in the available resource documents is reliable Technical Data, then the default definition of Technical Data (added by EJCDC in 2013) will be applicable, making “boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor,” worthy of Contractor’s reliance. The reason for this defined term is to create a default baseline condition of what constitutes Technical Data on which Bidders and the Contractor may rely. (See further discussion below.) Note that the default definition of “Technical Data” solely concerns the contents of reports of subsurface and physical conditions at the Site prepared for the current Project; therefore, the default definition does not cover older reports or drawings prepared for earlier projects.

The Contractor may not assume that the resource documents that Owner makes available are complete or sufficiently all-inclusive to provide the Contractor with all the information the Contractor needs for its construction purposes, particularly with respect to the particular means and methods and unique procedures of construction that it intends to use in the Work. Reliance on any content other than the Technical Data (either expressly identified, or as a default by definition), and any conclusion or interpretation that the Bidder or the Contractor draws from such documents or from the Technical Data is at Contractor’s own risk. See C-700 5.03.D.

Because such known resource data and documents (regardless of category) most likely will include outdated, unverified, and perhaps unreliable data, and in some cases may contain speculation or ill-founded opinions regarding subsurface conditions or construction techniques, Owners are understandably unwilling to assume responsibility for such documents as a whole, and such documents are specifically indicated as “not Contract Documents” to overcome any possible claim that by implication the totality of their contents was made available for reliance by the Contractor, when in fact it was made available in the interests of full, open disclosure, and to avoid any contention that relevant information had been withheld (see C-200 Article 5). Stating that such documents are specifically “not Contract Documents” will not, however, prejudice or defeat the Contractor’s basic right to rely on Technical Data to the extent provided in C-700 5.03.C and the definition of “Technical Data” at C-700 1.01.A.46.

Some owners may conclude that the path of least resistance is to indicate (in the Instructions to Bidders and in C-800 SC-5.03, or in C-800 SC-5.06 with respect to Hazardous Environmental Conditions) that Bidders and the Contractor may not rely on any of the contents of the available resource documents. In other cases, an owner, often with the best intentions, may withhold access to resource documents, impose unrealistic requirements for pre-bid subsurface testing, or draft harsh non-standard disclaimers of responsibility for site conditions. Attempting to allocate the full risk of unexpected site conditions to the construction contractor is typically an ineffective and unproductive course to follow. It may ultimately increase the Owner's risk by creating uncertainty and confusion during Bidding and contract administration, or provoke disputes, and may increase the cost for constructing the Project when Bidders and the Contractor base their costs on assumed, rather than known, risks. Balanced standard risk allocations and a modest investment in engineering services to identify reliable content in the resource documents will commonly serve the Project well.

It is important for the Engineer to assist the Owner in determining and establishing those portions of the resource documents that are Technical Data on which the Bidders and the Contractor will be entitled to rely as permitted by C-700 5.03.C and, relative to a Hazardous Environmental Condition, by the parallel language at C-700 5.06.B.

Examples of subsurface Technical Data that Owner might expressly identify as reliable under C-800 SC-5.03 are: the boring method, locations of borings as indicated on the Drawings, and lithologic (boring) logs; level of subsurface water; laboratory test methods and results; and similar factual data, all as of the date(s) on which the boring or excavation was made. Similar language and reasoning can be applied to identifying Technical Data relative to a Hazardous Environmental Condition, and other reports of physical conditions at the Site (for example, a report of non-destructive pipe wall thickness measurements; or report by a diving subcontractor retained by the Engineer for underwater investigations during design; or video and reports on the condition of a sewer system, such as pipeline televising and test results).

It is typical practice to give all of the content contained in drawings of physical conditions related to existing surface or subsurface structures (other than Underground Facilities) at the Site reliable Technical Data status, and the Supplementary Conditions for expressly identifying Technical Data are so drafted. The drafter should note any exceptions. See C-800 SC-5.03.F.

During the Bidding or negotiation phase, the Owner should have required prospective contractors to visit the Site to become familiar with and satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work. This should consist of an alert, heads-up, eyes-open, reasonable examination of the area and the conditions under which the Work is to be performed (see C-410 8.01). It is expected that any special requirements for such examination will be set forth in the Instructions to Bidders (see Article 5 and related Guidance Notes and Notes to User), or elsewhere if the Contract is to be awarded on the basis of negotiation rather than after receipt of Bids. The extent of such an examination will depend to a great extent on the specific nature of the Project and the Site, as well as the Owner's preference. EJDCDC believes, however, that the requirements for any such pre-bid Site examination should be realistic and clearly stated, and that detailed Site and subsurface investigations should ordinarily not be required during the Bidding or negotiating phase because of their cost, the constraints of time, Site access, and other practical considerations.

Note that C-700 5.03 and the above discussion are based on the premise that some information exists regarding subsurface conditions and/or existing physical conditions. If no such resource data exists, the Instruction to Bidders and Supplementary Conditions should so indicate. See C-800 5.03 for suggested language.

5. *C-700 5.04, Differing Subsurface or Physical Conditions*

C-700 5.04 provides the framework for responding to a differing site condition (DSC). The goal is to prescribe a logical set of administrative procedures for the parties to follow if Contractor encounters a potential differing site condition.

C-700 5.04.A states four ways in which actual encountered conditions may be regarded as a differing site condition. Item 3 (encountered condition differs materially from conditions shown or indicated in the Contract Documents) is what is commonly known in the construction industry as a Type I differing site condition. Item 4 (actual condition is of an unusual nature and differs materially from conditions ordinarily encountered and generally recognized as inherent in the Work of the character provided for in the Contract Documents) is what is commonly called a Type II differing site condition. The terms Type I and Type II originate in federal government contract law. EJCDC's Item 1 (the revealed or discovered condition is of such a nature as to indicate that the Technical Data on which reliance was permitted is materially inaccurate) is closely related to a Type I DSC, except that the point of comparison is with Technical Data (as defined and established under EJCDC's provisions—see discussion above), rather than with the Contract Documents. Finally, EJCDC's Item 2 (the condition is such that a change in the Drawings or Specifications is required) acknowledges that any encountered condition that triggers a design change is significant enough to warrant differing site condition status, even if it does not neatly fit into any of the more typical DSC categories.

If the Contractor encounters a subsurface or physical condition that Contractor believes fits into one of the four DSC categories set out in C-700 5.04.A, then the Contractor must notify the Owner and Engineer. The Work in connection with the differing condition is then to stop and the Contractor may not further disturb such condition until expressly permitted to do so.

C-700 5.04.B details the investigation that the Engineer is required to provide in response to the Contractor's notice of a differing site condition. Among the key steps in the Engineer's review are concluding whether the encountered condition falls into one of the four DSC categories in C-700 5.04.A, and gathering cost and schedule information, which will be relevant to a possible adjustment of Contract Price or Contract Times. The Engineer is also tasked with analyzing whether a change in the Drawings or Specifications will be necessary to adapt to the actual conditions as discovered or revealed, and whether Contractor may resume Work in connection with the DSC. Engineer's conclusions and recommendations are to be presented to the Owner in writing.

Under C-700 5.04.C, Owner's Statement to Contractor Regarding Site Conditions, the Owner, as the contracting party, must decide what action to take in light of Engineer's conclusions and recommendations. The Engineer's technical expertise typically carries great weight, but in most cases the technical engineering issues are intertwined with contractual, legal, schedule, and budgetary considerations that are also highly relevant. The Owner communicates its decisions to Contractor in a written statement.

Under C-700 5.04.D, Early Resumption of Work, added to C-700 in 2018, the Engineer may, at its discretion, instruct the Contractor to resume work connected to the DSC prior to completion of Engineer's review or Owner's issuance of its statement. This clause provides a mechanism for keeping the Work moving, provided that the encountered conditions have been adequately documented and analyzed, even if the full DSC procedure has not yet been completed.

C-700 5.04.E Possible Price and Times Adjustment, addresses Contract Price and Contract Times adjustments for DSCs. Note that any potential right to such an adjustment is barred if Contractor knew about the actual condition at the time it committed to the contract, or if Contractor should have discovered the actual condition during a routine site visit. Also of note is the provision that the Contract Times will be extended as a result of a DSC only if the extension is necessary for Contractor to complete the Work on schedule.

A graphical presentation of C-700's provisions for the procedures relative to differing site conditions is presented in C-001 Exhibit B, Figure 2.

The language of C-200 Article 5 is closely coordinated with that of C-700 5.03 and C-700 5.04, C-410, and C-520 Article 8 and C-525 Article 12 (Owner-Contractor Agreements.) Thus, a change in the substance of C-700 5.03 or C-700 5.04 may well require corresponding changes in the Instructions to Bidders, Bid Form, and Owner-Contractor Agreement.

6. *Geotechnical Baseline Reports, Geotechnical Data Reports, and Traditional Geotechnical Engineering/Design Reports*

The use of a Geotechnical Baseline Report/Geotechnical Data Report (GBR/GDR), and related contract provisions, is an optional means of providing geotechnical information to prospective contractors, and stipulating expected conditions for purposes of the differing site conditions clause. On suitable projects, GBR/GDR can offer price and administrative advantages. The optional GBR/GDR contract clauses are presented for users' consideration in the EJCDC Supplementary Conditions, at C-800 Exhibit C, Geotechnical Baseline Report Supplement to the Supplementary Conditions, located with the other exhibits at the end of C-800. For additional discussion on Geotechnical Baseline Reports and Geotechnical Data Reports, refer to this Commentary's discussion of C-200 Article 5.

To understand the concepts included in this portion of this Commentary, it is important to summarize the various types of geotechnical reports that may be prepared for a Project:

- a. A traditional geotechnical engineering/design report (a term that is not defined in C-Series documents; sometimes casually called "the geotech report" or "soils report"). This common type of report often includes both factual subsurface information, such as data obtained from soil borings, and geotechnical engineering opinions and recommendations. A traditional geotechnical engineering/design report is typically prepared for the Owner or Engineer during the Project's preliminary design phase, and usually contains geotechnical engineering recommendations for the design of the Project's facilities that are located in or on the ground. In addition to the technical data from testing or investigations, the geotechnical report may include interpretations of the subsurface conditions observed at the Site. A traditional geotechnical engineering/design report typically includes significant disclaimers and opinions, and under EJCDC's contract structure such a report is not part of the construction Contract Documents. Sometimes the report's author includes comments about construction

techniques, or construction cost, or productivity; these are often based on assumptions or “experience” and are not necessarily the product of rigorous research or analysis. The Instructions to Bidders, General Conditions, and Supplementary Conditions associated with geotechnical engineering/design reports require Bidders (and ultimately the Contractor) to make their own interpretations and conclusions regarding the relationship of the report’s data points to the full scope of subsurface conditions. The information provided by a traditional geotechnical engineering/design report may be helpful in pricing the subsurface work, but is typically less than prospective contractors would like to have to develop prices with minimal contingencies. It is very important to bear in mind that the traditional geotechnical engineering/design report’s primary purpose is to serve as a design tool, not to provide information to prospective contractors. For this reason, it is not deemed a Contract Document.

- b. A “Geotechnical Baseline Report” (GBR), a term that, when used, is to be defined as stated at C-800 SC-1.01.A, is a report that stipulates basis-of-pricing requirements for Bidders (relative to subsurface conditions) and is part of the Contract Documents. For example, in simple terms a GBR might indicate to prospective contractors that between Point A and Point B of a pipeline project the assumed baseline condition is sandy loam. Rather than each contractor conducting its own analysis or making its own assumptions (coupled with contingencies), the geotechnical firm conducts the analysis and the Owner takes the risk that the analysis or assumed conditions are flawed (with possible recourse against the geotechnical firm, outside the bounds of the construction contract). In contrast to a traditional geotechnical engineering/design report, the GBR is written for the prospective contractors, and is expressly intended to be relied upon by them; therefore, it is suitable for classification as a Contract Document.
- c. A “Geotechnical Data Report” (GDR), a term that, when used, is to be defined as stated at C-800 SC1.01.A, is a report containing only factual data on subsurface conditions. A GDR is typically part of or associated with a GBR. In essence, the GDR is directly comparable to identified “Technical Data,” as discussed above: it is data upon which the Contractor (or Bidders) may rely.

The expectation is that a GBR will contribute to more competitive pricing of Bids or proposals, because the GBR significantly reduces the Contractor’s risk of interpreting the conditions between soil boring locations, thus reducing the inclusion of contingencies for variations in subsurface conditions between boring locations. When a GBR is used, in the event actual conditions differ from the stipulated baseline conditions, the Contractor will be entitled to the remedies available for any other differing site condition: equitable adjustments in Contract Price, Contract Times, or both, subject to the specific provisions of C-700 / C-800 5.04.E, Possible Price and Time Adjustments.

To increase the potential for clear, consistent interpretations, it is very important that the preparer of the Bidding Documents understands, and acts appropriately on, the significant differences between a GBR, a GDR, and a traditional geotechnical engineering/design report; these very different types of geotechnical reports should not be confused, nor should their terms and uses be intermixed.

When a GBR is used on the Project:

- a. include “Geotechnical Baseline Report” and “Geotechnical Data Report” as defined terms via C-800 SC-1.01.A (model language is included in C-800);

- b. include the GBR (with the GDR) in the enumeration of the Contract Documents at Paragraph 7.01 in C-520 or Paragraph 11.01 in C-525; and
- c. replace C-700 5.03 and C-700 5.04 with provisions that account for the GBR and GDR, and retain the conventional differing site conditions clauses; model language for provisions is included in C-800 SC-5.03 and C-800 SC-5.04 (note that these versions of SC-5.03 and SC-5.04 are located in Exhibit C at the end of C-800).

For a more-detailed discussion of geotechnical baseline reports, refer to ASCE Construction Institute's (CI) booklet, *Geotechnical Baseline Reports for Construction—Suggested Guidelines* (2007).

7. C-700 5.05, *Underground Facilities*

Underground Facilities (underground utilities, conduits, wires, and other such facilities; as defined at C-700 1.01.A.47) are covered in C-700 5.05. Because of the functional and safety issues associated with Underground Facilities, it is standard practice to depict them on the Drawings.

The Contractor's responsibilities with respect to existing Underground Facilities are clearly indicated in C-700 5.05, and are based on the premise that (a) neither the Owner nor the Engineer can guarantee the accuracy of the location of Underground Facilities, due to the inherent errors in older record drawings, and (b) it is important to avoid damage to existing Underground Facilities and interruption of the services that they provide. Accordingly, the Owner will bear the risk of changes in Contract Price and changes in Contract Times related to Underground Facilities conditions found to differ from those shown on the Drawings or otherwise indicated in the Contract Documents, but the Contractor has the responsibility to determine the exact location of such Underground Facilities during construction, and to avoid damaging them.

C-700 5.05.F.4 notes the sources of the information on Underground Facilities, as shown on the Drawings. The clause expressly cites ASCE 38, *Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data*, by the American Society of Civil Engineers. This document is a recommended resource for engineers and contractors whose work includes tasks associated with Underground Facilities.

The responsibility to locate Underground Facilities is statutory in many jurisdictions, where governing authorities have often set up "call-before-you-dig" utility location data centers. Such services, coupled with modern equipment available for locating Underground Facilities, significantly facilitate the ability to locate and thereby avoid damaging Underground Facilities during the course of the Work.

A graphical presentation of C-700's provisions for decision-making relative to Underground Facilities is presented in C-001 Exhibit B, Figure 2.

8. C-700 5.06, *Hazardous Environmental Conditions at Site*

"Constituent of Concern" and "Hazardous Environmental Condition" are defined terms (C-700 1.01.A.11 and C-700 1.01.A.24) adopted by EJCDC to facilitate the use of or revisions to C-700 5.06. For additional discussion on the defined terms "Constituent of Concern" and "Hazardous Environmental Condition," see this Commentary's discussion regarding C-700 1.01.A.11 and C-700 1.01.A.24.

Some of the provisions of C-700 5.06 are analogous to the provisions of C-700 5.03 regarding existing subsurface and physical conditions at the Site, and many of the principles presented above in this Commentary's discussion on C-700 5.03 are also applicable to C-700 5.06. However, the distinctive primary purpose of C-700 5.06 is to assign responsibility for and to define actions to be taken when a Hazardous Environmental Condition is created or encountered at the Site. The Contractor is not responsible for removing or remediating a Hazardous Environmental Condition that is uncovered or revealed at the Site (unless such removal or remediation is expressly within the scope of the Work). Various provisions insulate the Contractor from involvement in hazardous clean-up work or activities that most contractors are not qualified to undertake.

Note that C-700 5.06 is not a contractual platform for an environmental remediation project. For a project whose principal purpose is environmental remediation, or that includes a significant remediation component, customized documents will be necessary.

Specific comments regarding C-700 5.06 follow.

- a. EJCDC strongly recommends that Owner advise prospective contractors (Bidders) in the Supplementary Conditions of the identity of all reports and drawings, if any, known to the Owner relating to a Hazardous Environmental Conditions at the Site. C-700 5.06.A is drafted under the assumption that Owner will make such a disclosure. See the discussion above regarding the closely related site condition disclosure provisions in C-700 5.03.
- b. In C-700 5.06.B, the Bidders and the Contractor are entitled to rely on the general accuracy of the "Technical Data" contained in the available resource documents, but may not rely on non-technical data, interpretations, or opinions contained therein. Any conclusion or interpretation drawn from such documents is at Contractor's risk. See the discussion above of the closely related limitations in C-700 5.03. As with geotechnical information, the intent is that the Owner (with Engineer's assistance) will identify the specific items in the documents that are Technical Data entitled to reliance; C-800 SC-5.06 provides the structure for making the identification. Examples of what might properly be considered Technical Data in such reports on a Hazardous Environmental Condition may include factual data such as: sampling locations, testing and analytical methods used, and the results of laboratory and analytical testing. As a default, if Owner does not identify specific Technical Data, then the definition of that term at C-700 1.01.A.46 will control.
- c. Because resource documents regarding a Hazardous Environmental Condition will most likely include opinions, recommendations, and non-factual data, the accuracy of which the Owner and the Engineer cannot assure, and on which they are unwilling to allow Bidders and the Contractor to rely, such documents are specifically not Contract Documents. The rationale for this is to overcome any possible claim that, by implication, such documents were made available for reliance by Bidders and the Contractor when, in fact, they were made available in the interests of full disclosure, and as potentially informative resources for construction purposes (see also C-200 Article 5). Stating that such resource documents are specifically not Contract Documents will not, however, prejudice or defeat a contractor's basic right to rely on Technical Data to the extent provided in C-700 5.06.B.

- d. C-700 5.06.A and C-700 5.06.B and the above discussion are based on the premise that information exists with respect to a Hazardous Environmental Condition at the Site. When no such information exists, C-800 SC-5.06 should state that none exists.
- e. As discussed above relative to C-800 SC-5.03 through C-800 SC-5.05, and in C-001 3.4.E relative to Article 5 of the Instructions to Bidders, Bidders are required to visit the Site prior to submitting a Bid and executing the Owner-Contractor Agreement. Again, the Owner should not expect a potential Bidder to perform a complete investigation of the Site under this requirement; nor should the Owner preclude such investigations. Because of the significant risks to the Owner, if the Contractor uncovers or reveals a Hazardous Environmental Condition that was not identified in the Contract Documents as being within the scope of the Work, the Owner may wish to consider having an environmental investigation prepared by properly-trained and experienced professionals prior to seeking a contract for the Work. Thus, EJCDC does not anticipate that any special requirements will be required for an environmental assessment of the Site by Bidders. In rare cases where there are special requirements for an environmental examination, said requirements should be indicated in the Instructions to Bidders (C-200 Article 5 and related Guidance Notes and Notes to User), or elsewhere in the Contract Documents if the Contract is to be awarded on the basis of negotiation rather than after receipt of Bids. The extent of such an examination will depend to a great extent on the peculiarities of the Project and the Site, as well as the Owner's preference. EJCDC recommends that the requirements for any such pre-bid Site examination should be realistic and clearly stated, and that detailed environmental investigation should ordinarily not be required during the Bidding phase because of the constraints of time and other practical considerations.
- f. In many cases, it may be necessary for the Contractor to use materials with potentially hazardous qualities during the course of construction, solvents and petroleum products, for example. C-700 5.06.D specifies that Contractor is responsible for controlling, containing, and removing such materials from the Site. C-700 5.06.D also indicates that if such materials create a Hazardous Environmental Condition (for example, a fuel spill), then Contractor is responsible for the resulting costs. In such a situation, the Owner has the right to designate another entity to remedy the condition, pursuant to the final sentence of C-700 5.06.E, at Contractor's expense. The Owner is given this control over the clean-up because of the critical importance to the Owner of ensuring that its Site is free of contamination.
- g. C-700 5.06.E provides for actions to be taken when the Contractor encounters a previously unknown Hazardous Environmental Condition, or creates a Hazardous Environmental Condition. The Contractor must immediately stop work with respect to the condition, and Owner, after investigating and obtaining qualified, expert advice (often from an expert other than the Engineer, which may lack the specialized environmental expertise needed), will determine the corrective action, if any, to be taken, and which entity will undertake such corrective action. C-700 5.06.F, C-700 5.06.G, and C-700 5.06.H address issues concerning the stoppage of Work resulting from Hazardous Environmental Conditions.
- h. Under C-700 5.06, unless the Contractor agrees, the Contractor cannot be required by the Owner either to remedy a Hazardous Environmental Condition or work in the area under special working conditions not contemplated under the Contract Documents.

Similarly, as indicated above, if the Contractor creates the Hazardous Environmental Condition, the Owner has the right to designate another party to remedy said condition. If the Owner and the Contractor agree that the Contractor will remove or clean up a Hazardous Environmental Condition, it is advisable that specific terms and conditions covering the special considerations and unique conditions involved in removing, handling, and disposing of a Constituent of Concern be included in a Change Order.

- i. A graphical presentation of C-700's provisions for actions relative to a Hazardous Environmental Condition encountered at the Site is presented in C-001 Exhibit B, Figure 3.
- j. C-700 5.06.I and C-700 5.06.J are cross-indemnification provisions. Owner indemnifies the Contractor for costs resulting from the discovery of Hazardous Environmental Conditions at the Site; and Contractor indemnifies Owner with respect to costs arising from Constituents of Concern that Contractor or its subcontractors bring to the Site, and from Hazardous Environmental Conditions created by the Contractor.
- k. The site conditions provisions of C-700 5.03 through C-700 5.05 do not apply to a Hazardous Environmental Condition.

F. *C-700 ARTICLE 6—BONDS AND INSURANCE*

1. *C-700 6.01, Performance, Payment, and Other Bonds*

A Performance Bond gives the Owner the assurance that a financially strong surety is available to step in and arrange the completion of the Contractor's obligations if necessary. A Payment Bond gives laborers, Subcontractors, and Suppliers assurance of payment, and reduces the possibility of liens against the Owner's property and funds. Various federal and state statutes that require bonds on public projects demonstrate the importance of Performance and Payment Bonds as risk management tools. Owners on private projects also commonly require Performance and Payment Bonds.

Because of the frequency of the use of bonding, C-700 6.01.A contains a standard requirement that Contractor furnish Performance and Payment Bonds. If, on a specific Project, the Contractor will not be required to furnish a Performance Bond or Payment Bond (this would be unusual on public projects; practices vary on private projects), it will be necessary to delete C-700 2.01.A and C-700 6.01.A-H via the Supplementary Conditions; in addition, other Supplementary Conditions provisions will also be necessary, as presented in this Commentary's discussion, above, regarding C-700 2.01. If these requirements are to be changed, or if the Contractor will be required to furnish bonds other than Performance and Payment Bonds, or if the time when a bond is to remain effective is to be altered, such requirements should appear in C-800 SC-6.01.

C-700 6.01.B requires Contractor to furnish any "other bonds" (bonds other than Performance and Payment Bonds) required in the Supplementary Conditions. As of 2018, EJCDC publishes a standard Warranty Bond (EJCDC® C-612). This optional bond is discussed in the Guidance Notes that accompany C-800 SC-6.01, detailing the clauses necessary to require a warranty bond, and explaining the relationship of the warranty bond to the correction period in C-700 15.08.

C-700 6.01.C indicates that the required bonds shall be in the form required by the Contract or otherwise specified by Owner. This includes not only the requirements in C-700 6.01 itself, but also specific form requirements presented elsewhere in the Contract—by including specific required bond forms in the project manual, or stating a specific form requirement. C-800 SC-6.01 includes a recommended Supplementary Condition that expressly requires use of EJCDC® C-610 Performance Bond, and EJCDC® C-615 Payment Bond. The time periods provided in bond forms other than C-610 and C-615 may differ from those required by C-700 6.01.A (i.e., bonds shall remain in effect until one year after the date when final payment becomes due, or until completion of the correction period specified in C-700 15.08). See C-001 5.2 and C-001 5.3.

C-700 6.01.C and D set out qualification requirements for sureties. These qualifications are considered by EJCDC to be fairly typical in the construction industry. When the Owner desires to augment or change such requirements, the revisions should be accomplished at C-800 SC-6.01.C.

The importance of project bonding is reflected in C-700 6.01.F, which expressly provides that if the Contractor fails to obtain a required bond, the Owner may exclude Contractor from the Site and terminate the Contract.

C-700 6.01.G requires Owner to provide a copy of the payment bond to potential claimants. Governing payment bond statutes frequently mandate this requirement. Its inclusion in the General Conditions emphasizes the duty, and eliminates the possibility of Contractor objections to the Owner giving potential claimants access to the payment bond. C-700 6.01.H provides similar language that requires the Contractor to furnish a copy of the payment bond to potential claimants upon request.

2. *C-700 and C-800 Article 6: 2018 Insurance Modifications*

In 2013 and previous editions of the C-Series documents, a substantial portion of the insurance requirements, including critical provisions such as required policy limits, was located in the Supplementary Conditions. As of 2018, EJCDC expanded that approach, by relocating additional specific insurance requirements to C-800, including the detailed specifications for the critical CGL insurance and for Builder’s Risk insurance. Provisions located in the Supplementary Conditions are somewhat easier for the user to modify, as needed for a specific Project, based on advice from Owner’s insurance advisors. It is also more practical for EJCDC to include specific guidance to the user in the Supplementary Conditions—the reader should review the greatly expanded Guidance Notes regarding insurance located in C-800, 2018 edition.

The 2018 C-700 and C-800 Article 6 also features substantive improvements in the recommended insurance requirements. Because every project has specific risk management issues, and because local insurance practices can vary from typical national standards, EJCDC urges all owners to retain insurance consultants, risk managers, or legal counsel to review the insurance clauses in C-700 and C-800 Article 6, and make appropriate revisions.

3. *C-700 6.02, Insurance—General Provisions*

C-700 6.02 presents general requirements applicable to all insurance required by the Contract, whether provided by the Owner or the Contractor.

C-700 6.02.B includes qualifications requirements for insurers. The qualifications are considered by EJCDC to be fairly typical. An optional limited exception to the stated A.M. Best

rating requirement, for worker's compensation insurance only, is presented in C-800 SC-6.02. When the Owner desires to augment or change the standard qualifications requirements, the revisions should be accomplished at C-800 SC-6.02.B.

C-700 6.02.D and C-700 6.02.E set forth the obligation of the Contractor and the Owner to deliver to each other, and to each named insured and additional insured, evidence of insurance. Such evidence is to include not less than an insurance certificate accompanied by required endorsements. Upon request, the party furnishing the insurance is required to furnish copies of complete policies to the entity (other party, named insured, or additional insured) that so requests. The common ACORD insurance certificate forms, and binder forms used by insurance agents, together with the endorsements, are a useful starting point in determining that the insurance is actually in place, but in establishing evidence of insurance some parties may wish to obtain a copy of exclusions and deductibles, or perhaps the full policy.

When it is desired to change broad, but very important, general provisions on insurance under C-700 6.02, EJCDC strongly recommends that the Owner engage qualified and experienced legal counsel and insurance advisors before such changes are made. The ramifications of such changes may be far-reaching and serious.

The Engineer often provides clerical assistance in completing the specific Contract's insurance provisions, but Owner, with assistance from insurance professionals and legal counsel, must make decisions regarding coverages, policy limits, deductibles, and all other substantive insurance provisions. Few engineers are qualified to act as insurance counselors, and providing insurance advice is excluded from coverage under many engineers' professional liability insurance policies. Particular projects may require very specialized types of coverage, such as railroad or airport protective liability coverage, or marine coverage. See EJCDC® C-051 Engineer's Letter to Owner Requesting Instructions Concerning Bonds and Insurance and EJCDC® C-052, Owner's Instructions to Engineer Concerning Bonds and Insurance.

C-700 6.02.G confirms that if the Owner wishes to maintain liability coverage to protect the Owner's interests, the Owner may do so—but such coverage does not relieve the Contractor from its contractual obligation to procure liability insurance to protect the Owner. In most instances, Owner will already have a standing liability policy in effect. Although the Owner is required to be listed as an additional insured under the Contractor's commercial general liability policy as provided in C-700 6.03, additional insured status is derivative protection that is not the same as that enjoyed under an entity's own liability policy. Broader coverage will be available if the Owner maintains protective liability coverage in the Owner's name.

Having protective insurance in place, especially commercial general liability insurance, is critically important. That point is emphasized by C-700 6.02.J, confirming that Owner may exclude Contractor from the site or terminate the Contract if Contractor has neglected to obtain the required policies.

4. *C-700 6.03, Contractor's Insurance*

a. *Required Insurance*

C-700 6.03.A makes the general statement that Contractor is required to purchase and maintain Commercial General Liability (CGL) insurance, Workers' Compensation insurance, and other insurance required in the Supplementary Conditions.

b. *Commercial General Liability Insurance*

The Contractor's commercial general liability (CGL) insurance is one of the most important risk management tools on a construction project. The Contractor is in control of the activities at the Site that most commonly give rise to liability. The CGL policy provides insurance against claims for workforce injuries (for example, an injured employee of a subcontractor), damage to neighboring property, and in certain cases claims involving defective Work. Contractors routinely carry CGL policies that apply to all projects in which they are engaged. There is a substantial degree of national standardization of CGL policies; the EJCDC requirements for CGL (see especially C-800 SC-6.03.F, G, and H) include use of a standard Insurance Services Office (ISO) form, and are consistent with the standard ISO policy provisions as of the publication of the General Conditions.

Two specific CGL requirements merit mention. (1) At C-800 SC-6.03.G.1, the Contractor's CGL policy is required to include products and completed operations coverage. This standard coverage encompasses liability arising out of the Contractor's business operations conducted away from the Contractor's premises once those operations have been completed, hence providing liability insurance applicable to the completed Project. (2) C-800 SC-6.03.G.2 requires that the CGL policy include contractual liability coverage. The primary purpose of this coverage is to back up Contractor's contractual indemnification commitment at C-700 7.18, discussed below.

c. *Other Liability Insurance to be Carried by Contractor*

In addition to requiring the Contractor to have CGL insurance, C-800 SC-6.03 establishes requirements for the following other liability insurance policies:

- 1) Workers' Compensation and Employer's Liability insurance (C-800 SC-6.03.E): The Contractor is required to carry Worker's Compensation insurance by state law. It applies to injury and death claims by Contractor's employees. Employer's Liability provides related coverage. In some cases, related federal statutes may apply.
- 2) Automobile liability insurance (C-800 SC-6.03.J).
- 3) Umbrella or excess liability insurance (C-800 SC-6.03.K). Such insurance provides supplemental coverage for underlying CGL, auto, and employer's liability policies. As of 2018, EJCDC's standard insurance requirements allow the Contractor to meet coverage limits through specified combinations of underlying and umbrella coverages, subject to stated minimum limits. C-800 SC-6.03.L.
- 4) Contractor's Pollution liability insurance (C-800 SC-6.03.M): Contractor's Pollution Liability insurance provides coverage for pollution-related third-party claims for bodily injury and/or property damage, and for remediation costs stemming from pollution incidents resulting from the Contractor's covered operations. Examples include the accidental release of fuel oil or chemicals, from mobile storage tanks or from accidental damage to pipelines. The impact of such an event can be substantial; therefore, it is important to the Project that the Contractor manage the risk through insurance. Required specific coverage limits, as directed by the Owner, are to be indicated in the Supplementary Conditions, which include model language. When Contractor's pollution liability coverage is not required, delete pollution liability requirements via the Supplementary Conditions or otherwise.

- 5) Contractor's Professional Liability Insurance (PLI) (C-800 SC-6.03.N): C-800 SC-6.03.N requires the Contractor to furnish professional liability coverage when the Contractor, including any Subcontractor, Supplier, or other entity employed on the Work, will furnish professional services, including (but not necessarily limited to) delegated professional design (refer to C-700 7.19, and this Commentary's discussion regarding C-700 7.19). Note: As discussed at Guidance Note 3 accompanying C-800 SC-6.03, Contractor's Pollution Liability and Contractor's Professional Liability policies can sometimes be purchased as a combined policy. If Owner elects to allow this, so indicate in C-800 SC-6.03.M or N.

Based on industry trends, EJCDC's standard Contractor's PLI clause is a simple requirement that Contractor obtain this widely used insurance. It protects both Owner and Contractor by covering possible gaps in coverage created by the professional services exclusion in commercial general liability policies, as contractors are increasingly providing incidental and even primary services that could be construed as professional in nature. Previously EJCDC allowed the Contractor to satisfy the requirement by having a subcontractor furnish the PLI; that accommodation has been removed as of 2018.

- 6) Railroad Protective Liability Insurance (C-800 SC-6.03.O). The requirements for this insurance apply only if a portion of the Work will take place near railroad property. See Guidance Note 4 accompanying C-800 SC-6.03 for additional comments.
- 7) Unmanned Aerial Vehicle Liability Insurance (C-800 SC-6.03.P). This coverage is recommended based on the increasing frequency of use of drones in construction. Include if potentially applicable.

General Considerations Regarding Contractor-Furnished Liability Insurance

d. *General Comments: Liability Insurance*

General provisions regarding the Contractor's liability insurance are indicated in C-700 6.03.B. As previously indicated, more detailed requirements are now located in the Supplementary Conditions, at C-800 SC-6.03.

Contractor's liability insurance is to include the specific coverages and be written for not less than the limits of liability (including any aggregate limits) specified in the Supplementary Conditions or required by Laws or Regulations, whichever is greater. C-700 6.03.A and 6.03.B.2. Thus, C-800 SC-6.03 is essential to make the insurance requirements operative, and is one of the mandatory SCs. References to a "combined single limit" for bodily injury and property damage, as opposed to individual limits, will normally allow the insurance agent to negotiate the most advantageous arrangement for the insureds, and either alternative should be acceptable, although the coverages provided may not be identical. Other variations are also available.

Under various provisions of C-800 SC-6.03, specific ISO endorsement forms are indicated. When the Project's insurance requirements are prepared, the suitability, validity, and commercial availability of the specific endorsements indicated in C-800 should be verified and, where necessary, revised.

e. *Additional Insureds on Contractor-Furnished Liability Insurance*

C-700 6.03.C requires that the Owner, Engineer, and other entities so indicated in the Supplementary Conditions are to be “additional insureds” on the Contractor’s commercial general liability and automobile liability insurance policies. Additional insured status is a basic risk management provision that provides a degree of protection for the entities that are additional insureds, and typically the cost of covering additional insureds is built into the Contractor’s annual premium and costs the Owner (via the Contractor’s Bid or pricing negotiated with the Owner) little or nothing. Owner, Engineer, and other additional insureds should understand that while additional insured status is beneficial, it typically has substantial limitations and broad exceptions, and is not a substitute for maintaining primary liability policies (for example, in Engineer’s case maintaining professional liability insurance).

Specific standard endorsements by the Insurance Services Office (ISO) regarding additional insureds under the Contractor’s commercial general liability insurance are required at C-800 SC-6.03.G.6 and 7, C-800 SC-6.03.H.3, and C-800 SC-6.03.O. Regarding the specific ISO endorsements, C-800 SC-6.03.G.6 includes the following: “If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.” Commercial unavailability in insurance can often be demonstrated by evidence of three declinations to offer the product from insurers that are actively writing the class business.

While the Owner and Engineer are specifically identified by name in the Owner-Contractor Agreement and are to be additional insureds on the Contractor’s commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies as indicated in C-700 6.03.C, the other entities (if any) to be “additional insureds” are to be indicated in the Supplementary Conditions by their specific legal/contractual name instead of by generic category (such as “Engineer’s consultants”). The listing of other additional insureds required by C-700 6.03.C (to be indicated at C-800 SC-6.03.D) is separate from the list of named insureds required by C-800 SC-6.04.F.10 for property insurance (Builder’s Risk); each clause has its own separate function and legal consequences. While there may be many common names on each list (e.g., additional insureds for liability insurance and named insureds for property insurance), EJCDC considers separate listings to be good practice. Careful attention to the listings and understanding of the consequences of failing to include a person or entity on the listings is very important and is often considered by many entities to be an essential risk management provision.

The drafter of the Supplementary Conditions should note that when the Contractor is required to furnish professional liability insurance, such insurance excludes naming other entities, such as the Owner, Engineer, or others, as additional insureds.

f. *Useful Related Documents*

EJCDC® C-051, Engineer’s Letter to Owner Requesting Instructions Concerning Bonds and Insurance, is model language for a letter from the Engineer to the Owner requesting instructions regarding insurance coverage types and amounts of insurance to be furnished by the Owner and the Contractor. This document, coupled with EJCDC® C-052, Owner’s Instructions to Engineer Concerning Bonds and Insurance, may prove to be a helpful reference for the Owner and the Owner’s insurance counselor. For additional information on the use of these documents, see C-001 2.3 and C-001 2.4.

g. *Required Duration of Contractor-Furnished Liability Insurance Coverages*

C-700 6.03.B.3 requires that, unless a longer duration is otherwise expressly indicated, all Contractor-furnished liability insurance provided under C-700 6.03 remain in effect at least until final payment, and at all times thereafter when the Contractor is at the Site to correct defective Work or perform warranty obligations.

The products and completed operations coverages under the Contractor's commercial general liability insurance are to remain in effect for three years after final payment is made, in accordance with C-800 SC-6.03.G.1.a.

Under C-800 SC-6.03.M, Contractor-furnished pollution liability insurance is to remain in effect for not less than three years after final completion.

Under C-800 SC-6.03.N, Contractor-furnished professional liability insurance is to be maintained, and remain in effect, throughout the duration of the Contract and for not less than two years after Substantial Completion.

5. *C-700 6.04, Builder's Risk and Other Property Insurance*

a. *Basic Introduction to Property Insurance*

Property insurance provides protection against many risks to property, such as fire, theft, and certain weather-related damage. Property insurance is a broad term that includes specialized forms of insurance such as fire insurance, flood insurance, earthquake insurance, home insurance, and/or boiler insurance. Relative to construction, there are two principal forms of property insurance: builder's risk and installation floaters. The discussion in the sections that follow will focus on builder's risk insurance.

- 1) Builder's risk insurance is a type of property insurance that provides coverage against damage to buildings and structures as they are being constructed. Builder's risk insurance protects an organization's insurable interest in materials, fixtures, and equipment being installed in the construction or renovation of a building or structure, if such items sustain physical loss or damage from a covered cause. Buildings and structures are subject to many different risks while under construction: fire, damage by high winds, and other force majeure events. The Contractor, Subcontractors, and the Owner are the parties that have clear insurable interests in the Work in progress.
- 2) An installation floater is coverage on moving or movable property (usually covering only materials and equipment, not buildings or structures) that is being installed by a contractor. An installation floater is essentially a specialized and limited type of builder's risk coverage that is often written on forms similar to those used to provide builder's risk coverage. C800SC6.04 presents the option of requiring an installation floater instead of builder's risk insurance—see Paragraph 5.d in this section.

b. *Direction and Decisions by Owner*

What has been written above regarding the necessity of the Owner, during the design phase, obtaining the advice of a competent insurance advisor also applies to property insurance, and the comments, above, concerning the risks to the Engineer of professing, whether knowingly or unknowingly, insurance expertise or providing insurance advice are as applicable to matters of property insurance as they are to liability insurance. Accordingly, the Engineer's

request to the Owner for instructions concerning required liability insurance coverages should also elicit the necessary direction from the Owner regarding the Project's required property insurance, if any. Once obtained, that information should be set forth in C-800 SC-6.04.

c. *Builder's Risk Insurance Provider for the Work*

In the common situation in which builder's risk insurance is used to insure the work in progress, the following considerations may be useful to the Owner in determining whether the Contract for a specific Project should require the Owner or the Contractor to purchase and furnish the builder's risk. All parties should bear in mind that if the EJDC standard requirements of C-700 6.04.A are followed, the Owner, the Contractor, and the Subcontractors all will have adequate standing as insureds to protect their respective property interests in the Work, regardless of whether the Owner or the Contractor purchases the builder's risk insurance. Thus, the focus should be on assuring that a proper builder's risk policy is purchased, rather than on who purchases the policy.

It is common for owners (especially public owners) to require that the Contractor furnish builder's risk insurance for the Work; accordingly, EJDC has written C-700 6.04 for Contractor-furnished builder's risk insurance. EJDC acknowledges that is by no means uncommon for a project owner to prefer to take on the duty of purchasing and furnishing the builder's risk insurance, and for that reason EJDC has drafted the builder's risk provisions to make it simple for users to flip the contractual purchase responsibility from Contractor to Owner; see suggested language for C-800 SC-6.04.A.

Insurance companies issuing builder's risk policies typically settle claims by working directly with the named insured that purchased the policy. See C-700 6.06.A. Since the majority of losses during construction affect the Contractor and its Subcontractors to a greater degree than the Owner, one advantage of Contractor-purchased builder's risk is that in the event of an insured property loss and claim, the Owner will not have to serve as an intermediary between the insurance company and the Contractor. Complicating the analysis is the point that the Owner takes title to work that is completed and paid for; yet Contractor remains responsible for completing the Work. Looking at the situation from a broad perspective, both Owner and Contractor have a substantial interest in having an effective property insurance tool in place from the start of the Work to completion.

Another factor to consider is that contractors often have considerable experience in obtaining builder's risk insurance, including the negotiation of premium costs and policy terms and exclusions, and may be in a better position than the project owner to ensure the appropriate underwriting of risks. Many contractors have ongoing relationships with builder's risk insurers and may be in a position to obtain favorable premium prices because of the volume of insurance purchased. Conversely, some owners have numerous construction projects and highly experienced staff, and thus can develop a level of familiarity with builder's risk insurers, underwriting, and claims. Such owners may prefer to maintain control over the purchase of builder's risk insurance rather than delegating to the Contractor.

When the Project entails a modification or rehabilitation of an existing facility, the balance may shift toward the Owner furnishing the builder's risk insurance. Among other considerations, in the event of a loss and property insurance claim the Owner can begin immediately to move forward and restore the facility to an operational status without having to work through the Contractor as an intermediary between Owner and the Contractor's builder's risk insurer. In some cases it may be possible to obtain a builder's risk policy from

the same property insurance company that insures the Owner's current facilities on an ongoing basis; this can further streamline the processing of claims, and reduce the possibility of coverage gaps.

If there are several prime Contractors involved in the Project and Owner is not purchasing the builder's risk, the Supplementary Conditions must clearly indicate which of the several prime Contractors is to purchase and maintain the property insurance. The Supplementary Conditions should also expressly state that the interests of each other prime Contractor and its subcontractors are to be included. Under certain circumstances, builder's risk on the "all-risk" form of insurance may not be available for this sort of an arrangement. An alternative, possibly costlier overall, would be for each prime Contractor to provide property insurance for the full replacement cost of its part of the Project.

d. Installation Floaters and Other Approaches to Property Insurance

Note that if Owner opts during the drafting phase for an alternative to builder's risk insurance, such as Contractor-furnished installation floater property insurance, or no property insurance, then the Supplementary Conditions should delete C-700 6.04 and replace it with the applicable language.

Contract language for requiring an installation floater policy is presented in C-800 SC-6.04, together with an accompanying Guidance Note.

For some linear construction projects, such as buried utility lines and roadway work, or projects that are entirely site work, obtaining builder's risk insurance may be problematic or unnecessary if there is a no building or structure involved in the Work. For example, if a pipeline is covered as soon as a section of pipe is installed, there is little chance of a traditional property insurance loss (such as damage from a fire) to the installed work. An installation floater may be the ideal risk management tool on such projects. The property insurance emphasis on such projects is on losses to the material or equipment to be installed, while in transit or at the Site. As suggested by the Contractor-purchase requirement at C-800 SC-6.04.A.1.a thru d of this alternative C-800 SC-6.04.A, installation floaters are purchased by the Contractor, not the Owner.

If the Project involves renovations or additions to an existing building, it may be possible to obtain an endorsement to the Owner's existing property insurance to cover the Work under construction, obviating the need for a separate builder's risk insurance policy. However, such endorsements require additional premium payments, may not have the same range of coverage as builder's risk, and do not necessarily result in cost savings.

e. General Discussion of EJCDC Property Insurance Provisions

Unlike commercial general liability insurance, for which there is essentially one basic and truly "standard" policy, there are many different policy forms, and custom policies, for builder's risk property insurance. Thus, a task for all interested parties is to ascertain whether a furnished policy meets the Contract's requirements. Note that under C-700 2.01.B and C and C-700 6.02.D and E, the Owner and Contractor are required to exchange information about the insurance that is obtained.

If the Owner will furnish the property insurance, under the EJCDC insurance provisions Owner will need to comply with the same requirements that Contractor would have been subject to—most notably the policy specifications in C-800 6.04.A. This is sometimes modified to allow Owner to provide whatever builder's risk it elects to purchase. In such cases, it is good

practice for Owner to keep Contractor well informed of the contents of the selected policy, giving Contractor the option of purchasing supplemental coverage to protect its interests, if necessary.

The amount of property insurance is established at C-700 6.04.A as the completed value basis of the full replacement cost of the Work (subject to deductibles); such amount is not necessarily the same as the Contract Price.

Builder's risk property insurance can be obtained on either a "completed value" or "reporting" form. C-700 6.04.A requires the completed value basis.

Although the "all-risk" policy form is required under C-700 6.04.B and C-800 SC-6.04.F.1, despite the name such policies do not extend to all types of risks. The text of C-800 SC-6.04.F.1 gives details on the types of losses that the policy must cover. If there are other special perils to be covered, these should be listed here as well.

The costs for builder's risk and any supplemental coverages and policies are ultimately paid by the Owner (whether directly or via the Contractor's Contract Price). The Owner's insurance and risk management advisors should evaluate each Project's features and perils and determine whether any of the standard covered losses are irrelevant to the specific Project but would entail additional premium expense. If so, C-800 SC-6.04.F.1 could be amended by deleting such potential losses from the requirements.

C-800 SC-6.04.F.1 provides that the builder's risk insurance cover mechanical breakdown, boiler explosion, and damage from artificially generated electrical currents. Such coverages are not included in some builder's risk form policies. If the coverage cannot be obtained by an endorsement to the builder's risk, the standard provision allows the purchaser to meet the requirement through purchase of a separate policy for such losses. Other losses that the standard provisions require to be covered, but that bear review and analysis in specific cases, include earthquake, volcanic activity, other earth movements, and flood.

In most builder's risk policies, coverage for defective workmanship and design is excluded. However, despite these exclusions, it is generally possible to obtain coverage for losses that flow from such defective work or design ("ensuing losses"); this coverage is required in C-800 SC-6.04.F.1.a. This usually does not provide coverage for the cost of correcting the faulty Work or the design error themselves.

Another builder's risk option is to require coverage for Owner's loss of revenue and soft costs resulting from delays associated with a covered property loss. See C-800 SC-6.04.G, and accompanying Guidance Note.

The user is advised to refer to the various C-800 SC-6.04 provisions of EJCDC® C-800 for additional, important information regarding drafting of property insurance provisions.

f. *Other Property Insurance*

C-700 6.04.B requires the Owner to provide property insurance for any existing structure or facility in which any part of the Work will take place. This insurance is in addition to, not a substitute for, the builder's risk insurance.

Builder's risk insurance insures the Work. As a general matter it does not cover all other property that might be adversely affected during a construction project. C-700 6.04.E states that the entity that owns such other property is responsible for insuring it.

C-700 6.04.C requires the Owner to obtain property insurance on the substantially completed Work. This transition is discussed in the following section.

g. *Duration of Property Insurance; Partial Utilization*

Traditionally, the Owner assumes responsibility for property insurance, using a conventional premises policy rather than a builder's risk policy, upon taking occupancy of the entire Work or some portion thereof; in other words, upon Substantial Completion. Consistent with this, C-800 SC-6.04.F.9 requires that the builder's risk insurance "be maintained in effect until the Work is complete [final completion]...or until confirmation of Owner's procurement of property insurance following Substantial Completion, whichever comes first." It is important to achieve a definite, seamless transition of coverage to avoid disputes regarding coverage, and the possibility that a property loss event is uninsured. The provisions of C-700 15.03.D are relevant:

"...Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work."

The transition becomes more complicated when partial use or occupancy occurs; this is addressed at C-700 6.04.D, and C-700 15.04.A.4 ("No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance"). Where it is anticipated that the Owner will require temporary access to some parts of the Work prior to Substantial Completion for some special purpose (such as placing a part of the Work in operation before reaching Substantial Completion of the entire Work), it would be prudent for the insurance advisors to determine whether specific endorsements are needed on the applicable property insurance policies (which may not permit split coverage without an express provision to that effect), so that the interests of all parties are protected.

h. *Deductibles*

Property insurance policies are subject to deductibles. The standard EJCDC provision provides that the purchaser of the builder's risk insurance be responsible for costs within the deductible (in effect for paying the deductible). See C-800 SC-6.04.H and its accompanying Guidance Note. The potential consequences to the Owner and the Contractor of deductible provisions should be evaluated by the Owner's insurance counsel, and requirements on maximum allowable deductibles should be indicated at C-800 SC-6.04.H.1. Because this number is a maximum, the party purchasing the insurance (and thus responsible for losses within the deductible) is free to obtain a policy with a lower deductible, at the cost to purchaser of a higher premium. Also consider the effect of such decisions when evaluating potential changes to C-700 13.01.B.5.f.

i. *Insureds under the Project's Property Insurance Policy*

C-800 SC-6.04.F.10 requires that the Owner, Contractor, and Subcontractors be named insureds on the Project's property insurance. These entities all have insurable interests in the

work in progress. Unlike the 2007 Edition (and earlier editions) of C-700, the Engineer and Engineer's consultants are not required to be covered under the property insurance (builder's risk) policy, because these entities rarely have an insurable interest in the property at the Site, and have other means of managing the risk of the consequences to them of damage to the Work. As a matter of risk allocation policy EJCDC also no longer includes Suppliers in the ambit of builder's risk protection. If in a particular case the insurance advisors conclude that entities other than the Owner, Contractor, and Subcontractors will have an insurable interest in the property at the Site, and merit protection under the builder's risk policy, they should be indicated (by legal/contractual name and address) as insureds at C-800 SC-6.04.F.10.

A listing of supplemental required insureds under C-800 SC-6.04.F.10 is to be separate from and not confused with the listings of additional insureds for the various forms of liability insurance required under C-800 SC-6.03.D.

Even if the Engineer (or for that matter Owner or Contractor) is an insured under the builder's risk policy, such listing should not be considered as a substitute for carrying adequate property insurance on its own property at the Site, such as vehicles, tools, and computers.

Perhaps the most significant protection typically expected by the Engineer and its consultants relative to property insurance is afforded by the waiver of the insurer's right to subrogate (C-700 6.05). This waiver protects the named entities (which includes the Owner, Contractor, Subcontractors, Engineer, and Engineer's consultants) and is independent of the benefits afforded by being an insured under the builder's risk policy.

6. *C-700 6.05, Property Losses; Subrogation*

a. *The Concept of Subrogation*

When an insurance carrier pays a claim for a loss to an insured, and that loss was caused by an entity other than the insured, the insurer may wish to obtain damages from the responsible party. Typically, the insurer will not have any direct rights against the responsible party. However, the insurer can pursue such a claim if it is subrogated to the rights of the insured—the party that suffered the loss. “Subrogated to the rights of” means that the insurer “stands in the shoes” of the insured and has the right to bring suit against the party that caused the loss, to the same extent that the insured could have pursued the claim. Most insurance policies grant the insurance company the right of subrogation. Thus, if an insured incurs losses due to a fire, the property insurer pays the insured for its losses, and if the fire can be traced to activities by an adjacent property owner, the insurer is subrogated to the rights of its insured, and can pursue a claim against the neighboring landowner to the same extent that the insured could have pursued such a claim. In some cases, subrogation is not an issue, because there is no responsible third party to pursue—for example, property losses caused by a tornado.

When a true third party, such as a neighboring landowner or the manufacturer of a defective switch that causes a fire, causes an insured property loss, there are no adverse results if the insurance company pursues a subrogation claim against that third party. However, if the responsible party is one of the project participants, a subrogated attack on that party could result in cross-claims, counterclaims, acrimonious relations, and project delays. Accordingly, many standard contract documents require that the insurer waive subrogation rights as to specified project participants. When contractually required to do so, most insurers will agree to waive their subrogation rights. Because such waivers are the norm in construction-related

builder's risk policies, in setting their premiums the insurance carriers account for the lack of rights against project participants.

Waiving of subrogation rights by the insurer is a very important risk management provision that affords significant and proper protections to the entities included in the waiver. To verify that subrogation rights have been waived for the required entities, the insureds should require an appropriate endorsement from the insurance carrier.

b. *EJCDC's Waiver of Subrogation Rights*

It is the intent of C-700 6.05 to preclude subrogation and suit by the builder's risk (property) insurer against the Owner, Contractor, Subcontractors, Engineer, and Engineer's consultants (and any other parties indicated in the Supplementary Conditions as an insured under the property insurance policy). Each of these entities are involved in one way or another in the Work and property loss claims among them should be discouraged, if for no other reason than the difficulty of identifying responsibility for errors that result in a loss. In effect, the insurance company takes on the risk of these losses (just as it takes on the risk of losses from high winds), in exchange for a fair premium.

The builder's risk subrogation waiver is accomplished through an express provision regarding the content of the policy (first sentence of C-700 6.05.A) and by a waiver of rights by and between the involved project parties (accomplished in part in C-700 6.05.A.1). Lower tier contracts such as subcontracts and subconsultant agreements should contain similar waivers as to insurable property loss matters. In some cases, lower-tier project participants may need to sign formal written waivers.

Some insurance policies do not permit any waiver of rights, and others permit it only by special endorsement to the insurer's prescribed form. Some builder's risk property insurers take an aggressive position against waivers (or against the application of waivers beyond Owner and Contractor). Barring a revision of Article 6, such insurers presumably will not provide builder's risk insurance to the Project.

As a parallel to the builder's risk waivers, under C-700 6.05.B, the Owner commits to a waiver of subrogation in any property insurance policies on Owner's existing structures, and on the completed facilities; and in C-700 6.05.B.1 the Owner waives cross-claims against the Contractor, Subcontractors, and Engineer. (Contractor, Subcontractors, and Engineer have no property interest in the existing structures or the completed facilities, hence this latter waiver does not need to be mutual.

C-700 6.05.C indicates that the contractual waivers in C-700 6.05 include the waiver business interruption, loss of use, and consequential loss claims stemming from property loss perils. The Owner may wish to protect its interests with respect to such losses through appropriate business loss insurance.

7. *C-700 6.06, Receipt and Application of Property Insurance Proceeds*

This paragraph of the General Conditions describes the procedures that will occur if there is an insured loss under the builder's risk insurance. The named insured that purchased the policy is ordinarily the primary point of contact for the claim, and will take receipt of insurance proceeds prior to distribution to other insureds, as appropriate. C-700 6.06.C states that the presumed case is that the Contractor will repair or replace the damaged Work, using allocated insurance proceeds.

G. C-700 ARTICLE 7—CONTRACTOR’S RESPONSIBILITIES

1. C-700 7.01, *Contractor’s Means and Methods of Construction*

C-700 7.01.A contains the important statement that Contractor is solely responsible for the means, methods, techniques, sequences, and procedures of construction. This is a core principle of construction contract law. The statement is a contractual acknowledgement that the Contractor is the party with the experience, skills, resources, training and expertise necessary to build the facilities depicted in the Contract Documents. The clause protects Contractor from undue meddling in its operations during construction, and insulates the Owner and Engineer from responsibility for the details of the construction process. This is important not only with respect to the responsibility for the satisfactory completion of the Work, which is the focus of C-700 7.01.A, but also as to jobsite safety, which is a subset of the Contractor’s means and methods of construction. See C-700 7.13, Safety and Protection.

On a typical project, some elements of the Contract Documents could be categorized (incorrectly) as means, methods, techniques, sequences, or procedures of construction. For example, the Specifications might indicate that certain construction materials be checked for flaws or damage prior to final installation; that could be construed as means or methods of construction. Or, the Drawings might prescribe a sequence of removal and rerouting of existing utilities; this could be categorized as sequences or procedures of construction. The existence of such design elements does not undermine the contractual force of C-700 7.01.A. The correct perspective is that in general the Owner (and in turn the design professional) takes responsibility for the contents of the Contract Documents, whatever that may be (performance specifications, prescriptive specifications, detailed design, etc.), under the Spearin Doctrine, and the Contractor takes responsibility for all means, methods, techniques, sequences, and procedures of construction “necessary to perform the Work in accordance with the Contract Documents.” What is in the Contract Documents is design; what follows is construction means, methods, techniques, sequences and procedures.

To carry out the means and methods of construction, the Contractor may need to engage the services of a design professional. For example, a Contractor may need the assistance of an engineer in designing temporary scaffolding. C-700 7.01.B requires that such professional services be performed by a duly licensed professional. The clause also clarifies that Owner and Engineer are not responsible for Contractor’s decision to engage (or not engage) a design professional to assist with means and methods, for the qualifications of such a design professional, or for any errors by the design professional.

2. C-700 7.02, *Supervision and Superintendence*

C-700 7.02.A assigns the duty to superintend the construction to Contractor. C-700 7.02.B establishes limited requirements for the Contractor’s on-site superintendent: the superintendent must be competent, and may not be replaced without prior written notice to the Owner and Engineer. Incorporating extensive qualifications for the superintendent, or exerting substantial control over the acceptability of the Contractor’s superintendent, could unintentionally result in shifting some responsibility for the competency and performance of the Contractor’s superintendent from Contractor to Owner.

3. C-700 7.03, *Labor; Working Hours*

C-700 7.03.A requires the Contractor to furnish “competent, suitably qualified” workers. For the same reasons discussed immediately above (at C-700 7.02) regarding the Owner or

Engineer exerting control over the qualifications of the Contractor's superintendent, similar cautionary concern extends to provisions in some contracts—not C-700—that allow the Owner to require removal of the Contractor's employees judged incompetent by the Owner or Engineer. EJCDC believes that the overriding requirement for “competent, suitably qualified” workers is sufficient.

C-700 7.03.B has been relocated from a later section concerning Subcontractors, and the emphasis of the paragraph has been refined to confirm the Contractor's responsibility for the actions not only of Subcontractors and Suppliers (as entities), but also of their employees; and for the actions of Contractor's own employees.

C-700 7.03.C establishes a general baseline for Work at the Site—regular working hours, Monday through Friday, and no work on weekends or holidays. C-800 SC-7.03 provides an opportunity to provide more detail regarding work hours, and to either expand or reduce the hours and days that Contractor may work. C-800 SC-7.03.D also presents model language regarding responsibility for payment of overtime costs for personnel employed by Owner or Engineer in observing the Work or otherwise employed at the Site.

4. *C-700 7.04, Services, Materials, and Equipment*

C-700 7.04.A states the Contractor's overall responsibility to perform all services and furnish material required to complete the Work in accordance with the Contract Documents; the provision explicitly includes items such as transportation, temporary utilities and temporary facilities, tools, and fuel. This provision is, of necessity, broad and general because such requirements will vary significantly from project to project. Project-specific expansions of C-700 7.04.A should generally be located in the Division 01 Specifications.

C-700 7.04.B requires that, unless otherwise provided in the Contract Documents, all materials and equipment incorporated into the Work will be “new and of good quality.” The general provision does not include additional statements such as “of best quality” or similar requirements. All detailed requirements regarding the quality of the materials, equipment, and the Work overall should be set forth in the Specifications.

If there is to be any variation in or supplement to the requirements of C-700 7.04.A or C-700 7.04.B, it will probably be Work-related and thus should be covered in the Specifications. The words, “except as otherwise provided in the Contract Documents,” or similar, are primarily intended to refer to information shown on the Drawings or requirements in the Specifications.

Reference is made in C-700 7.04.C to the need to follow the Supplier's instructions regarding storage and installation of materials and equipment. Any Project-specific requirements that are more stringent or detailed than the Supplier's instructions should be clearly indicated in the appropriate Specifications sections.

5. *C-700 7.05, “Or-Equals,” and C-700 7.06, Substitutes*

In the C-Series Documents, an “or-equal” is an item of material or equipment that is not specified in the Contract Documents but rather is the equivalent—as deemed by the Engineer—to that which is specified. In contrast, a substitute is an item of material or equipment proposed by the Contractor that is different from that which is specified in the Contract Documents. On some projects, the Contractor will only be allowed to propose “or-equal” items, and the more-complex procedures for substitutions will be eliminated. Such a change should be accomplished in C-800 SC-7.06.

A key contractual distinction between “or equals” and substitutes is that neither approval nor denial of an “or equal” request will change the Contract Price or Contract Times (C-700 7.05.A.1.b.1; C-700 7.05.D), whereas an approved substitute commonly results in a change of Contract Price (C-700 7.06.A.3.d; C-700 7.06.F), as either a higher quality or lesser quality item is allowed, and may affect Contract Times (C-700 7.06.A.3.b.1).

C-700 7.05 and C-700 7.06 indicate that the Engineer is the sole judge of the acceptability of proposed “or-equals” and substitutes; this is because acceptance by others, such as the Owner, of proposed “or-equals” and substitutes has the potential to affect the Project design intent as expressed in the Contract Documents. Because this could impact the technical integrity and functionality of the completed Project, and potentially the public welfare, for which Engineer has professional responsibility, the primary task of evaluating and determining the acceptability of proposed “or-equals” and substitutes resides with the Engineer. It is, however, good practice for the Engineer to discuss the preliminary results of such evaluations with the Owner to obtain the Owner’s input, before the decision on acceptability is finalized; and ultimately the Owner must be involved in the case of approved substitutes that affect the Contract Price or Contract Times and will require a Change Order.

Should the preparer of a given Specification section desire to disallow “or-equals” or substitutes for certain materials or equipment under that section, words such as “Or-equals and substitutions are not allowed,” or similar phrasing, should be specified at the appropriate location in that section.

C-700 7.05.D indicates that the cost of the Engineer’s substitution review is the responsibility of the Contractor, regardless of whether the proposed substitute is approved; this provision coordinates with EJCDC’s primary Owner-Engineer agreement forms (EJCDC®E-500, Agreement between Owner and Engineer for Professional Services, and EJCDC®E-505, Agreement between Owner and Engineer for Professional Services—Task Order Edition) which give the Engineer responsibility for evaluating substitution requests, but indicate that the Owner will compensate the Engineer separately for the Engineer’s services for such reviews. Thus, the Engineer is to separately record the Engineer’s time and cost for each such review and present such costs to the Owner as part of an engineering contract amendment, and the Owner may recover such costs from the Contractor via a Change Order or otherwise.

While “or-equals” that are acceptable are indicated via the Engineer’s approval of the associated Contractor request, approval of a proposed substitute is to be memorialized via a Field Order or Change Order.

It is common to expand upon the provisions of C-700 7.05 and C-700 7.06 via the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, additional requirements for “or-equals” will typically be under *Section 01 62 00, Product Options*. Requirements for substitutes will be under *Section 01 25 00, Substitution Procedures*. Further, requirements for substitutes relative to a particular element of the Work may be further expanded upon in “Part 1 – General” of the associated Division 02-49 Specifications sections.

Attention is directed to C-200 Article 10 which states that EJCDC’s presumptive practice is that substitute and “or-equal” items will not be considered until both parties have signed the Owner-Contractor Agreement and the Contract is effective. If this concept is to be modified, the change should be made in the Instructions to Bidders with any required new language for C-700 7.05 and C-700 7.06 appearing in the Supplementary Conditions. Refer to this

Commentary's discussion of C-200 Article 10 for additional comments on substitutes and "or-equals" during the Project's Bidding or negotiating phase.

6. *C-700 7.07, Concerning Subcontractors, Suppliers, and Others*

The term "Subcontractor" is defined in C-700 1.01.A.40. It includes entities that have a contract with the Contractor, as well as lower-tier companies that perform Work for other Subcontractors; the intent is to include all those in the contractual chain below Contractor. The term "Supplier" is defined in C-700 1.01.A.45 as a manufacturer, fabricator, supplier, distributor, materialman, or vendor under contract to either the Contractor or any Subcontractor. For purposes of the General Conditions, relatively few contractual distinctions are made between Subcontractors and Suppliers.

The following are key points regarding use and acceptability of Subs/Suppliers:

- a. C-700 7.07.A: Contractor is allowed to use Subcontractors/Suppliers to accomplish its obligations. Any restrictions on the percentage of the Work, or the categories of Work, that may be delegated should be noted in the Supplementary Conditions.
- b. C-700 7.07.A: All Subcontractors/Suppliers must be acceptable to Owner.
- c. C-700 7.07.B: The Contract Documents may require that Contractor retain specific Subcontractors/Suppliers. This is not uncommon for Suppliers; typically this is done with respect to Subcontractors when an owner (most commonly a private owner) is familiar with the skills and expertise of a particular Subcontractor and wants to assure that the Subcontractor is on the Project. Contractors uncomfortable with having a specific Subcontractor imposed on them should refrain from entering into contracts with this requirement.
- d. C-700 7.07.C: After commencement of the Contract, Owner may require retention of a specific Subcontractor/Supplier only if Contractor has no reasonable objections.
- e. C-700 7.07.F: If Owner requires the replacement of a Subcontractor/Supplier, the Contractor is entitled to an adjustment of the Contract Price or Contract Times, or both.

While it is generally recognized that contractors should be entitled to employ and retain individuals or entities of their own choosing, it is at times desirable for the Owner to "veto" the Contractor's selection or use of a specific Subcontractor/Supplier. The general rationale for this is that the Owner has the right to exclude anyone from the Owner's Site, and to protect its own interests. EJCDC recommends restraint in Owner involvement, and has concluded that it is equitable for the Contractor to be compensated for the difference in the price of subcontracts when the Owner rejects a Subcontractor or Supplier after commencement of the Contract.

For a discussion of similar matters prior to the execution of the Contract, see this Commentary's discussion regarding C-200 Article 11.

- f. C-700 7.07.H: This paragraph requires Contractor to keep Owner advised of the Subcontractors/Suppliers on the Project on a monthly basis. This gives the Owner information that may be useful for security purposes, or if payment or injury issues arise.
- g. C-700 7.07.K: This paragraph is the principal subcontract "flow-down" provision, in which each Subcontractor and Supplier is bound by the applicable provisions of the Contract

Documents. To assist Contractors in complying with C-700 7.07.K, EJCDC recommends consideration of the use of EJCDC® C-523, Construction Subcontract.

- h. C-700 7.07.M: This paragraph requires that Subcontractors, Suppliers, and similar entities communicate with Owner through the Contractor; however, C-700 7.07.L explicitly gives the Owner the right to furnish to Subcontractors, Suppliers, or others information on the amounts paid to the Contractor.
7. *C-700 7.08, Patent Fees and Royalties*

- a. Under C-700 7.08.A, the Contractor is responsible for paying any license fees or royalties arising from the Work. C-700 7.08.A further provides that when some element of the Work includes an item of material or equipment subject to payment of license fees or royalties, and such fee/royalty obligation is called out in the Contract Documents (typically in the associated Specification section), then the cost is included in the Contract Price.
- b. C-700 7.08.B provides that Owner will indemnify the Contractor for the costs if the Contract Documents did not identify the required item as being subject to license fees or royalties.
- c. C-700 7.08.C states that if Contractor uses a product or device that is not required by the Contract Documents, and there is a resulting charge or infringement action, Contractor shall indemnify Engineer and Owner.

8. *C-700 7.09, Permits*

C-700 7.09 is a general provision requiring the Contractor to obtain required permits and comply with the requirements of the permits. The Contract Documents should identify permits to be furnished by Owner, and specific requirements with which the Contractor is to comply regarding such Owner-furnished permits.

9. *C-700 7.10, Taxes*

The standard requirement is that Contractor is responsible for all taxes associated with its performance of the work; for example, sales taxes on materials.

If the Owner qualifies for a state or local sales tax exemption in the purchase of certain materials and equipment, appropriate language in this respect should be included in C-800 7.10. There should also be a cross-reference to C-800 SC-7.10 in the Instructions to Bidders, or the suggested language of the Instructions to Bidders should be supplemented as indicated in Article 21 of the Instructions. Because statutes on tax exemptions are often complex and require care to qualify for, EJCDC recommends that the Engineer obtain specific, written instructions from the Owner or the Owner's legal counsel regarding the exact language to include at C-800 SC-7.10.

10. *C-700 7.11, Laws and Regulations*

C-700 7.11 is a blanket provision that requires the Contractor to comply with all "Laws and Regulations" (a term defined at C-700 1.01.A.25) related to the Work. C-700 7.11 also clarifies that the Owner and Engineer do not have responsibility for monitoring Contractor's compliance with applicable Law and Regulations.

It is generally not recommended to include in the Contract Documents specific reference to a particular Law or Regulation. Doing so could create the false impression that the cited law is

the only law that applies. Thus, a specific requirement written in the Contract Documents to comply with a particular Law or Regulation is not desirable unless there is a provision in the Law or Regulation mandating inclusion of specific language in the Contract Documents. A common example is when there is governmental funding of a project and the funding or financing entity requires that the Contract Documents contain actual language from, or reference to, certain legal or regulatory requirements applicable to the conditions of the funding/financing or performance of the Work. Assistance in identifying the applicable provisions should be obtained from the Owner's legal counsel.

If legal provisions are required to be incorporated into the Contract Documents, one option is to add them as exhibits to the Owner-Contractor Agreement. Another option is to include the required language in a separately numbered article of the Supplementary Conditions, or in some other distinct location in the Project Manual. Examples of the types of information to which these comments apply include:

- a. Labor standards provisions;
- b. Statutorily required minimum wage rates;
- c. Prevailing wage requirements;
- d. Verification of employment eligibility status;
- e. Certification of equal employment opportunity;
- f. Certification of non-segregated facilities;
- g. Affirmative action contract compliance requirements;
- h. Requirements on use of, and utilization goals for, minority business enterprises (MBE), women's business enterprises (WBE), and disadvantaged business enterprises (DBE);
- i. Value engineering incentive; and
- j. Statutory declarations

11. *C-700 7.13, Safety and Protection*

Construction is a dangerous activity. Most owners and engineers lack experience, expertise, and training in performing construction activities safely, or in monitoring jobsite safety. The Contractor (together with its subcontractors) is in the best position to minimize injuries to the workforce and damage to property. C-700 confirms and emphasizes the important point that responsibility for safety is borne by the Contractor. Changes to this widely accepted allocation are discouraged. Most contractors want to have control of the Site and the construction activities, so they can control the protection of persons and property.

If the construction will be performed under multiple-prime construction contracts, or if other work will be performed, the responsibility for coordinating the work (and specifically the safety programs) of the various constructors must be clearly delineated. See C-700 8.02, Coordination.

Site-specific safety and security procedures, if any, should be included in the Division 01 Specifications.

12. C-700 7.16, Submittals

This section of C-700 Article 7 was formerly titled “Shop Drawings, Samples, and Other Submittals.” In 2018, EJCDC added a formal definition of “Submittals” (C7001.01.A.41) that encompasses Shop Drawings and other items that Contractor is required to submit; and this section has been reorganized and retitled. However, the fundamental provisions regarding Shop Drawings remain intact.

Although C-700 7.16 sets out basic procedures for Shop Drawing review (C-700 7.16 A, B, C, and D) and for Submittals other than Shop Drawings (C-700 7.16 E), there are many strictly procedural aspects of the submittal, review, and approval process for Submittals that may warrant further amplification (for example, the number of copies when printed copies are required, how and where submittals are to be transmitted, submittal types when submittals are so classified, the meanings of the Engineer’s actions and disposition on submittals, and other administrative and procedural requirements); often such details are addressed in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, such requirements will typically be under *Section 01 33 00, Submittal Procedures*. Among the requirements specified in Section 01 33 00 may be detailed requirements for the organization and format of the Schedule of Submittals.

At times a submittal review may, by agreement, be for a narrower purpose than indicated in C-700 7.16 (also see C-700 7.19, Delegation of Professional Design Services). In addition, some engineering firms, regardless of the extent of the Engineer’s review, are reluctant to “approve” Shop Drawings and other Submittals. When wording other than that contained in C-700 7.16 (which uses the term “approve”) will be used to describe the Engineer’s responsibility with respect to submittals, such requirements should appear in C-800 SC-7.16 as an amendment of C-700 7.16 (also see C-700 7.19). The language of C-700 7.16 is closely coordinated with the description of the Engineer’s duties in EJCDC’s Owner-Engineer agreement forms (such as E-500 and E-505) and a change in one will probably necessitate a change in the other. The user should note that some of the Engineer’s most important obligations regarding Shop Drawings arise from Engineer’s professional responsibilities, including duties owed to the public; wordsmithing in the contract may have little or no impact on such obligations.

CSI SectionFormat™ suggests classifying Contractor submittals into the following types: “action submittals,” “informational submittals,” closeout submittals,” and “maintenance materials submittals”—with the implication that the Engineer’s review action and disposition may vary by submittal type. Any such categorization should be made in the Division 01 Specifications, and should specify what action or response Engineer will make to Submittals of the various types.

As required under C-700 7.16.A.3, the Contractor is required to bring to the Engineer’s attention, in writing, at the time the submittal is delivered to the Engineer, items in the submittal that vary from the requirements of the Contract Documents. Doing so is critical to avoiding inadvertent “approval” of unintended changes to the Contract Documents. If proposed variations are highlighted, as contractually required, then Engineer can properly assess the impact, advantages, and disadvantages of a change in the Contract Documents in relation to the subject of the Shop Drawing as well as the overall design intent.

Where variations from the requirements of the Contract Documents are properly indicated to the Engineer at the time of submittal delivery, followed by the Engineer’s approval of that

submittal, the change should be documented by the Engineer in a Field Order, Change Order, or Work Change Directive, as applicable. C-700 7.16.C.4.

The Engineer should not attempt to alter the requirements of the Contract Documents via the Engineer's comments when the Engineer approves the submittal. An associated Field Order, Change Order, or Work Change Directive will provide a much better permanent record of the change.

Under C-700 7.16.C.8, once a Shop Drawing or Sample has been approved, it becomes binding on the Contractor: The Work must be performed in compliance with the approved submittals.

It is common for Shop Drawings and other submittals to be returned to the Contractor for correction and resubmittal. C-700 7.16.D sets out the basic procedures for the resubmittal process. For any specific required submittal, the Contractor is allowed three opportunities to submit an approvable document or item (the original submittal and two resubmittals). For the fourth and subsequent submittals of the same document or item, the Contractor will be charged for the engineering costs associated with the extra reviews. If the Owner prefers to establish some other limit on resubmittals, or to not impose any limit, the preferred requirements should be included either at C-800 SC-7.16 or in the appropriate Division 01 Specifications.

C-700 7.16.E addresses Submittals other than Shop Drawings. The general rule for such Submittals is that Engineer will either note "Accepted" or "Not Accepted." Acceptance in this context refers to whether the Submittal meets the requirements of the Contract Documents as to general form and content. A deep, probing analysis is not expected, and "approval"—as used elsewhere in C-700 7.16—is neither given nor withheld.

As stated in C-700 7.16.F, the Submittals required by C-700 7.19, Delegation of Professional Services, are governed by that clause, and are not subject to the provisions of C-700 7.16.

13. *C-700 7.17, Contractor's General Warranty and Guarantee*

C-700 7.17 is a general warranty by which the Contractor guarantees to the Owner that the Work will comply with the Contract Documents and will not be defective. The Contractor's general warranty is not limited by any specific period of time, although its enforcement will be governed by the post-completion notice-of-defect provisions in C-700 7.17.B (see also this Commentary's discussion of C-700 15.08) and the applicable statute of limitations in the jurisdiction where the Project is located.

Separate and distinct from the general warranty is the Contractor's commitment to return to the Site to correct defective construction during the first year after Substantial Completion. C-700 15.08. See this Commentary's discussion regarding the C-700 15.08 Correction Period. Also, note the Contractor's warranty and guarantee, under C-700 15.02, regarding title to the materials and equipment incorporated into the Work.

In accordance with C-700 7.17, the Engineer is explicitly entitled to rely on the Contractor's general warranty. This right may be an important defense if Engineer is accused of failing to detect defective Work, or of being responsible for defective Work.

C-700 7.17 includes a listing of actions by the Owner or the Engineer—such as observing the Work, issuing progress payments, and others—that will not constitute acceptance of Work that is not in accordance with the Contract Documents.

14. *C-700 7.18, Indemnification*

The Contractor's indemnification clause at C-700 7.18.A is narrow in scope. It applies to claims involving injuries and property damages, and requires indemnification only to the extent of the Contractor's negligence. It does not require the Contractor to indemnify any other party against that party's own negligence. The clause is intended to be consistent with the scope of coverage provided under the Contractor's commercial general liability insurance policy.

The Laws and Regulations that apply to construction indemnification clauses vary from state to state. EJCDC recommends that Owner consult with an attorney to confirm that C-700 7.18 is permissible and enforceable in the controlling jurisdiction, and before undertaking any modifications. Attempts to broaden the clause in Owner's favor may result in a clause that violates statutory or other limitations on indemnification duties.

C-700 7.18 requires that the Contractor indemnify the Owner, Engineer, and their consultants and subcontractors. Any expansion or reduction in this scope should be made via C-800 SC-7.18.

C-700 7.18.B is primarily intended for situations in which the Contractor is obligated to indemnify the Owner or Engineer against an injury claim initiated by an employee of the Contractor or a Subcontractor. The clause forecloses any contention by a Contractor that its indemnification duty to Owner and Engineer is eliminated or excused because of the operation of workers' compensation insurance.

Note: the separate clause formerly located in C-700 stating that the Contractor's indemnification duty does not apply to Engineer's liability (in the 2013 edition this was located at C-700 7.18.C) was removed as of 2018 because it was superfluous and redundant, as a result of prior narrowing of the indemnification duty.

15. *C-700 7.19, Delegation of Professional Design Services*

The purpose of C-700 7.19 is to clarify the duties and responsibilities of the parties and the Engineer when the Owner delegates to the Contractor a portion of the professional design services for a Project. Delegation of professional design services has occurred for decades, and is commonplace in practice, especially with respect to certain specialized areas of design and construction such as fire protection, mechanical systems, utility storage tanks such as those used for potable water, and instrumentation and controls. On a broader scale, it flourishes under the title design-build.

The design profession and the construction industry have worked to allow delegations that place design responsibility in the hands of specialists, to the benefit of the project and without sacrificing the interests of the public. The experience in New York provides an example. In seeking an acceptable approach to the issue of delegation of professional design services, in 1996 the New York State Education Department's Board of Regents adopted a rule to the effect that design professionals will not be considered to be engaged in "unprofessional conduct" if they delegate work involving the performance of a design function requiring a professional license. Under this New York State rule, a design professional can delegate professional design functions through an intermediate entity (e.g., a contractor) that is not licensed to provide design services. However, such delegated professional design functions must be performed by a licensed, registered design professional either retained by, or employed by, the Contractor, Subcontractor, or Supplier. C-700 7.19 conforms to the New York State rule.

EJCDC believes that the procedures specified in C-700 7.19 fairly allocate the duties and responsibilities of the parties and their respective representatives with regard to professional design delegation, but cautions that a review of licensing requirements in the jurisdiction of the Project should be made before an actual delegation is made. Changes, if any, in those duties and responsibilities would be made in C-800 7.19.

The provisions of C-700 7.19 pertain to delegated professional design of elements of the completed Work. EJCDC's position is that required design by a Contractor (or Subcontractor) of temporary facilities, such as temporary support of excavations, or scaffolding, is not delegated design under C-700 7.19. All activities relating to temporary facilities are squarely within Contractor's purview as means and methods of construction. See discussion in this Commentary regarding C-700 7.01.B.

In a similar vein, C-700 7.19 is regarded by EJCDC as not applying to internal design services for specified materials, products, and equipment. Manufacturers of items such as steel piping and pumps presumably design their products, but there is typically no need to address this in the construction contract, as a delegation or otherwise.

When reviewing construction-phase submittals of designs for Work that has been delegated in accordance with C-700 7.19, the Engineer is cautioned to review and comment only on those items specifically indicated in C-700 7.19.E. Expansion of the Engineer's review beyond those items indicated in C-700 7.19.E has the potential to blur the lines of professional liability for the delegated design services.

Various clarifications and organizational improvements have been made to the delegation clause in the 2018 edition of C-700. Among the changes:

- Acknowledgment that the delegated professional services will be performed pursuant to the professional standard of care
- Shop Drawings submitted by Contractor with respect to Work designed under a delegation must be supported by the designer's written approval
- Engineer's review of a proposed delegated design is limited to confirming that the Contractor's design professional applied the performance and design criteria that Engineer furnished, and that the delegated design is consistent with the Engineer's design concept—Engineer will not re-engineer the Contractor's design in depth, because doing so would defeat the purpose of the delegation.

H. *C-700 ARTICLE 8—OTHER WORK AT THE SITE*

1. *C-700 8.01, Other Work*

Frequently, more than one prime contractor will perform the construction work at the Site, or some part of the Project will be performed directly by the Owner or by a utility company. When such other work has been planned in advance, the Owner should specifically describe it in the Bidding Documents so that, when submitting a price, each Bidder can take into consideration the problems of relating to others at the Site, and the disclosure should be incorporated in the Contract. When CSI MasterFormat™ is used for organizing the Project Manual, such requirements will typically be indicated under *Section 01 12 00, Multiple Contract Summary*. If possible, the description should include the identification of each other project or contract, the nature of the associated work, the exact location of the other work,

and approximate starting and ending time frames for such other work. Any noteworthy features of the other contracts should also be indicated in the Contract Documents. The importance of the interrelationship of the contracts is illustrated by the provisions of C-700 8.03, which are discussed below.

C-700 8.01.B requires that Owner inform Contractor of other work at the Site, and also that Owner give Contractor notice prior to the commencement of such other work. Under C-700 8.01.C, Contractor must accommodate the other work at the Site. As a practical matter, the more information and advance notice that all involved parties have regarding other work activities at the Site, the greater the opportunity to avoid disruptions and conflicts.

C-700 8.01.F explains that the provisions of C-700 Article 8 do not apply to utility work that the Owner has not contracted for or arranged. Adverse impacts of such “force majeure” utility work are governed by C-700 4.05.C.3.

2. *C-700 8.02, Coordination*

Coordination of the Site activities of various prime contractors, other contractors working at the Site, work by the Owner, and work performed by others for the Owner (such as utility companies), is a complicated matter. At times, the Owner will undertake this coordination responsibility, either with the Owner’s own personnel or by employing a construction manager or construction coordinator. C-700 8.02.B expresses the default position that Owner has the coordination responsibility. Frequently, the Owner contractually assigns construction coordinator authority and responsibilities to one of the prime contractors, or to a separate entity with construction expertise. Note that some jurisdictions may restrict an Owner’s ability to delegate such coordination duties; Owners should consult with counsel to assure compliance with governing statutes and regulations.

C-700 8.02 requires a statement in C-800 SC-8.02 identifying the individual or entity that will serve as construction coordinator; otherwise, the necessary authority and all associated responsibilities will rest solely with the Owner under the default provision at C-700 8.02.B. EJCDC suggests that the designated entity be referred to and defined as the “construction coordinator,” which is the practice followed in this Commentary. As indicated in C-700 8.02.A.2 and 3, the scope and extent of the construction coordinator’s authority and responsibility should be indicated in the Contract Documents with specificity.

Very few construction coordination or construction management arrangements are the same. Some of the topics that might be covered include:

- a. the authority and responsibility of the construction coordinator with respect to safety precautions and procedures at the Site (C-700 7.13, C-700 7.14, and C-700 7.15);
- b. obtaining permits (C-700 7.09);
- c. monitoring compliance with various schedules applicable to performance of the various scopes of work (C-700 2.03, C-700 2.05, and C-700 4.04);
- d. property insurance (C-700 6.04);
- e. keeping the Site clean during construction (C-700 5.02.B and C-700 5.02.C);
- f. coordinating tests and inspections (C-700 14.02);
- g. use of temporary construction facilities (C-700 5.02.A);

- h. scheduling purchase and delivery times (C-700 2.03, C-700 2.05, and C-700 4.04); and
 - i. scheduling and coordinating the activities of the various contractors at the Site (C-700 Article 8).
3. *C-700 8.03, Legal Relationships*

When multiple entities perform work activities at the Site under separate prime contracts or arrangements, there is a possibility of schedule clashes, damage to work in place, access restrictions, and other impacts on progress. The purpose of C-700 8.03 is to clarify the legal relationships between and among the involved parties, with the Owner as the central figure.

Prior to the 2013 Edition of C-Series documents, C-700 required that contractors pursue claims against each other, without the involvement of the Owner or Engineer. Because this system was inefficient and sometimes left impacted contractors without a practical remedy, the 2013 Edition of C-700 presented a fresh administrative approach:

- a. C-700 8.03.A: If other entities performing work for the Owner at the Site damage the Work, or delay, disrupt, or interfere with the Work, then Contractor may obtain an equitable adjustment of Contract Times or Contract Price from Owner. This adjustment must take into account the information regarding the other work available to the Contractor at the time the Contract was entered into. Thus, if Owner had fully advised Contractor of likely impacts from other work before Contract formation, then little or no additional time or compensation would be justified as a result of the anticipated impacts occurring.

Note that with respect to utility work at the Site, the provisions in C-700 8.03.A refer only to utility work being done for the Owner, by arrangement of the Owner; see the initial utility work reference in C-700 8.01.A. The Owner does not take responsibility in C-700 8.03.A for utilities that undertake activities at the Site at their own initiative, without a contract or arrangement with the Owner. To the extent such independent utility work delays and disrupts the Contractor and is beyond the control of both Owner and Contractor, C-700 4.05.C does provide relief to the Contractor, in the form of a time extension. This point is expressly confirmed in C-700 8.01.F.

- b. C-700 8.03.A: In the event that Contractor obtains a remedy from Owner based on the impacts from other work at the Site, Contractor must assign all rights to Owner, so Owner can pursue reimbursement with all available rights.
- c. C-700 8.03.B: As a general matter, Contractor must take reasonable and customary steps to avoid damaging or interfering with the work of all others at the Site.
- d. C-700 8.03.B.1: If Contractor fails to take reasonable and customary measures with respect to other work by another contractor or utility, resulting in damage or delay to that other work, then the Owner may impose a set-off against payments due to protect itself against a possible claim from the other party, and may assign rights to the other contractor or utility.
- e. C-700 8.03.B.2: If Contractor fails to take reasonable and customary measures with respect to other work by Owner, resulting in damage or delay to that other work, then Owner is entitled to compensation from Contractor, through a set-off against payments due.

- f. C-700 8.03.C: If Contractor fails to take reasonable and customary measures with respect to other work by another contractor or utility, resulting in damage or delay to that other work, then Contractor's first obligation is to resolve the matter.
- g. C-700 8.03.C: If another contractor or utility makes a claim resulting in a loss to Owner or Engineer or both, and Contractor is culpable, then Contractor must indemnify Owner and Engineer for the loss.
- h. Note that if there is a contract between Owner and the other contractor that has similar provisions to C-700, then the other contractor may obtain an equitable adjustment of time and price from Owner, Owner will keep the set-off, and the matter will be resolved without any direct action between Contractor and the other contractor.

I. *C-700 ARTICLE 9—OWNER'S RESPONSIBILITIES*

Much of C-700 Article 9 involves cross-referencing to other paragraphs of the General Conditions. If a referenced paragraph is changed, a change in C-700 Article 9 will also be required. If the Owner undertakes responsibilities customarily assigned to the Engineer, or employs its own Site representative, these would be addressed in C-800. To illustrate this, C-800 includes model language (C-800 SC-9.13) for an Owner-furnished "Owner's Site Representative," who is envisioned to be in place of the Engineer-furnished Resident Project Representative (RPR), albeit with somewhat differing responsibilities. If C-800 SC-9.13, the Project-specific duties and activities of the Owner's Site Representative should be described, as indicated.

When the Owner's responsibilities are changed from those normally undertaken, it is important to review and, to the extent necessary, make complementary modifications in the Engineer's responsibilities, especially the various specific paragraphs of C-700 Article 10 and related paragraphs wherein the Engineer's functions are described. The necessity of corresponding changes in the Owner-Engineer Agreement for professional services should also be considered. If the Owner functions as construction coordinator of the activities of several prime contractors (see C-700 8.02), the language of C-700 9.09 should be amended to note the coordination duties as a limited exception to the general rule.

1. *C-700 9.11, Evidence of Financial Arrangements*

Under C-700 9.11, Contractor is entitled to request and receive evidence that Owner is capable of meeting its obligation to pay Contractor for its construction services. This right is most commonly exercised on private sector projects, although budgetary, political, and solvency concerns have increased its relevance in public construction.

J. *C-700 ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION*

The EJCDC documents assume that the design engineer will have an active role during construction, including tasks such as review of Shop Drawings and contract administration. At times, however, the Owner will not engage the design engineer to perform the full range of customary engineering services during construction. This will occur when Owner provides such services using in-house staff, or when a construction manager is retained to provide administrative services such as review of payment applications. It may sometimes also be the case that the Engineer's duties during construction are substantially expanded. The terms and

conditions of C-700 regarding the Engineer's role, including the terms of C-700 Article 10, conform very closely to the standard scope of services presented in the standard Owner-Engineer agreement forms (for example, E-500 and E-505). Accordingly, a change in the Engineer's scope of construction-phase services in the applicable professional services agreement would necessitate changes in Engineer-related terms of C-700.

Legal counsel should be consulted before finalizing language that modifies either the Owner-Engineer Agreement or any provisions of the General Conditions in this regard.

1. *C-700 10.01, Owner's Representative*

This clause states the most common, standard status of Engineer during construction: Engineer is the Owner's representative. This role is not to be confused with the optional appointment of an Owner's Site Representative, under C-800 SC-9.13 (see discussion in the previous section of this Commentary, concerning C-700 Article 9, Owner's Responsibilities).

2. *C-700 10.03, Resident Project Representative*

A "Resident Project Representative" or "RPR" is defined as the Engineer's authorized representative at the Site. When an RPR is used, the Engineer (through the RPR) has an increased presence at the Site. The RPR may be an employee of the Engineer itself, or may be a consultant or individual retained by Engineer to provide RPR services; the term includes any staff or assistants of the RPR. If Engineer will provide RPR services, the RPR's role and scope of services has a direct impact on Contractor and its performance of the Work, and thus should be described in the Supplementary Conditions, at C-800 SC-10.03, where extensive model wording for description of the RPR's role and services is provided. The model wording is coordinated with the RPR scope provisions in Exhibit D of EJCDC's Owner-Engineer agreement forms, such as E-500 and E-505.

Some Owners will provide services comparable to those of the RPR through a representative that is not affiliated with the Engineer. If this is the case, the representative is referred to as the Owner's Site Representative, and should be identified under C-700 Article 9, Owner's Responsibilities, by adding a Supplementary Condition at C-800 SC-9.13. As with the RPR, the role and scope of services of the Owner's Site Representative is important to Contractor, and should be described at C-800 SC-9.13. In that case, some of the text of the RPR scope of services at C-800 SC-10.03 may be useful in drafting the provisions of C-800 SC-9.13. Note also that if the Engineer is not providing RPR services, regardless of the reason, then this point should be stated in C-700 10.03 by use of the clause set out in C-800 SC-10.03.A.1, after the first RPR-related Guidance Note; and the lengthy RPR services text that follows the second RPR Guidance Note should not be used.

3. *C-700 10.06, Decisions on Requirements of Contract Documents and Acceptability of Work*

Under the EJCDC documents the Engineer is empowered to make decisions on the requirements of the Contract Documents and the acceptability of the Work. The Engineer is in the best position to understand the details and intent of the design as expressed in the Contract Documents, and the engineering implications of any deviations from the design. The Engineer's responsibilities in this regard are expressly governed by the procedure for initial interpretations, Change Proposals, and acceptance of the Work set out elsewhere in the General Conditions. Note also that as of the 2013 Edition of C-700, Engineer does not have a role in adjudicating Claims, as defined, or in reviewing matters that do not involve the design or engineering/construction technical issues.

C-700 10.06 requires the Engineer to act impartially toward the parties to the Contract; as long as Engineer acts in good faith in making interpretations and decisions, it has no liability to Owner or Contractor for those decisions. EJCDC believes this approach will encourage fair results during the course of the Project, thus reducing disruptive disputes.

A graphical presentation of EJCDC® C-700's provisions for actions relative to the interpretation and clarifications process is presented in C-001 Exhibit B, Figure 4.

C-700 10.07.A clarifies that it is not the intent of the Contract to create a direct legal relationship between Engineer and the Contractor (or Subcontractors). The Engineer's professional services agreement is with the Owner, and the performance of Engineer's duties should be evaluated under the terms of that agreement.

C-700 10.07.B confirms the fundamental rule that the Contractor (not the Engineer) is responsible for the means and methods of construction, for site safety, and for satisfactory performance of the Work.

K. C-700 ARTICLE 11—CHANGES TO THE CONTRACT

1. C-700 11.01, Amending and Supplementing the Contract

C-700 11.01 sets forth the mechanisms under which the requirements of the Contract Documents may be changed. EJCDC intends that the Contract not be amended, supplemented, or modified other than as provided in C-700 11.01. In addition, the basic administrative and procedural provisions associated with these standard contract modification clauses are frequently expanded upon in the Division 01 Specifications. When CSI *MasterFormat™* is used for organizing the Project Manual, such requirements will typically be specified under *Section 01 26 00, Contract Modification Procedures*.

C-700 11.01.A establishes that the only valid Contract modification instruments are a Change Order (C-700 11.02), Work Change Directive (C-700 11.03), and Field Order (C-700 11.04).

C-700 11.01.C establishes that all changes in the Contract that involve changes to the design, technical aspects of the Work, and the acceptability of the Work, will be made only upon the Engineer's recommendation. This is to ensure that a qualified design professional reviews and approves all changes to the design, and the completed Work, in accordance with laws and regulations governing the practice of professional engineering and architecture. Engineer's active involvement during construction will protect the Owner's interests, as well as the interests of the public. As a best practice, only the engineer of record (or other design professional of record) who sealed and signed the associated element of the Contract Documents, or a duly appointed and documented successor, should sign or recommend Change Orders, Work Change Directives, and Field Orders.

Conversely, where a Contract modification does not involve changing the design, the technical aspects of the Contract Documents, or the acceptability of the Work, there is no need for the Engineer to recommend or sign the associated instrument of Contract modification. C-700 11.01.B. Examples of Contract modifications that would not require the Engineer's recommendation include: a change in the Contract Times (without an associated change in the design), a change in the insurance requirements, or any other change to the administrative and procedural requirements of the Contract that do not affect the design, technical aspects, or acceptability of the Work.

2. *C-700 11.02, Change Orders*

The content of C-700 11.02, 2018 edition, was relocated from other parts of Article 11. As a result of this restructuring process, Paragraph 11.07 of the 2013 edition, Execution of Change Orders, was eliminated.

The term “Change Order” is defined at C-700 1.01.A.8 as a document that is signed by both the Owner and the Contractor, authorizing a revision in the Work, an adjustment in Contract Times or Contract Price, or other revision to the Contract. Thus, Owner and Contractor may use a Change Order to accomplish any change to the Contract. Although Change Orders are the only Contract modification that can authorize a change in the Contract Price and/or Contract Times, a Change Order may also be used for modifications that do not affect time or price.

Change Orders are sometimes required as the proper documentation of the result of certain actions, decisions, or procedures that occur under the Contract; specific cases are set forth in C-700 11.02.A.

C-700 11.02.B indicates that if either the Owner or the Contractor refuses to sign a Change Order that is required under the provisions of C-700 11.02.A, such Change Order will be construed to be in full force and effect as if it were fully signed by the parties. The provisions of C-700 11.02.B are intended to prohibit a party from holding up the resolution of a Claim or dispute simply by refusing to sign the final Contract modification. It is understandable that some owners, especially public owners, may have concern or trepidation about C-700 11.02.B “forcing” them to accept a Change Order that they would otherwise prefer not to approve. However, the circumstances where C-700 11.02.B would apply to the Owner would be extremely rare, and would apply only after the contractual Claims/dispute resolution process has run its course.

For additional information on EJCDC® C-941, Change Order Form, see C-001 7.5.

3. *C-700 11.03, Work Change Directive*

C-700 11.03.A provides for the issuance of Work Change Directives (a term defined at C-700 1.01.A.50, and whose meaning is further expanded upon at C-700 11.03.A), which orders changed (or extra) Work to proceed without waiting until the Owner and the Contractor have agreed upon the change’s effect on price, time, or both.

It is important to note that, while a Work Change Directive is a Contract Document and authorizes a change in the Work, it does not, itself, result in a change in the Contract Price or Contract Times. The Work Change Directive is essentially a “promissory note” that requires issuance of a subsequent Change Order, after the parties have agreed upon the effects (if any) on Contract Price and Contract Times. The implication of this requirement is that the Contractor performing Work required by a Work Change Directive will often be unable to apply for payment for such Work until the corresponding Change Order is formalized and fully signed by the parties.

As a procedural matter, C-700 11.03.B.1 requires the Contractor to take the initiative in seeking payment (and a time extension) for Work performed under a Work Change Directive, by submitting a Change Proposal within 30 days of completion of the subject Work. In the rare case that the Owner, rather than the Contractor, is seeking a change in Contract Price or Contract Times as a result of a Work Change Directive, C-700 11.03.B.2 establishes a

procedural step—Owner must file a Claim within 60 days of issuing the Work Change Directive.

Changes ordered by a Work Change Directive are by its express terms to be performed “promptly” by the Contractor. EJCDC® C-940, Work Change Directive, p. 1. Keeping the Work moving forward, without the delay associated with negotiation of a change’s impact, is one of the primary reasons for issuing a Work Change Directive. If necessary, the Engineer or the Owner should remind the Contractor that a Work Change Directive is a unilateral order, and a Contract Document, that must be implemented without delay.

Work ordered by a Work Change Directive is frequently, but not always, compensated on the basis of the Cost of the Work plus a fee. C-700 11.07.B.3. For this reason, the Contractor should always maintain good cost records while performing Work Change Directive tasks.

Because C-940, Work Change Directive, orders a change in the Work that may affect the Contract Price, Contract Times, or both, the Owner’s signature is mandatory. Although a case could be made for allowing the Engineer to issue a Work Change Directive, EJCDC believes that the Engineer should not be (and is not, under EJCDC documents) empowered to spend the Owner’s money, and thus the Owner’s signature on a Work Change Directive is necessary.

Prior to the 2018 edition, C-940, Work Change Directive, had a signature line in which Contractor was supposed to acknowledge that it had “Received” the Work Change Directive. As of 2018 EJCDC has eliminated the Contractor’s acknowledgment of receipt as superfluous. A Work Change Directive is a unilateral order by the Owner directing an immediate change in the Work and does not require the Contractor’s signature to be binding and effective. The Contractor’s actual receipt of a Work Change Directive can be proven (if necessary) in a variety of ways, depending on the means by which it was transmitted.

The Engineer’s signature on the Work Change Directive is included in accordance with C-700 11.01.C, for situations where the change so ordered modifies or affects the design, technical aspects of the Work, or the acceptability of the Work.

For additional information on EJCDC® C-940, Work Change Directive, see C-001 7.4.

4. C-700 11.04, Field Orders

A Field Order, defined at C-700 1.01.A.23, is a document issued by the Engineer to the Contractor, and is used for ordering minor changes in the Work that do not affect the Contract Price or the Contract Times. Because a Field Order does, in fact, modify the Contract, an issued Field Order is a Contract Document, as indicated at C-520 7.01 and C-525 11.01. A Field Order is prepared, signed, and issued by the Engineer, and is binding upon both the Owner and the Contractor.

If the Contractor concludes that the change in Work ordered by a Field Order does in fact impact the Contract Times or Contract Price, the Contractor is required to submit a Change Proposal. C-700 11.04.B.

Changes ordered by a Field Order are to be performed promptly by the Contractor, pursuant to the terms of Field Order form. EJCDC® C-940, Field Order.

As with the Work Change Directive form, prior to the 2018 edition C-942, Field Order, had a signature line in which Contractor was supposed to acknowledge that it had “Received” the Field Order. As of 2018 EJCDC has eliminated the Contractor’s acknowledgment of receipt as superfluous. A Field Order is a unilateral order by the Engineer directing an immediate, minor

change in the Work, and does not require the Contractor's signature to be binding and effective. The Contractor's actual receipt of a Field Order can be proven (if necessary) in a variety of ways, depending on the means by which it was transmitted.

EJCDC strongly recommends that engineers avoid attempting to change the Work via a Field Order when the associated changes have any potential to affect price and/or time. EJCDC also recommends that engineers avoid attempting to amend the requirements of the Contract Documents by the Engineer's comments and actions on Submittals, as well as the Engineer's responses to requests for interpretations. If the Engineer's response to a Submittal or request for interpretation results in a minor change (without affecting price or time) in the Contract Documents, EJCDC recommends that such change be documented in a Field Order. If the Engineer's action on a Submittal or request for interpretation result in an associated change in the Contract Price or Contract Times, then the Contract Documents' procedures for requesting, reviewing, and authorizing such changes should be followed.

For additional information on EJCDC® C-942, Field Order, see C-001 7.6.

5. *C-700 11.05, Owner-Authorized Changes in the Work*

C-700 11.05 empowers the Owner to order changes in the Work. The Contractor is obligated to promptly undertake and implement such changes when so ordered. The express exception to this duty is that the Contractor is not obligated to perform the new work if Contractor reasonably concludes that it cannot perform the work safely.

"Authorized changes" in C-700 11.05 refers to changes duly authorized under one of the mechanisms indicated in C-700 11.01.

Because the provisions of C-700 11.05 are so basic, there is rarely a need to revise it via the Supplementary Conditions.

6. *C-700 11.06, Unauthorized Changes in the Work*

The meaning and intent of C-700 11.06 is basic, self-explanatory, and requires no amendment via the Supplementary Conditions. C-700 11.06 is a strong mechanism that, in effect, mandates compliance with the Contract's provisions governing Contract modifications. If the Contractor performs work that has not been authorized under the contractual structure of Change Orders and Work Change Directives, such work is at risk of being uncompensated.

7. *C-700 11.07, Change of Contract Price*

C-700 11.07.A establishes that the only way the Contract Price can be changed is via a Change Order.

Three alternative bases for determining changes in the Contract Price are provided in C-700 11.07.B. The change in price will be determined by the application of the following to the Work involved: (1) Unit prices in the Contract, if applicable; (2) A lump sum mutually acceptable to the Owner and Contractor, when the subject Work is not covered by applicable unit prices; or (3) Cost of the Work (a term defined at C-700 1.01.A.17 and further expanded upon at C-700 13.01), plus a Contractor's fee, provided that the subject Work is not covered by applicable unit prices, and assuming that no mutually acceptable lump sum has been agreed to by Owner and Contractor. These alternative bases are intended as independent methods of determining compensation.

When the third method, Cost of the Work, is used to establish the adjustment in Contract Price, C-700 11.07.B.3 expressly indicates that a Contractor’s fee for overhead and profit should be added to the cost. This fee may be a mutually acceptable fee, agreed to by the parties (C-700 11.07.C.1), or a fee that is calculated based on the Cost of the Work performed as a result of the change (C-700 11.07.C.2). If the latter, in almost all cases the fee will be based on application of the provisions of C-700 11.07.C.2. The limited exception is the following: if the Work as a whole is being performed on the basis of cost-plus-fee (for example, using EJCDC® C-525, Agreement between Owner and Contractor for Construction Contract (Cost-Plus-Fee) for the Owner-Contractor Agreement) and the fee for the Work as whole is a percentage fee, then the fee for any additions or deletions will automatically adjust as the Cost of the Work changes, and no separate calculation is necessary. C-700 13.01.D.1.b.2.

Under C-700 11.07.C.2 (the most common mechanism for calculating the fee to be added to the Cost of the Work when Cost of the Work plus a fee is used to price a Change Order), different percentage rates of markup apply to the Contractor’s own direct costs (construction workers’ labor, and costs for materials and equipment incorporated into the Work), and to costs incurred in paying Subcontractors of various tiers, up to a specific limit. For other costs, including Contractor-hired consultants, use/rental of construction equipment, and non-compensable costs, no fee markup is allowed. C-700 11.07.C.2 also addresses the “fee markup” credit back to the Owner when Work is deleted from the scope and the Contract Price reduction is determined on the basis of Cost of the Work plus a fee.

Presented below are further details and examples using the fee markups allowed by C-700 11.07.C.2.

As a basic example, suppose that after the Contract is underway the Owner directs the Contractor to expand a parking area. The additional Work will include labor, materials, and construction equipment rental costs, as well as materials testing to be performed by a testing laboratory (“special consultant”—see C-700 13.01.B.4). The increase in Contract Price will be determined as follows:

Cost Type	Cost of the Work	Fee (%) per C-700 11.07.C.2	Fee (\$)	Total
Construction field labor	\$4,000	15%	\$600	\$4,600
Materials and equipment incorporated into the Work	\$3,000	15%	\$450	\$3,450
Special consultant (testing) costs to Contractor	\$1,500	0%	\$0	\$1,500
Contractor's cost for rented construction equipment	\$2,000	0%	\$0	\$2,000
Total change (increase) in Contract Price	\$10,500		\$1,050	\$11,550.00

The procedure in C-700 11.07.C.2.b and C-700 11.07.C.2.c establishing the Contractor’s fee for overhead and profit when there are several tiers of Subcontractors allows a 15% fee to the Subcontractor actually performing the Work involved, and a 5% fee to the Contractor and each higher-tier Subcontractor above the one actually performing the Work. The 5% fee should be calculated on all amounts paid for Cost of the Work and overhead and profit of all Subcontractors in lower tiers. However, C-700 11.07.C.2.c imposes a 27% maximum (total markup), pegged to the costs expended by the Subcontractor that actually performed the Work (the 27% cap is based on a fee at three tiers: $1.15 \times 1.05 \times 1.05 = 1.268$; rounded to 1.27). Some parties may wish to draft revised contract terms (via the Supplementary Conditions) that do not impose such a cap, or that impose a different cap.

Example: After the Contract is underway, the Owner directs Contractor to install additional wiring for data transmission. The additional Work will actually be performed on a Cost of Work basis by a data wiring company, Sub-Subcontractor A, which is a sub to Subcontractor E, the Contractor’s electrical sub. The multi-tier mark-up procedure set forth in C-700 11.07.C.2.c works as follows:

Cost of Work performed by Sub-Subcontractor A	\$10,000.00
Sub-Subcontractor’s fee (15%)	\$1,500.00
Total paid by Subcontractor E to Sub-Subcontractor A	\$11,500.00
Subcontractor E’s fee (5% of \$11,500))	\$575.00
Total paid by Contractor to Subcontractor E	\$12,075.00
Contractor’s fee (5% of \$12,075)	\$603.75
Amount to be paid by Owner to Contractor—increase in Contract Price. [Note that under this example the total mark-up over the base Cost of the Work, \$2,678.75, is just below the 27% contractual cap on mark-up]	\$12,678.75

C-700 11.07.C.2.d allows no fee markup for Contractor-hired consultants (reimbursement of raw consultant costs deemed adequate compensation) or for other specified cost categories detailed in the referenced paragraphs of C-700 Article 13. EJCDC’s rationale for allowing no fee markup on costs for using or renting construction equipment is presented below in this Commentary’s discussion of C-700 13.01.B.5.c.

C-700 11.07.C.2.e requires a 5% “markup” on Contractor credits for deleted Work. This is based on an assumed, typical Contractor fee markup of 15% for overhead and profit, further assumed to be comprised of 10% for overhead and 5% for profit. Because a contractor’s total business overhead cost is typically based on the contract prices of work awarded to the contractor, EJCDC believes the Contractor should be allowed to retain the overhead portion of its fee markup on deleted Work; but Contractor should not make a profit on deleted Work. The 5% “markup” on credits required by C-700 11.07.C.2.e thus allows the Contractor to keep the overhead portion of the deleted Work, but “gives back” the unearned profit on the deleted Work. An owner that seeks to “get back” the full, assumed fee markup (say, 15%) on deleted Work may be imposing a financial hardship on a Contractor’s ability to pay its general business expenses.

Example, C-700 11.07.C.2.e: After the Contract is underway, the Owner elects to narrow the scope of the Work by eliminating a storage shed from the design. As a result the Contractor will avoid incurring labor costs, materials costs, and Subcontractor costs (electrical subcontractor) totaling \$20,000 (net decrease in Cost of the Work). The amount of credit to Owner for the change will be 5% greater than the Cost of the Work that has been deleted from the Contract, to account for a surrender of anticipated profit:

- Reduction in Contract Price = $\$(20,000) \times 1.05 = \$(21,000)$

C-700 11.07.C.2.f addresses the situation in which both additions and credits are involved in a given change or Change Proposal. The clause states that the costs in each cost category will be determined and the appropriate fee markup will be applied to each separate type of cost (as opposed to adding the costs and applying a markup). For example, assume a Contract for the construction of a processing facility. The original design includes a garage area with three vehicle bays and an adjoining workshop. After the Contract is underway the Owner directs that a fourth vehicle bay be added to the Work, but eliminates the workshop. If the change in Contract Price is determined on a Cost of the Work basis, the following calculations will be conducted:

Cost Type	Cost of the Work	Fee (%) per C-700 11.07.C.2	Fee (\$)	Total
Construction field labor—additional vehicle bay	\$20,000	—	—	—
Construction field labor—deleted workshop	\$(3,000)	—	—	—
Construction field labor—net increase	\$17,000	15%	\$2,550	\$19,550
Materials and equipment costs—additional vehicle bay	\$12,000	—	—	—
Materials and equipment costs—deleted workshop	\$(2,000)	—	—	—
Materials and equipment costs—net increase	\$10,000	15%	\$1,500	\$11,500
Subcontracted Work (cost to Contractor)—additional vehicle bay	\$1,000	—	—	—
Subcontracted Work (cost to Contractor)—deleted workshop	\$(4,000)	—	—	—
Subcontracted Work (cost to Contractor)—net decrease	\$(3,000)	5%	\$(150)	\$(3,150)
Total change (increase) in Contract Price	\$24,000	—	\$3,900	\$27,900

Construction documents developed from EJCDC's C-Series Documents may be supplemented to account for the possibility of extreme fluctuations in the cost of materials or equipment after the Effective Date of the Contract. For additional information on this subject, refer to C-001 4.8, Comment: Construction Cost Fluctuations.

A graphical representation of C-700's provisions for resolving Contractor-initiated Contract modifications is presented in C-001 Exhibit B, Figure 5.

8. *C-700 11.08, Change of Contract Times*

The provisions of C-700 11.08 are brief and indicate that the only means for changing the Contract Times is via a Change Order. Entitlement to a change in the Contract Times may be affected by C-700 4.05, Delays in Contractor's Progress, and various other provisions.

9. *C-700 11.09, Change Proposals*

EJCDC added the term "Change Proposal" and related contract provisions to the EJCDC General Conditions in 2013. The basic intent of the Change Proposal concept is to emphasize the routine nature of many adjustments of Contract Price and Contract Times, and of many other issues that arise during a Project. These adjustments and issues often can be resolved amicably at an informal level, without the contentiousness that frequently plagues formal "Claim" procedures.

The term "Change Proposal" is defined at C-700 1.01.A.9. Under C-700 11.09.A, the Contractor may submit a Change Proposal to:

- ...request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents;
- challenge a set-off against payment due; or seek other relief under the Contract.

A Change Proposal may be submitted by the Contractor either in response to a proposal request received from either the Owner or the Engineer, or prepared and transmitted on the Contractor's own volition. Many provisions of the General Conditions contain prompts for Contractor's initiation of the Change Proposal procedures, if Contractor chooses to seek an adjustment or have an issue resolved. For example, the differing site condition provisions in C-700 5.04, Differing Subsurface or Physical Conditions, grant Contractor an equitable adjustment of Contract Times and/or Contract Price, under certain circumstances. If there is immediate agreement as to this adjustment, Owner and Contractor should enter into a Change Order that memorializes the adjustment. If there is no immediate agreement, the Contractor is prompted at C-700 5.04.E.4 to submit a Change Proposal within a prescribed time. Doing so will allow an opportunity to present Contractor's position and work out a resolution.

In accordance with C-700 11.09.B.1, each Change Proposal shall be complete and submitted promptly (not more than 30 days after the event giving rise to it). Each Change Proposal is to include a statement by the Contractor that the Change Proposal is complete and that the amount and time requested are the entire adjustment to which the Contractor believes it is entitled. Engineers or owners who utilize "Change Proposal" forms, which are not furnished by EJCDC, should ensure that such forms are appropriate and comply with C-700 11.09 and the rest of the Contract Documents. When CSI MasterFormat™ is used for organizing the Project Manual, procedural requirements for Change Proposals, possibly including a "Change

Proposal” form and proposal request form, will typically be specified under *Section 01 26 00 Contract Modification Procedures*.

The Engineer reviews the Change Proposal and renders a written decision; the Engineer may approve the Change Proposal in whole or in part, deny it, notify the parties that the Engineer is unable to render a decision, or take no action and make no decision within 30 days (the latter two of which are construed as denials). The Engineer’s decision on the Change Proposal is to be rendered in a timely manner (within 30 days) and the results of the Engineer’s decision are binding on the parties unless one party elects to seek a different result at the next level: the Claims procedure under C-700 Article 12.

The result of an Engineer’s approval of a Change Proposal will typically be an appropriate Contract modification in accordance with C-700 11.01—typically a Change Order. Change Proposals may, however, also be used as a mechanism for negotiating changes that are ultimately paid under a contingency allowance under C-700 13.02.

Change Proposals, by definition, are requests submitted by the Contractor. The Owner has other means of engaging in project-level resolution of issues, and can if necessary protect its interests through the use of set-offs against progress payments, pending further discussion and resolution of issues, or in extreme cases by filing a Claim (see discussion under Article 12).

The Change Proposal process is intended to be used during construction, while the Engineer is still involved in the Project. C-700 11.09.D notes that the Contractor may not submit any Change Proposals after final completion. Disputes that arise after that point are addressed under the Claims process, as indicated at C-700 12.01.A.4.

A graphical representation of C-700’s provisions for resolving Change Proposals, Claims, and disputes is presented in C-001 Exhibit B, Figure 7.

L. C-700 ARTICLE 12—CLAIMS

1. *Narrowing of the Definition of “Claim”*

Users of the C-Series documents who are familiar with pre-2013 editions (2007, 2002, 1996, and earlier) of C-700 know that as of 2013 EJCDC narrowed and restricted the definition of a Claim, and changed the procedures for resolving Claims. Under earlier editions the term “Claim” broadly applied to any demand or assertion by one party against the other. All Claims under the prior editions were to be submitted to the Engineer for resolution, under a formal set of Claim procedures. As of the 2013 edition of C-700, and continuing with the 2018 edition, Claims are made directly between the Owner and the Contractor, with no involvement of the Engineer, and the term Claim applies in three limited ways:

- a. First, as to the Contractor and the Owner, a Claim is the next step in the dispute resolution process if the Change Proposal procedure does not result in an acceptable outcome; thus if either the Owner or the Contractor elects to contest the Engineer’s Change Proposal decision, the dissatisfied party must file a Claim.
- b. Second, as to the Owner only, Owner may initiate a Claim for routine issues such as contesting the Engineer’s initial decision regarding the acceptability of a portion of the Work (the Contractor, by contrast, pursues resolution of such issues in the Change Proposal process discussed under C-700 11.09 above.) Most construction project “claims” in the generic sense are Contractor initiated or driven. The expectation is that

because of the close working relationship between the Owner and the Engineer, and because of the many practical options and leverages available to the Owner (most obviously, its control of the payment process), the Owner's use of a Claim as to routine matters would be relatively infrequent.

- c. Third, if the Work has been completed and the Engineer has recommended final payment, then any further disputes are handled under the Claims process. C-700 12.01.A.4.

It is EJCDC's expectation that in most cases a Claim, under the 2013 and 2018 editions, and moving forward, will be viewed as a significant and exceptional Project event, resulting in the involvement of higher-level decision-makers within the Owner's and Contractor's organizations. This involvement can often ease the impasse that has occurred at the field level and lead to a prompt resolution.

2. *Evolution of Engineer's Role in Claims*

As indicated above, starting with the 2013 Edition of C-700 and continuing with the 2018 edition, the Claims resolution process no longer involves the Engineer being placed into the challenging position of attempting to serve as an impartial arbiter of serious disputes between the Owner and the Contractor. Rather, Claims are made directly between the two parties. In most cases the Engineer will already have had input into the issue, during the Change Proposal process or otherwise. As stated in C-700 10.06, Decisions on Requirements of Contract Documents and Acceptability of Work, Engineer's decisions on Change Proposals and similar issues should be rendered without partiality to Owner or Contractor. It is hoped that the more routine nature of Change Proposals, and the availability to both parties of an appeal to a next level (Claims level) that is short of litigation/arbitration, will make it easier for the Engineer to render such decisions with genuine impartiality.

Note that although the Engineer is not a decision maker at the Claims level, there is no reason that the Engineer cannot continue to be involved, presumably by providing technical assistance to its client, the Owner. EJCDC suggests that the individuals in the Engineer's organization that reviewed and rendered a decision on the Change Proposal should, optimally, not be the only people assisting or advising the Owner with respect to a Claim on the same issue. Claim resolution assistance may be enhanced by involving one or more of the Engineer's experienced staff members or executives who are not part of the Engineer's Project team on a day-to-day basis.

3. *Claims Procedures*

The following paragraphs discuss the procedures applicable to Claims under the 2018 General Conditions:

- a. To be valid, Claims should be submitted in compliance with the procedures and time frames stipulated in C-700 12.01, Claims, and delivered in accordance with the requirements of C-700 18.01, Giving Notice.
- b. C-700 12.01.B stipulates a time limit for filing a Claim, as follows: "promptly (but in no event later than 30 days) after the start of the event giving rise thereto." EJCDC believes that the time for submitting a Claim can be properly interpreted as beginning on the date of the conclusion of the Change Proposal process under C-700 11.09. If it is desired to change the time limits relative to filing and supporting Claims, make the appropriate changes in C-800 SC-12.01.B, Submittal of Claim.

- c. The underlying rationale for imposing time limits on initiating the Change Proposal and Claims process is that each Change Proposal and Claim should be brought forward in a timely manner when it arises, so that each may be resolved based solely on its own merits. Delaying the resolution of Change Proposals and Claims, and aggregating multiple items for resolution, often tends to detract from resolving a Change Proposal or Claims on its specific, individual merits.
- d. The Claims resolution process under C-700 12.01.C, Review and Resolution, does not stipulate any time limit in which the Claim must be resolved; the negotiation between the parties may take as long as the parties mutually desire. However:
- e. At any time after initiation of a Claim, by mutual agreement the parties may submit the Claim for mediation in accordance with C-700 12.01.D.
- f. If the receiving party does not respond to the Claim within 90 days, in accordance with C-700 12.01.F, Denial of Claim, the Claim is deemed to be denied in whole, unless the claiming party makes a timely written notice for final dispute resolution.

4. *Mediation; Claims Resolution*

Mediation is a non-binding dispute resolution process in which a neutral mediator attempts to facilitate the negotiation and settlement of the dispute. Mediation costs are to be evenly divided and paid by the Owner and Contractor regardless of the outcome of the mediation.

If the Owner during the contract drafting stage prefers an alternative to mediation as a means of resolving a Claim that is in dispute, or elects to specify a specific mediation process, such changes should be accomplished in C-800 SC-12.01.D.

Claims will be resolved by one of the following outcomes, as evidenced by the decision (written notice) of the party receiving the Claim:

- a. Approve the Claim in its entirety. In this event, the Claims resolution process concludes to the satisfaction of the parties.
- b. Approve part of the Claim and deny the balance of the Claim. As addressed in C-700 12.01.E, when such partial approval occurs, the receiving party's decision is final and binding on both of the parties unless, within 30 days, the party making the Claim makes written demand for final dispute resolution pursuant to C-700 Article 17.
- c. Deny the Claim in its entirety, either in writing or by not responding within 90 days (such lack of a response being deemed under C-700 12.01.F as a denial). Such denial will be final and binding on both of the parties unless, within 30 days of the denial (whether written or by the expiration of the 90-day time) the party making the Claim files a written notice demanding final dispute resolution under the provisions of C-700 Article 17.

Any demand for final dispute resolution is to be in writing, in accordance with C-700 12.01, C-700 Article 17, C-800 Article 17, and C-700 18.01. Final dispute resolution is discussed in this Commentary with respect to C-700 Article 17.

A graphical representation of C-700's provisions for resolving Change Proposals, Claims, and disputes is presented in C-001 Exhibit B, Figure 7.

M. *C-700 ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK*

1. *C-700 13.01, Cost of the Work*

As indicated in C-700 13.01.A, the Cost of the Work provisions of C-700 are important for two distinct reasons.

First, for contracts in which the entire compensation method is cost-plus-fee (such contracts are less common in public work than are stipulated price contracts), it is essential to define those costs that are compensable and those that are not. For this purpose, EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus-Fee), Paragraph 6.01, refers directly to C-700 13.01 to establish the basis for Cost of the Work reimbursement. (The Contractor's fee is established in C-525 7.01—the fee provisions of C-700 11.07.C do not apply when the entire Contract's basis of compensation is cost-plus-a-fee).

The second important purpose of C-700 13.01 is to determine the Cost of the Work when a Change Order is priced on a Cost of the Work basis, under C-700 11.07.B.3. This is a common means of pricing a Change Order. It is used if the exact price of the additional Work is difficult to determine in advance, and both the Owner and the Contractor are content to proceed on a Cost of the Work basis; and when there is disagreement over the price, and the Work has proceeded under a Work Change Directive.

The same General Conditions clauses—C-700 13.01.B and C—are used to determine Cost of the Work, regardless of which of the two distinct purposes is being served.

For comments regarding the determination of the fee that is usually added to the Cost of the Work, see this Commentary's discussion of C-525 (entire contract based on Cost-Plus-Fee) and C-700 11.07.C (for pricing Change Orders). C-700 13.01.D, Contractor's Fee, summarizes the determination of the fee under the two situations.

C-700 13.01 is organized into costs that are included (compensable) in determining the cost of the subject Work (C-700 13.01.B) and costs that are expressly excluded and are therefore non-compensable (C-700 13.01.C). Costs that do not fit within the included categories of C-700 13.01.B are not compensable for the purposes of C-700 13.01.

The primary categories of compensable costs are typical for the construction industry, and are self-explanatory: construction labor (C-700 13.01.B.1—note that safety managers and representatives are expressly included, as of 2018); materials and equipment that are incorporated in the Work (C-700 13.01.B.2); and Subcontractor costs (C-700 13.01.B.3).

C-700 13.01.B.5 allows compensation for certain types of miscellaneous work. As of 2018 this category expressly includes a portion of the cost of temporary materials such as excavation support (sheeting), plates, and scaffolding. Such items may be able to be used on subsequent projects, reducing the reimbursement. As a further limitation, regardless of rental costs or other factors, the compensation for such items will not be greater than the market value for purchasing them.

One of the typical cost elements in a Cost of the Work compensation determination is the cost of renting construction equipment. C-700 13.01.B.5.c.(1) addresses reimbursement of equipment rentals from third-party rental companies. For these rentals, the Owner retains the right to approve the rental agreement as to price. Most equipment rental cost disputes do not arise from third-party rentals, however; they arise from "internal" rentals from

Contractor itself or from companies that are owned by, or affiliated with, the Contractor. To reduce the potential for such disputes, C-700 13.01.B.5.c.(2) indicates that reimbursement for “internal” equipment rentals will be at the fair-market rates published in a specified equipment rental rate book. C-800 SC-13.01.B.5.c.(2) includes model language for specifying the rental rate book. C-800 SC-13.01.B.5.c.(2) is a mandatory Supplementary Condition if Contractor will seek reimbursement for internal rentals—the accompanying Guidance Notes present additional comments and information regarding equipment rental rates. Examples of equipment rental rate books include the *Rental Rate Blue Book for Construction Equipment* (Volumes 1 through 3), by EquipmentWatch (EquipmentWatch also publishes other guides as listed at www.equipmentwatch.com); some state departments of transportation (DOT), including the California DOT (CalTrans), publish equipment rental rates applicable within that state.

The Contractor is entitled to charge for Contractor-owned equipment (at the fair-market rental rates in the rate book indicated in C-800 SC-13.01.B.5.c.(2)) because when Contractor-owned construction equipment is at the Site, the equipment cannot be used by the Contractor on another project and thus is effectively “leased to the Project.”

C-700 11.07.C.2.d, when applicable, prohibits a Contractor’s fee on construction equipment costs because construction equipment is so often Contractor-owned, or owned by a Contractor subsidiary; the intent is to prohibit multiple levels of fee markups for construction equipment used in the Work. Another factor is that Contractor-owned construction equipment depreciation is typically a Contractor business overhead expense. Where the basis of compensation for the entire Contract is, however, Cost of the Work plus a fee (e.g., where C-525 is used for the Agreement), then C-525 7.01’s second alternative allows the parties to knowingly agree to a fee markup on supplemental costs (including construction equipment) indicated in C-700 13.01.B.5—or to fill in “zero” in the appropriate space in the Agreement.

Although prior editions of C-700 allowed compensation for Contractor-owned small tools, as of 2018, C-700 no longer allows such compensation. C-700 13.01.C.2. Such items are often part of a Contractor’s general business overhead expense or, in the case of hand tools, owned by the construction workers themselves. In many instances, these are often excluded from compensation in practice, especially in public work.

Although “small tools and hand tools” is a well understood construction term, the parties can provide objective definition by using the optional Supplementary Condition at C-800 SC-13.01.C.2, which states that a tool falls in the small tools and hand tools category if its cost, if purchased new, is less than \$500. The user is invited to modify the threshold amount.

2. C-700 13.02, Allowances

Allowances are a means of providing flexibility in a construction contract, although they also present some associated challenges. C-700 13.02 includes provisions for two alternative types of allowances: 1) Cash allowances, and 2) Contingency allowances.

Allowances need to be properly coordinated in the Bidding Documents, including the Instructions to Bidders, Bid Form, the Division 01 Specifications, and the individual Specifications sections affected by a particular allowance (refer to CSI’s SectionFormat™ for the location in Part “1 - General” where allowances are specified in a Specifications section). Allowances for a particular work item, such as cash allowances, require greater efforts for

proper coordination in the Bidding Documents, although even contingency allowances require care and coordination in properly written, well-coordinated construction documents. The type and amount of each allowance must be clearly indicated in the Bidding Documents and Contract Documents. It is important to state the allowance amount in as few locations as possible and, when stated in more than one location in the construction documents, the amounts should, obviously, not conflict.

At the time of Contract closeout, unused allowance funds, if any, are credited back to the Owner via a Change Order. The drawback of including allowances, particularly excessive allowance amounts, is that they drive up the price ultimately paid by the Owner due to the associated increases in the cost of the performance bond and payment bond.

An important step in the actual use of allowances is to designate a person (or persons) within the Owner's organization who authorizes the use of the allowances included in the Contract. EJCDC recommends that only an Owner's employee be specifically designated by the Owner as having authority to authorize use of allowances; as a general matter, EJCDC recommends against arrangements that put the Engineer in the position of spending the Owner's money. EJCDC also recommends that consideration be given to documenting each individual allowance authorization in writing. The Construction Specifications Institute publishes a useful allowance authorization form.

Before selecting the type of allowance for a given contract, the specifier should clearly understand the differences between cash allowances and contingency allowances, as well as the contractual provisions governing each. It is not uncommon for specifiers to specify "cash allowances" when a contingency allowance is, in fact, intended.

a. *Cash Allowances*

Like alternates, cash allowances are a means for the Owner to defer certain decisions on the scope of the Project until further information, such as pricing for other elements of the Work, is known. Cash allowances are stipulated amounts for anticipated purchases of materials or equipment. Cash allowances are addressed in C-700 13.02.B. Cash allowances cover the material cost for the selected product, but do not include the Contractor's installation cost, handling cost, or any additional overhead and profit. For this reason, cash allowances often require the Bidder to bid blindly on the installation and handling associated with products that are as yet not selected or specifically identified.

It is incumbent on the Owner to decide as early as possible after construction starts on the specific materials to be purchased with a cash allowance, to reduce the impacts on the construction Progress Schedule.

Cash allowances are addressed in C-200 13.06 and in C-410 3.01, and in related notes to users.

b. *Owner's Contingency Allowance*

C-700 13.02.C defines a contingency allowance as being "for the sole use of Owner to cover unanticipated costs." A contingency allowance essentially functions as a pre-funded Change Order account. This allows for an added degree of administrative ease in funding changes and maintaining the progress of the Work, because the Owner's project managers do not need to submit contingency-allowance Work items to the Owner's governing decision-making body, such as a city council, for approval. In some cases the governing body will prefer to maintain control over changes and thus will elect to not establish contingency allowances.

The cost of additional Work to be paid for under a contingency allowance is typically negotiated in the same manner as a Change Proposal. Contingency allowances included in the Contract Price typically allow the Contractor to invoice the full price of the Work to be paid for under the contingency allowance, including Contractor's overhead and profit.

Contingency allowances can either be incorporated into a larger lump sum bid/payment item, or be included in the construction documents as separate bid/payment items. Many engineers favor the latter approach because it decreases the likelihood for the Bidder to inadvertently omit the amount of the contingency allowance from a lump sum Bid item that contains costs for other Work. When a contingency allowance is incorporated as part of a "larger" lump sum item, it is necessary to specify the contingency amount only in the appropriate section of the Division 01 Specifications (e.g., *Section 01 21 00, Allowances*). If the contingency allowance is a separate bid/pay item, the amount of the allowance should be specified in *Section 01 21 00, Allowances*, and at the appropriate location in the Bid Form. As noted in C-001 3.5.C.5.e, the drafter of the Bidding Documents fills in the amounts for allowances.

3. C-700 13.03, Unit Price Work

Unit prices provide an effective and equitable method for paying the Contractor for specific types of Work that cannot be precisely quantified in advance of actual performance of the Work. Unit prices can be included in a Contract that includes items of lump sum Work (for example, unit prices might be used for the earthwork and crushed stone fill components of a contract for a new building or structure, with the remainder priced under a lump sum), in which case the total, final Contract Price, at the end of the job, would be the sum of the lump sum and the final price determination of the Unit Price Work (a term defined at C-700 1.01.A.48). For certain types of civil/site work, such as road construction, the entire Contract may be comprised of Unit Price Work.

Bid forms that include unit price items typically contain an estimated quantity for each unit price item. An example format for listing unit prices is presented in C-410, Bid Form. The estimated quantities serve two purposes: 1) To provide all Bidders with a uniform basis for planning their work; and, 2) To provide a uniform basis for the comparison of Bids.

During construction, the Unit Price Work eligible for payment each month is measured and established by the Engineer, based on contractual measurement criteria (typically established in the Specifications (such as *Section 01 22 00, Unit Prices*, and, when CSI *SectionFormat* is used for organizing the content of individual Specifications sections, in the "Price and Payment Procedures" Article in "Part 1—General" of the Division 02-49 sections where the associated Unit Price Work is specified). At the end of the Project, a final Change Order is signed to align the final quantities of Unit Price Work performed with the Contract.

Variations between the estimated quantities and the actual quantities encountered during the Work are to be expected, and in most cases the unit prices that have been agreed to will result in fair compensation for the Work. However, if the actual quantity varies dramatically from the estimated quantity, the unit price may no longer be reasonable—too high from the Owner's standpoint, or too low for the Contractor's. C-700 13.03.E provides for adjusting unit prices when the actual quantity of the Unit Price Work performed "differs materially and significantly from the estimated quantity." Specific safeguards are included to promote a mutually equitable final result.

Because of the difficulty in reaching agreement after the fact on what may be “material and significant,” some Engineers and Owners prefer to include a Contract clause that states that a re-evaluation of a unit price will be made if the quantity actually encountered varies by more than a fixed percentage (usually somewhere between 15 and 25 percent) from the estimated quantity. Such a clause is included in the Supplementary Conditions as C-800 SC-13.03.E; the Guidance Notes accompanying the clause may also be of interest.

N. *C-700 ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK*

The provisions in Article 14 regarding defective Work are dependent on a careful review of the definition of the modifying adjective “defective” in C-700 1.02.D. The criteria in the definition are objective, with the most fundamental point being that Work is defective if it does not conform to the Contract Documents (of which the Drawings and Specifications will be the most relevant).

1. *C-700 14.01, Tests and Inspections*

The Contract Documents should allocate testing responsibilities (including responsibility for testing costs) between Owner and Contractor. C-700 14.02.B specifies that Owner is responsible for testing that is expressly allocated to Owner by the Contract Documents; this allocation may be made in Division 01 of the Specifications or elsewhere. Under C-700 14.02.D, all testing obligations that are not expressly allocated to the Owner default to Contractor.

A common approach used to allocate testing duties and costs is that the Contractor pays for tests necessary for approval or acceptance of materials and equipment (including but not necessarily limited to shop tests at the manufacturer’s facility), and the Owner pays for quality control testing at the Site (except for Site testing that is required by the Supplier but is not required by the Contract Documents).

During the design phase, the Owner and Engineer should consider that, when assigning cost responsibility for tests and inspections, the 2006 and later editions of the model International Building Code, versions of which are in effect throughout the United States and its territories, require that the Owner retain the services of the entity that will perform code-required “special inspections” (including associated testing).

The tests referred to in C-700 14.02.D are primarily quality assurance and quality control tests of items furnished by the Contractor, Subcontractors, and Suppliers and are customarily required under the Divisions 02 through 49 Specifications. Such tests may be either: 1) at the manufacturer’s shop or factory, 2) performed on the installed materials or equipment at the Site, or 3) both in the shop and at the Site.

The additional specific requirements for payment for each such test should appear in the Division 01 Specifications. Customary conditions precedent to payment are indicated in C-700 15.01.C.2.

O. *C-700 ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD*

In accordance with EJCDC® N-122/AIA® A521™, Uniform Location of Subject Matter (2012 Edition):

- the fundamental terms of the agreement between the Owner and the Contractor regarding Contract Price and Contract Times, and the basic provisions regarding payment, provisions on guaranteed maximum price (when applicable), sharing of cost savings or incentive compensation (when applicable), provisions for liquidated and special damages, and provisions on retainage (including changes to retainage upon partial satisfactory completion; federal, state or local retainage requirements; and other arrangements in lieu of retainage), all should be located in the Owner-Contractor Agreement (see EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price), and EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus-Fee)).
- Provisions regarding the procedures for making payment applications and related matters should be located in the General Conditions (see C-700 15.01, Progress Payments, C-700 15.02, Contractor’s Warranty of Title, and C-700 15.06, Final Payment.) Revisions to these provisions may be made in the Supplementary Conditions.
- Language to further expand on the provisions of C-700 Article 15, such as additional details for the processing or contents of Applications for Payment should be specified in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, detailed requirements for progress payment procedures will typically be located in *Section 01 29 76, Progress Payment Procedures*.

Because the provisions regarding completion of the Work are so closely tied to payment, they are also located in C-700 Article 15.

1. *C-700 15.01.A, Basis for Progress Payments*

Any change in the requirements with respect to the Schedule of Values should appear, as applicable, in C-800 1.01.A.36 (regarding the definition of “Schedule of Values”), C-800 SC-2.03 and C-800 SC-2.05 (regarding initial submittals and acceptance of schedules), and/or in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, detailed requirements for the Schedule of Values will typically be located in *Section 01 29 73 Schedule of Values*. C-700 2.05 *Acceptance of Schedules*, provides that the Schedule of Values be finalized and accepted by the Engineer before the Contractor’s first Application of Payment.

2. *C-700 15.01.B, Applications for Payment*

C-700 15.01.B requires that the Contractor’s Applications for Payment be supported by “such supporting documentation as is required by the Contract Documents.” It is important to clarify for the parties and the Engineer what supporting documents, if any, Owner will require with each Application for Payment. Language for this purpose will typically be placed in the Division 01 Specifications, such as *Section 01 29 76, Progress Payment Procedures*.

C-700 15.01.B.2 includes provisions for the Contractor to request payment for materials and equipment that are not yet incorporated into the Work, but are properly stored at a location mutually agreeable to the parties. As stated, an Application for Payment for materials or equipment so stored must be accompanied by documentation:

- a. establishing that Contractor has paid for the materials in full,
- b. upon request, warranting that Owner has received the materials and equipment free and clear of all Liens, and
- c. evidence that the materials and equipment are covered by appropriate property insurance or by other arrangements to protect Owner's interests.

One of the arrangements mentioned in C-700 15.01.B.2 for protecting Owner's interests in the stored materials is a warehouse bond. This is a surety bond that guarantees that goods stored in the warehouse will be discharged from the warehouse upon furnishing of a receipt. In such bonded warehouses, upon entry of the goods into the warehouse, the entity shipping the goods (e.g., Supplier or its shipper) and warehouse proprietor incur responsibility under the warehouse bond for the duration that the goods are stored in the warehouse. While in the bonded warehouse, the goods may be accessed for required maintenance, such as lubrication, rotation, and inspection. While a warehouse bond provides the Owner some assurance that the storage location is properly maintained and secured, and is backed by a surety, it comes with an associated cost.

Regardless of whether a warehouse bond is required, when materials or equipment are stored and application for payment is made, it is usually advisable for a representative of the Engineer (and the Owner, if desired) to visit the storage location to verify the presence, quantity, and type of goods stored, and the conditions of storage. In the event of long-term storage, periodic visits to the storage location may be advisable.

3. *C-700 15.01.C-E: Review of Payment Applications; Payment and Reductions*

C-700 15.01.C provides that the Contractor's Applications for Payments will be reviewed and acted upon by the Engineer within 10 days, and C-700 15.01.D provides that, within 10 days after presentation to the Owner of the Application for Payment with the Engineer's recommendation regarding payment, the recommended amount will become due and payable. Any change in these important time periods should be made in C-800 SC-15.01.

Provisions for the payment of interest on monies not paid when due are included in the Owner-Contractor Agreement (see C-520 6.05 and C-525 10.05). If these provisions are to be changed, the changes should be made in the Owner-Contractor Agreement and not in the Supplementary Conditions or the Division 01 Specifications.

C-700 15.01.C.2, 3, and 4 inform the parties of the scope and limits of the Engineer's review of the Application for Payment, and of a recommendation of payment. For example, in recommending payment the Engineer does not represent that it has made exhaustive inspections of the Work that is the subject of the Application.

In C-700 15.01.C.6, the Contractor is advised that the Engineer is authorized to protect Owner's interests by recommending reductions in payment (set-offs), based on specified criteria. The basis for such set-offs may be an occurrence on the Project that is not within the narrow scope of the specific Application for Payment. In addition, the Owner itself may have knowledge of reasons for set-offs (C-700 15.01.E).

A portion—often a sizable portion—of a progress payment made to Contractor may ultimately be owed to Subcontractors, Suppliers, or employees of the Contractor. Contractor has an obligation to take the proceeds and pay those who are owed for their contributions to the progress of the Work. The Owner and Engineer should be able to rely on the Contractor’s certifications under C-700 15.01.B.3 that it has been using prior Contract payments to pay its obligations. As reflected in C-700 15.01.C.4.d, it is not a customary responsibility of the Engineer to furnish auditing services to give the Owner assurance as to how or for what purpose the Contractor has used the money paid on account of the Work performed.

Some owners withhold payments on an ad hoc basis because of concern about the Contractor’s apparent failure to pay lower-tier parties. EJCDC supports the principle that in most situations the Owner and Engineer should refrain from intervening in the dealings between the Contractor and those that Contractor has employed or retained to do the Work, under Contractor’s supervision and control. Rarely do the Owner and Engineer have access to all the facts regarding lower-tier obligations and performance issues. Note, however, that a lien filed by a Subcontractor or Supplier typically creates direct risks for the Owner’s property or funds, and is an express reason for imposing a set-off against payment, pursuant to C-700 15.01.E.1.k.

4. *Optional Clause, C-700 Article 15: Adjustment of Applications for Payment when the Basis of Compensation is Cost-Plus-Fee*

The potential exists that, when compensation of the Work is on the basis of Cost of the Work plus a fee (when C-525 is used for developing the Agreement), the amount payable based on labor performed and materials and equipment furnished and installed to date may outpace the actual progress of the construction, or may be out of alignment with the cost of the remaining Work or the Guaranteed Maximum Price. Accordingly, C-800 SC-15.01.F includes optional, model language to allow the Owner or Engineer to reduce payments to the Contractor when the price payable to date is inconsistent with progress. For more on this optional provision, see the Guidance Notes at C-800 SC-15.01.F.

5. *C-700 15.01.B.1, 15.01.C.1, 15.01.D.1: Summary of Time Frames for Progress Payments*

C-520 6.02 and C-525 10.02 indicate the day of the month when payment will be due.

- a. According to C-700 15.01.B.1, the Contractor is to submit the Application for Payment 20 days prior to the date indicated in the Agreement.
- b. In accordance with C-700 15.01.C.1, the Engineer is allowed 10 days to review the Application for Payment.
- c. In accordance with C-700 15.01.D, the Owner has 10 days to make payment after receipt of the Engineer’s recommendation.

6. *C-700 Article 15 Comment: Obtaining Consent of Surety*

The Owner should strive to keep payments to the Contractor in close alignment with the payment obligations in the Contract and with actual construction progress at the Site. Both the Owner and the surety rely on a sensible balance between the progress of the Work and the amount paid to the Contractor. In cases when the Owner and the Contractor agree that the Owner will make payments in excess of that required under the Contract Documents—and such payments are sometimes justified, for example, a partial release of retainage for the payment of an early-completion Subcontractor—the Owner should require the Contractor to

furnish consent of the surety to the special payment. Requirements on particular consent of surety forms and procedures are sometimes included in the Division 01 Specifications. An example of such a form is AIA® A707 ATM, Consent of Surety to Reduction in or Partial Release of Retainage. When CSI MasterFormat™ is used for organizing the Project Manual, requirements regarding consent of surety for payments in excess of that required by the Contract Documents will typically be located in either *Section 01 29 76, Progress Payment Procedures*, or *Section 01 77 19, Closeout Requirements*. For additional information on this topic, see this Commentary’s discussion below regarding C-700 15.06, Final Completion.

7. C-700 15.03, Substantial Completion

It is sometimes desirable to revise the standard requirements for Substantial Completion, to expand the provisions regarding Substantial Completion to incorporate Project-specific requirements, or to add more details to clarify the words “can be utilized for the purpose for which it is intended.” An example would be when some other entity (such as a construction manager or construction coordinator), in addition to the Engineer, will be required to sign the final Certificate of Substantial Completion. Revisions to the provisions in C-700 15.03 may be made in C-800 15.03. Additional administrative or procedural requirements concerning Substantial Completion should appear in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, additional administrative or procedural requirements regarding Substantial Completion will typically be in *Section 01 77 19, Closeout Requirements*.

If the Contractor contends that it has attained Substantial Completion, it so notifies the Owner and the Engineer. C-700 15.03.A. The Engineer then conducts an inspection. C-700 15.03.B. If the Engineer determines that the Work is not substantially complete, the Contractor will need to do additional Work and then repeat the notification process; a second inspection by the Engineer will follow. The Supplementary Conditions contain an optional clause that allows the Owner to charge the Contractor for the costs of the re-inspection by the Engineer. C-800 15.03.B.1.

If the Engineer concludes that the Contractor has attained Substantial Completion, the Engineer will prepare a preliminary certificate of Substantial Completion and an initial draft of the punch list of construction tasks to be completed by the Contractor, and furnish these documents to the Owner. C-700 15.03.C explains the review and revision process that follows, leading to Engineer’s issuance of the final certificate of Substantial Completion. Note that EJCDC®C-625, Certificate of Substantial Completion, is used for both the preliminary certificate and the final certificate—see check-boxes at line 1 of C-625.

8. C-700 15.04, Partial Use or Occupancy

Provisions are made in C-700 15.04 for the Owner to utilize a substantially completed part of the Work that has been specifically identified in the Contract Documents, prior to Substantial Completion of all the Work. If such utilization is known in advance, during the design stage, the description or limits of the part of the Work to be so utilized should be indicated in the Division 01 Specifications. C-700 15.04 also allows Owner to use or occupy a portion of the Work upon request made during the course of the Project, provided that the portion of the Work “can be used by Owner for its intended purpose without significant interference with Contractor’s performance of the remainder of the Work” and other criteria are satisfied.

In any partial occupancy situation, one critical task is to ensure that both the portion of the Work to be occupied and the portion that is under construction are covered against loss by a property insurance policy, either the builder's risk or a permanent facilities policy. (See C-700 6.04.D.)

When the early acceptance of a substantially completed part of the Work is anticipated during the contract drafting stage, EJCDC recommends that consideration be given to extending the correction period (see C-700 15.08) for that part of the Work, so that the correction period is the same for all portions of the Work. If the early completion and occupancy was not anticipated and the Contract Documents do not provide for a correction period longer than one year, the parties may nonetheless agree to such an extension of the correction period for that part of the Work, and a Change Order recognizing the extension should be executed by the parties.

Other factors for consideration in the case of early completion and occupancy include the time period of any special guarantee applicable to that part of the Work; the period of time after Substantial Completion of a finished part of the Work during which the performance bond, if any, will be applicable to that part of the Work; and any issues regarding access or utilities.

Prior to commencing partial utilization of a portion of the Work, in accordance with C-700 15.04, the Engineer should be so notified and perform an inspection for Substantial Completion for that part of the Work, in accordance with the procedures indicated in C-700 15.03 and elsewhere in the Contract Documents. The culmination of this process, prior to partial utilization, should be issuance of a Certificate of Substantial Completion for that portion of the Work. All specific agreements regarding insurance, utilities, access, and so on should be documented in the Certificate of Substantial Completion if possible.

9. C-700 15.05, *Final Inspection*

C-700 15.05 sets forth requirements for the Engineer's final inspection of the entire Work to verify that the Work is fully complete and ready for final payment. The Contractor initiates the procedure for such inspection by furnishing written notice that the entire Work is complete and ready for final inspection.

C-700 15.05 requires that the Owner and the Contractor accompany the Engineer during the final inspection. If other entities, such as a construction manager or construction coordinator, are also to participate, such requirements should be at C-800 15.05. Additional administrative or procedural requirements associated with the final inspection should be indicated in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, additional administrative or procedural requirements regarding the final inspection will typically be in *Section 01 77 19, Closeout Requirements*.

10. C-700 15.06, *Final Payment*

C-700 15.06.A.1 allows the Contractor to apply for final payment if it has (a) "in the opinion of the Engineer" completed any remaining corrective work identified during the final inspection, and (b) submitted operations and maintenance manuals and other items required for completion. There is no formal authorization process—the Contractor and the Engineer should communicate regarding the status of completion informally at the field level. If the Contractor submits the "final" application for payment prematurely, the Engineer will return the application to the Contractor, as indicated in C-700 15.06.B.

C-700 15.06.A.2 requires that the Contractor's final Application for Payment "be accompanied by all documentation called for in the Contract Documents." It is important that the Owner, the Contractor, and the Engineer know in advance of the final Application for Payment what will be required. All the documentation that the Owner will require for Contract closeout should be indicated in the Contract Documents; such requirements should appear in C-800 SC-15.06, or in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, additional documents required prior to or with the final Application for Payment may be specified in *Section 01 77 19, Closeout Requirements*.

C-700 15.06.A.2.b requires that the Contractor's final Application for Payment be accompanied by, among other things, consent of the surety to final payment. Such consent may be provided by letter or on a form such as *AIA® G707™ Consent of Surety to Release of Final Payment*.

The purpose of requiring consent of the surety is to ensure that the Owner's actions do not inadvertently prejudice the rights of the surety. Sureties expect to be able to utilize project funds as yet unpaid to the Contractor, including retainage, to offset any amounts that the surety may have to pay to correct a Contractor default. Sureties therefore do not want the Owner to overpay the bonded Contractor. Early payments and overpayments (such as, but not limited to, a premature release of retainage or a release of final payment before final payment is due) can harm the surety, and the surety can claim that an early payment or overpayment has impaired its suretyship status. An unjustified payment by the Owner can cause the surety's bond obligation to be discharged in whole or in part (up to the amount of demonstrated prejudice). By having the Owner (through the Contractor) obtain the surety's consent, the Owner can be assured that the surety considers the release of retainage or the final payment to be proper and can avoid the potential of the surety claiming a discharge of its bond obligation.

While C-700 15.06.A.2.b explicitly requires a written consent of surety to final payment, the C-Series documents do not require submittal of consent of the surety to routine progress payments and contractually-agreed reductions in retainage. If Owner's risk advisors recommend requirements for the Contractor to furnish intermediate surety consents, such requirements are typically located in the Division 01 Specifications. When CSI MasterFormat™ is used for organizing the Project Manual, requirements regarding consent for surety for payments in excess of that required by the Contract Documents will be located in either *Section 01 29 76 Progress Payment Procedures*, or *Section 01 77 19 Closeout Requirements*. Requirements for the use of a particular form for consent of surety to final payment will typically be in *Section 01 77 19 Closeout Requirements*. Refer to C-001 6.3.O.6 above for additional commentary regarding consent of the surety to a reduction in or partial release of retainage.

Laws regarding liens and lien waivers vary significantly from jurisdiction to jurisdiction. The Owner's requirements regarding lien waivers and similar documents should be identified for the Project and appropriate provisions included in either C-800 SC-15.06 or the Division 01 Specifications, as appropriate.

Lien waiver forms are often conditional based on the final payment amount stipulated in the waiver of lien form for the specific Subcontractor or Supplier. When the Owner requires specific documentation that final payment was made to the Subcontractors and Suppliers, a final waiver of lien should be required after the Subcontractors' and Suppliers' receipt of final

payment, or the Owner should issue payment jointly payable to the Contractor and each Subcontractor or Supplier to whom payment is due. Such requirements, when necessary, should be in either C-800 SC-15.06 or the Division 01 Specifications.

C-700 15.06.B discusses the Engineer's review of the final payment application, and the time limits for making a recommendation. If the Engineer concludes that the Work is complete and all related documentation has been submitted, Engineer will recommend that the Owner make final payment. Under C-700 15.06.C, the recommendation of payment will be accompanied by Engineer's written notice that the Work is acceptable. As of 2018, EJCDC provides a form for this purpose, complete with standard provisions regarding the limits of Engineer's review of the Work, and the Contractor's continued responsibility for any Work that does not comply with the Contract Documents (for example, latent defects). The form, EJCDC®C-626, Notice of Acceptability of the Work, is discussed in this Commentary's Section 7.0, Administrative Forms.

11. *C-700 15.07, Waiver of Claims*

When the Engineer recommends final payment, the Owner will know whether the Work was completed (Substantial Completion and final completion) according to the Contract Times. If the Owner chooses to make final payment despite late completion by the Contractor, C-700 15.07.A provides that any right to subsequently pursue a claim for late completion is waived. However, as an exception to the rule, if a claim for late completion is already pending, or if the Owner expressly reserves its rights regarding a late completion claim, then making final payment will not result in a waiver of the late completion claim.

When seeking final payment, the Contractor will know whether it has any potential claims against the Owner. For example, the Contractor will know at that point whether Owner delayed the Contractor's progress, or whether the design was defective. If the Contractor accepts final payment, under C-700 15.07.B the Contractor waives any such potential claims, unless the Contractor has already preserved its rights by filing a Claim or appealing an adverse decision on a Claim.

12. *C-700 15.08, Correction Period*

When there is a defect in the Work, the Owner has many potential legal remedies. If the defect is found during the Contract's Correction Period, the Owner is entitled to have the Contractor return to the Site and fix the problem. In legal terms this is a form of "specific performance," a remedy in which action is required of the Contractor.

The Correction Period "specific performance" remedy supplements other Owner rights. If those other rights are successfully enforced, they will result in the Contractor being required to pay the Owner monetary damages. Specific performance will in many cases be a better remedy than money damages. The Contractor will often be able to correct the problem efficiently, with minimal disruption of the Owner's facility, because of the Contractor's familiarity with how the Work was constructed. If the defective Work was installed by a Subcontractor, the Contractor will usually be able to summon the Subcontractor back to the Site to lend its expertise in correcting the problem.

It is common but incorrect to refer to the correction period remedy at C-700 15.08 as "the one-year warranty" or the "guarantee period." These incorrect terms may cause confusion. Most of the Contractor's obligations under the Contract (including but not limited to the Contractor's commitments under the General Warranty and Guarantee at C-700 7.17) do not

expire after one year; they apply as long as the applicable statute of limitations allows Owner to enforce them. Only the “specific performance” component of the Owner’s rights has a contractual time limit.

The correction remedy supplements other Owner rights. A defect in the work is a breach of contract: for example, a breach of a specific contract requirement in the Drawings or Specifications, or of the Contractor’s obligation at C-700 14.03.A to assure that the Work not be defective. The defect likely also constitutes a breach of the Contractor’s General Warranty and Guarantee at C-700 7.17. For some portions of the Work, such as the roof or equipment items, there may be express warranty requirements. In some cases an indemnification clause, performance bond (especially during the first year after completion), or warranty bond may come into play. As a general matter, after the completion of the Work, a successful pursuit of the Contractor for a breach of any applicable contract provision will result in a monetary judgment against the Contractor.

Any requirement that the Contractor furnish special guarantees of materials or equipment are to appear in the Specifications. Note that C-700 7.04.B requires that special warranties and guarantees on materials and equipment incorporated into the Work are to run to the benefit of the Owner. Legally effective warranties and guarantees are difficult to draft; the advice of the Owner’s legal counsel is suggested. Special guarantees are often provided in response to C-700 7.06.C (regarding substitutes) or are specified in the Divisions 02 through 49 Specifications.

To summarize, C-700 15.08 is not a limitation of the Contractor’s liability, or an exclusive remedy; rather it provides an additional remedy available to the Owner. See also C-700 18.03 Cumulative Remedies and C-700 18.06 Survival of Obligations, which explain that warranties and other commitments survive final payment, completion, and acceptance of the Work, or termination of the Contractor’s services.

It is always in the Owner’s best interest to act swiftly if a defect is found in the completed construction. The Contractor should be contacted and requested to remedy the problem. As of 2018 this point is contractually emphasized in C-700 7.17.B (notice of defect under the General Warranty and Guarantee clause) and in C-700 15.08.B (notice of defect under the Correction Period clause). These notice provision require the Owner to give the Contractor notice of a defect within 60 days of its discovery.

Some Owners may wish to lengthen the Correction Period. This can be accomplished by using the optional Supplementary Condition at C-800 15.08.G. As more fully explained in the Guidance Notes that accompany the Supplementary Condition, it is common to buttress the extended Correction Period with a Warranty Bond. See the optional C-800 SC-6.01.B.1-3, requiring a Warranty Bond, and concerning and the accompanying Guidance Notes, and this Commentary’s Section 8.0, Warranty Bond.

P. C-700 ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

1. C-700 16.01, Owner May Suspend Work

As indicated in C-700 16.01, the Owner may suspend the Work or a part of the Work for up to 90 consecutive days, by given written notice in accordance with C-700 18.01. To order the Contractor to resume the Work, the Owner is to furnish written notice to that effect. If such a suspension occurs and affects the schedule, costs, or both, the Contractor has the express

right to an adjustment in the Contract Price, Contract Times, or both, by filing a Change Proposal in accordance with the Contract Documents. To foster timely resolution of issues regarding price and time, C-700 16.01 requires that such a Change Proposal be submitted within 30 days of the date fixed for the resumption of Work.

2. *C-700 16.02, Owner May Terminate for Cause; and C-700 16.03, Owner May Terminate for Convenience*

The Owner's termination rights under C-700 16.02 and C-700 16.03 include both the right to terminate for cause (most commonly the Contractor's failure to carry out the Work as required by the Contract Documents and the accepted Progress Schedule), and to terminate for Owner's convenience. As its name implies, "termination for cause" may result when the Contractor has failed to perform in a manner consistent with the Contract Documents. In contrast, "termination for convenience" is when the Owner elects to not continue with the Contract for reasons that are not the fault of the Contractor. For example, the Owner may elect to terminate for convenience if external circumstances have rendered the need for the Project unnecessary, or if the Owner finds that it does not have the funds to complete the Project.

The Owner may terminate for cause for specific reasons, as set forth in C-700 16.02.A; however, several of the reasons are sufficiently broad to allow a fair degree of latitude for the Owner contemplating the drastic recourse of terminating for cause. EJCDC recommends that, when terminating for cause, the Owner's reasons be specific, documented, and justifiable under both the Contract Documents and in terms of reasonableness. The decision to terminate for cause should never be undertaken lightly because it frequently results in claims, disputes, and additional costs to both parties; in addition, it is an act that will typically remain on a Contractor's record and could be a factor that affects the Contractor's ability to obtain future work from other owners.

As indicated in C-700 18.06, even when the Contract is terminated, the representations, indemnifications, warranties, and guarantees required under the Contract Documents, and continuing obligations of the parties under the Contract, will survive the termination.

In the case of a termination for cause, the Contractor is allowed to attempt to cure its performance lapses. If the Contractor is able to do so within the 7-day time limit indicated in C-700 16.02.D, the Contractor's services will not be terminated. If the Contractor does not cure its failures, the termination will be effective and the Contractor's entitlement to further compensation will be limited by the Owner's entitlement to a set-off for its completion costs—the damages sustained in retaining a replacement contractor and finishing the Project. If the Owner's cost to complete the Project after the termination exceeds the remaining balance of the Contract Price still held by the Owner at the time of termination, the Contractor must pay the difference to the Owner.

In accordance with C-700 16.02.F, when the Contract is terminated for cause, the Owner's other rights and remedies under the Contract Documents and under law are not abridged.

When a performance bond is furnished, the time frames and procedures for terminating for cause may be superseded by the provisions of the performance bond, as indicated in C-700 16.02.G. For example, C-610, Performance Bond, requires a meeting between the Owner, Contractor, and the surety, which is not required under the provisions of C-700 16.02.

In contrast with termination for cause, in the case of a termination for convenience, the Contractor is entitled to be paid for the Work performed in accordance with the Contract Documents through the effective date of the termination, including reasonable overhead and profit on the Work performed to date, as well as for any costs associated with shutdown and termination of subcontracts and purchase orders. However, even under a termination for convenience the Contractor is not entitled to recover amounts for the loss of anticipated (not yet earned) overhead, profit, revenue, or other economic loss resulting from the termination.

3. *C-700 16.04, Contractor May Suspend Work or Terminate*

C-700 16.04 empowers the Contractor to suspend the Work or terminate for cause under limited, specific circumstances, including when the Owner has suspended the Work for more than 90 consecutive days for causes over which the Contractor has no control, and for reasons of non-payment.

C-700 contains no provision allowing the Contractor to terminate for convenience.

Q. *C-700 ARTICLE 17—FINAL RESOLUTION OF DISPUTES*

As indicated in this Commentary's discussion of C-700 Article 12, Claims, the parties are encouraged to attempt to resolve Claims by mediation. If they do not attempt mediation, or if mediation is unsuccessful, and the Claim remains unresolved, each party has the option of proceeding to final resolution of disputes under Article 17. The time limits for exercising this option are set forth in C-700 12.01.E and C-700 12.01.F.

Article 17's dispute resolution provisions also apply to Owner-Contractor disputes that arise after final payment. It is EJCDC's view that it is pointless to require procedures such as submittal of Change Proposals, decisions by the Engineer, appeals, and Claims (as addressed in Article 12) after final payment.

If the Supplementary Conditions for the Project (C-800 SC-17.02) specify a dispute resolution process, such process will govern any final dispute resolution (with the exception that the Owner and the Contractor are welcome to mutually agree to use some other process). If no dispute resolution is included in the Supplementary Conditions, and the parties do not agree to a specific process, then the final dispute resolution process will be litigation in a court with jurisdiction.

One common dispute resolution process that can be specified in the Supplementary Conditions is arbitration. C-800 SC-17.02 presents model wording for final resolution of disputes by arbitration. Binding arbitration is a process in which private arbitrators, usually familiar with the parties' field (in this case, construction), decide the dispute. The arbitrators' decision is binding and is usually the final word in the dispute, because there are very few grounds for an appeal of an arbitration decision. The arbitration clause in C-800 is keyed to the arbitration services provided by the American Arbitration Association; there are various other entities that provide such services, if the user chooses to customize the clause.

Note that in many cases the parties will have already attempted to mediate the dispute. If such is not the case, the administrator of the arbitration or the parties themselves may conclude that mediation is worth trying before beginning formal arbitration proceedings.

Other processes are available for final dispute resolution, such as a dispute review board; non-binding arbitration; mini-trial; and, where enabled by law, judicial reference. The C-Series

documents do not attempt to provide model language for all the possible alternative dispute resolution options.

Regardless of the type of final dispute resolution selected, EJCDC suggests that parties engaged in final dispute resolution ensure that any arbitration agreements or other agreement for final dispute resolution procedures include a specific provision that the arbitrator or other final dispute resolution facilitator will base its decision on the requirements of the Contract Documents, and that the reasons for the arbitrator/facilitator's decision will be specifically indicated to the parties in writing.

A graphical representation of C-700's provisions for resolving Change Proposals, Claims, and disputes is presented in C-001 Exhibit B, Figure 7.

R. *C-700 ARTICLE 18—MISCELLANEOUS*

This article contains important legal and administrative terms, such as:

1. *Requirements* for giving formal notices under the Contract (as of 2018, notice may be given by e-mail, if proper wording appears in the subject line);
2. How to compute contractual time periods;
3. A blanket statement regarding cumulative remedies;
4. A blanket statement that the Owner is not liable to the Contractor for any losses sustained on other projects of the Contractor;
5. A provision relative to non-enforcement of any provision of the Contract Documents not being construed as a waiver of that provision;
6. A statement that the parties' obligations under the Contract (including but not limited to representations, indemnifications, warranties, and guarantees) will survive final payment, acceptance, and termination;
7. A stipulation that the laws of the state in which the Project is located will govern the Contract;
8. A provision limiting assignment of rights or proceeds under the Contract, subject to specific exceptions ;
9. Recognition that the Contract is binding on the successors of the Owner and the Contractor; and
10. A statement that names of articles and paragraph headings in the General Conditions are not themselves part of the General Conditions.

7.0 CONTRACT ADMINISTRATION FORMS

7.1 EJCDC® C-620, Contractor's Application for Payment

EJCDC® C-620, Contractor's Application for Payment form, is distributed as a Microsoft® Excel spreadsheet file. As the user enters payment data, the spreadsheet automatically calculates total amounts. The Application for Payment form tracks the Contract Price, including the net impact of Change Orders, and retainage. The terms of C-620, including the Contractor's certification of entitlement and the requirement of a recommendation of the Engineer, are coordinated with the payment provisions of C-700 Article 15.

C-620 is distributed as an Excel Template file. Each time a Template file is opened, it will open as a new ".xlsx" spreadsheet, and edits or revisions to it will need to be saved with a new file name. C-620 is an Excel workbook with one worksheet that is solely text serving as User Guidelines, plus four operable worksheets:

- A. Summary sheet, presenting the Contract Price (as adjusted by Change Orders), retainage, amount due via the current application, Contractor's certification, Engineer's recommendation, and other information.
- B. Progress estimate sheet for lump sum (stipulated price) items (e.g., "Schedule of Values").
- C. Progress estimate sheet for Unit Price Work.
- D. Stored materials summary sheet.

Each worksheet is "protected" so the formula fields are protected from inadvertent editing. The worksheets are not password-protected, so the user can modify them if necessary by navigating to Excel's "Review" tab and then clicking the "Protect" button to "unprotect" the worksheet.

All calculations in C-620 are rounded to two decimal places (i.e., monetary amounts are all rounded to the nearest cent).

In the "Work Completed" section of the Progress Estimate–Lump Sum Work sheet, Column C is requesting the totals of Columns C and D from page 2 of the previous payment application; on the Contract's first Application for Payment, this amount will be zero. A user can link separate workbooks (e.g., prior Applications for Payment) together to automate this, or manually enter the values from the previous Application for Payment.

Equipment and materials that have been stored but not incorporated in the Work are separately accounted for in both of the Progress Estimate worksheets (Column E) and in detail in a Stored Material Summary worksheet (fourth worksheet in the Application for Payment file) because of the possibility that such items are treated differently for retainage purposes—see C-520 6.02 and C-525 10.02. Therefore, data entered on the Stored Materials Summary sheet is not automatically carried over to the Summary sheet.

For additional instructions on using C-620, refer to the User Guidelines worksheet in C-620.

When initially setting up an Application for Payment for a given project, it is necessary to input data such as the Project name, and other information in the header, only on the first (Summary) sheet of C-620; the spreadsheet will automatically copy the information to the progress Estimate sheets and the Stored Materials Summary sheet. Pricing information should be entered on the appropriate Progress Estimate sheet (lump sum sheet, and/or unit price sheet), and the appropriate values will be automatically carried over to the Summary sheet.

7.2 *EJCDC® C-625, Certificate of Substantial Completion*

EJCDC® C-625 Certificate of Substantial Completion may be used to document the substantial completion of the Work as a whole, or of a specified part of the Work. Its terms are correlated with the provisions regarding Substantial Completion in C-700 1.01.A.42, C-700 15.03, and C-700 15.04. The form includes a location for noting any amendment of the allocation of responsibility set forth in the General Conditions for security, operation, safety, maintenance, heat, utilities, insurance, and warranties applicable to the substantially completed facilities. The certificate is to be issued by Engineer, and thus a place is provided for Engineer's execution. Contractor's and Owner's signatures are strictly acknowledgments of receipt of the certificate.

C-700 15.03.C describes a two-step process in which Engineer issues first a preliminary and then a final certificate of Substantial Completion. C-625 is to be used for both steps, and therefore includes a place to indicate whether the specific certificate and the associated list of uncompleted Work items is "preliminary" or "final." After Engineer furnishes a preliminary certificate under C-700 15.03.C, the Owner has a specified number of days to comment on the preliminary certificate. After consideration of the Owner's comments and changes, if any, to the certificate and the associated list of uncompleted Work items, the Engineer issues the final Certificate of Substantial Completion.

7.3 *EJCDC® C-626, Notice of Acceptability of Work*

C-700 15.06.C requires that if the Engineer recommends that the Owner pay the final Application for Payment, then in support of the recommendation the Engineer will also furnish to both the Owner and the Contractor a notice of acceptability of the entire Work, "subject to stated limits in the notice...." EJCDC® C-626, Notice of Acceptability of Work, is intended to be used to give the required notice.

EJCDC includes a sample of this form in Exhibit E (Notice of Acceptability of Work) in both EJCDC® E-500 Agreement Between Owner and Engineer for Professional Services, and EJCDC® E-505 Agreement Between Owner and Engineer for Professional Services—Task Order Edition. By doing so, the Owner and Engineer agree in advance to the limitations that will appear in the notice when Engineer issues it after construction.

Because EJCDC's Notice of Acceptability of Work form includes various terms and conditions on the Engineer's notice that represent full disclosure of the extent and limitations of the Engineer's notice, it is typically superior to using an ordinary letter or memorandum to document such acceptance. In particular, C-626 confirms that the Engineer's conclusions regarding the acceptability of the Work are a professional opinion, subject to the standard of care; that Engineer's knowledge of the status of the Work is limited by Engineer's scope of services during construction; and that Engineer's notice does not relieve Contractor of responsibility for compliance with the Contract Documents (thus, the notice does not excuse a latent defect found after the close-out of the Project).

7.4 *EJCDC® C-940, Work Change Directive*

A Work Change Directive is a statement issued to the Contractor ordering an addition, deletion, or revision in the Work. It does not change either the Contract Price or the Contract Times. A Work Change Directive is a defined term (see C-700 1.01.A.50) and is more fully described at C-700 11.03. A Work Change Directive functions as both an order to perform additional Work before its effects on price and time are known or agreed upon, and as a commitment to further administrative action. The effects on Contract

Price and Contract Time resulting from a Work Change Directive are to be documented in a subsequent Change Order, when such effects have been determined and accepted by the parties.

Work Change Directives are generally used when one or more of the following circumstances arises: 1) preliminary discussions about a proposed change indicate an impasse on the change's impact on price or time, or 2) it is essential to expedite the change for the good of the Project, or 3) pending agreement of the parties on a quantity for Unit Price Work. C-940 includes a place for the Owner to estimate the impact on Contract Price and Contract Times, but such estimates are expressly indicated as being “non-binding, preliminary” and the form allows the Owner to merely note “not yet estimated.” By proceeding with the Work as directed in the Work Change Directive, the Contractor is not agreeing to the estimated price or time changes (if any). The Contractor is not asked to sign the document.

Means of determining the effects of a Work Change Directive on the Contract Price include the same methods indicated for any change in the Contract Price, as indicated at C-700 11.07. It is not uncommon for the change in Contract Price associated with a Work Change Directive to be resolved on the basis of “Cost of the Work” (in essence time-and-materials, with a fee for overhead and profit).

For additional comments on Work Change Directives, see this Commentary's discussion of C-700 11.03.

Additional administrative procedures associated with Work Change Directives may be specified in the Division 01 Specifications, including specifically requiring the use of C-940. When the Project Manual is organized in accordance with CSI MasterFormat™, such requirements would typically be located under *Section 01 26 00, Contract Modification Procedures*.

7.5 EJCDC® C-941, Change Order

A Change Order is a term defined at C-700 1.01.A.8, and is further described at C-700 11.02 and various other provisions of the General Conditions. The Change Order form requires a description of the modification to the Contract Documents (for example, a change in the Work, depicted in a supplemental Drawing) and resulting effect on the Contract Price, or Contract Times, or both. A Change Order is signed by the Owner and Contractor (under limited circumstances, a required Change Order will be effective even if one of the parties refuses to sign it—C-700 11.02.B). The Engineer's signature is required on the Change Order when one or more of the changes specified has the potential to affect one or more of the following: 1) The performance or acceptability of the Work, 2) The design (as set forth in the Drawings, Specifications, or otherwise), or, (c) Other engineering or technical matters. The Engineer's signature on a Change Order is not necessary when all of the changes ordered are either administrative or procedural in nature, and do not affect the Work's acceptability or functionality, or the engineering design of the Work.

For additional discussion on Change Orders, see this Commentary regarding C-700 11.02.

Additional administrative procedures associated with Change Orders may be specified in the Division 01 Specifications, including specifically requiring the use of C-941. When the Project Manual is organized in accordance with CSI MasterFormat™, such requirements would typically be located under *Section 01 26 00, Contract Modification Procedures*.

The following instructions apply to using *EJCDC® C-941, Change Order Form*:

- A. The Engineer normally initiates preparation of a Change Order, including preparing a description of the changes involved, and preparing or assembling the documents to be attached to the Change Order, based in some cases on documents or Change Proposals submitted by the Contractor, and typically after preliminary agreement by the Owner. In

other cases, such as when the Change Order involves matters that do not require Engineer's input, the Owner or Contractor may prepare the first draft. Note also that if the Change Order is the final documentation of a contractual procedure such as resolution of a Change Proposal, then the Change Order should adhere to the triggering decision.

- B. After the Engineer has completed and signed the Change Order (assuming the typical case in which Engineer's recommendation is necessary), Engineer should send all originals of the Change Order to the Contractor for approval. After approval and signature by the Contractor, all executed originals are to be transmitted to the Owner for approval and signature. Following signature by both parties, the Engineer (or other entity acceptable to the parties, for example the Owner) is then to distribute the executed originals to the parties with a copy to the Engineer.
- C. When a change documented in a Change Order affects either the Contract Price or the Contract Times, but not both, cross out on the Change Order form the inapplicable portions of the form.

7.6 EJDC® C-942, Field Order

A Field Order is used by the Engineer to order minor changes in the Work that do not entail a change in the Contract Price or Contract Times. For example, a Field Order may be used for ordering a change in the specified color of paint. "Field Order" is a term defined at C-700 1.01.A.23. and is further described at C-700 11.04. A Field Order is issued unilaterally by the Engineer to the Contractor, with a copy to the Owner. If the Contractor or the Owner contend that the change so ordered would affect price or time, the formal changes process should be followed.

For additional comments on Field Orders, see this Commentary's discussion of C-700 11.04.

Additional administrative procedures associated with Field Orders may be specified in the Division 01 Specifications, including specifically requiring use of C-942. When the Project Manual is organized in accordance with CSI MasterFormat™, such requirements would typically be located under *Section 01 26 00, Contract Modification Procedures*.

8.0 WARRANTY BOND

8.1 EJCDC® C-612, Warranty Bond

C-612 was developed and first published in 2018 to provide an appropriate surety bond form for use when the Contract's correction period is extended beyond the one-year period required by C-700 15.08. A warranty bond helps assure the Owner that the Contractor will perform its correction period obligations. An alternative name for a warranty bond is "maintenance bond." C-612 was developed by EJCDC in consultation with the National Association of Surety Bond Producers (NASBP) and the Surety and Fidelity Association of America (SFAA).

The warranty bond should not be in effect concurrent with the Contract's performance bond. This would be redundant "double bonding"—meaning, paying for overlapping, duplicative bond coverage.

In addition to this Commentary, Guidance Note 2 accompanying C-800 SC-6.01.A, concerning Warranty Bonds, is highly recommended, as is the Guidance Note accompanying C-800 SC-15.08, relating to extending the contractual correction period.

Bonding agents typically price performance bonds to remain in effect for a one-year correction period starting upon Substantial Completion. Thus, a performance bond will typically remain in effect throughout a one-year correction period, as is required by C-700 6.01.A. Sometimes an owner will desire that the correction period be two years, or other duration longer than one year. Such an extension may be done without the protection of bonding; but may be futile if the Contractor has gone out of business or simply refuses to honor its extended commitment.

While an Owner could stipulate via the Contract that the performance bond (which is in the amount of the full Contract Price) remain in effect for the longer correction period, this approach will typically be commercially impractical. The more feasible (and less expensive) way for the Owner to achieve-similar protection is to require a warranty bond for the part of the correction period that is longer than one year.

The penal sum of a warranty bond is typically less than the full Contract Price; amounts such as 10 or 15 percent of the final Contract Price are common.

The EJCDC Warranty Bond is expressly designed to cover the Contractor's "Correction Period Obligations" as defined in the bond. The Warranty Bond is not intended to cover the Contractor's general warranty under C-700 7.17 (which generally runs for a longer period than the correction period) or any special warranties issued by manufacturers or sellers of materials and equipment incorporated into the Work. However, the Contractor or surety may be able to seek recourse under a manufacturer's warranty, as part of the process of meeting the extended Correction Period duties.

It is not EJCDC's intent that a warranty bond will replace the performance bond during the first year of the correction period. The parties could, potentially, mutually agree to do this; for example, the Owner may desire to assist the Contractor by freeing up some of the Contractor's bonding capacity by accepting a warranty bond for the entire correction period instead of requiring the performance bond to remain in effect until a year after completion, as required by C-700 6.01.A. However, some funding/financing entities, such as the United States Department of Agriculture's Rural Utility Service, may not accept replacing the performance bond with a warranty bond during the first year of the correction period.

C-800 SC-6.01 includes an optional provision with model language for requiring a warranty bond. Among other things, the model language requires (1) that the same surety that furnished the performance bond also furnish the warranty bond, and (2) that the warranty bond be furnished by the Contractor after Substantial Completion but "prior to or with the final application for payment, and in any event no later

than 11 months after Substantial Completion.” A warranty bond generally cannot be obtained and furnished at the outset of a contract, when the performance and payment bonds are furnished.

The intent of this quoted language is for the Contractor to furnish the warranty bond prior to the Owner making final payment, when the parties are both concentrating on and are well aware of the required final closeout documents to be furnished by the Contractor, and of course prior to the start of the extended portion of the correction period. The Warranty Bond may be furnished promptly after Substantial Completion, but the model language quoted here takes into account that some contractors will have a difficult time obtaining a bond with an effective date almost a full year later; many sureties desire to evaluate their client’s (Contractor’s) financial status reasonably close to the bond’s effective date and therefore may be reluctant to pre-date a bond so far in advance. Thus, with the model language quoted here, EJCDC contemplates that some contractors will furnish the Warranty Bond nearly 11 months after Substantial Completion.

It is usually unnecessary to bind the warranty bond form into the Bidding Documents. The required form of warranty bond (EJCDC®C-612) is expressly stipulated in the model language of C-800 SC-6.01.

The model language of C-800 SC-6.01 is based on the warranty bond being a stipulated percentage, usually 10 or 15 percent, of the final Contract Price. In the event of significant changes in the Contract Price after the Effective Date of the Contract, the Contractor should include in any Change Proposals an appropriate amount for not only changing the penal sum of the performance bond and payment bond, but also the warranty bond as well.

Unlike a performance bond, a warranty bond does not require that the Owner terminate the Contractor for cause (default) to invoke the surety’s obligations; for this and other reasons the warranty bond form is simpler than the performance bond form.

C-520 and C-525 indicate the warranty bond as a Contract Document that is to be issued after the Effective Date of the Contract (if a warranty bond is required).

9.0 CONSTRUCTION SUBCONTRACT

EJCDC® C-523, Construction Subcontract, was developed so that contractors have access to a system of construction contracts and subcontracts that is fully integrated and coordinated, with consistent terminology throughout, with the aim of consistent contractual interpretation and coordination throughout the process of construction. The document is intended to reflect typical subcontracting practices.

The Construction Subcontract essentially combines into a single document a “subagreement” and “general conditions” specific for the Subcontract. C-523 is closely coordinated with the Contractor’s obligations under EJCDC® C-700 Standard General Conditions of the Construction Contract, as supplemented by Supplementary Conditions developed in part from EJCDC® C-800, Supplementary Conditions of the Construction Contract. When other forms of general conditions are used, subcontracts developed from C-523 will require editing.

9.1 Detailed Discussion of Terms and Conditions

- A. *C-523 Article 2—Obligations of Prime Contract:* The Construction Subcontract binds the Subcontractor to the terms of the Contractor’s obligations to the Owner under the Contract Documents; this is referred to as a flow down clause. Note that there is no “flow up” provision—the Construction Subcontract does not obligate the Contractor to the Subcontractor in the same manner that Owner is obligated to Contractor under the Prime Contract.

C-523 2.02, Precedence of Subcontract, is intended for situations where the Contractor and Subcontractor consciously intend that some of the terms of the Subcontract will differ from the corresponding provisions of the Prime Contract. Extreme care needs to be exercised in coordinating the two contracts—see especially C-700 7.07.K, requiring flow-down.

- B. *C-523 Article 3—Subcontract Times:* The Construction Subcontract includes a date (to be inserted) by which the Subcontract Work is to be fully complete and ready for full payment. C-523 3.01, Subcontract Times, also requires that the Subcontractor comply with the Contractor’s progress schedule and any changes thereto, which will cover situations where the prime construction Contract has interim Milestones with which the Subcontractor is to comply.
- C. *C-523 Article 4—Subcontract Price:* C-523 Article 4 presents sample language where the basis of the Subcontract Price is lump sum, together with unit prices. These are fixed or stipulated prices; where the Subcontractor’s compensation will be determined on the basis of cost-plus-fee, significant revisions to C-523 Article 4 will be necessary. Sample language for cost-plus subcontracts is in EJCDC® D-526, Subagreement Between Design/Builder and Subcontractor on the Basis of Cost-Plus. Reference to the compensation method language of C-525 may also be useful.
- D. *C-523 Article 5, Payment Procedures:* C-523 5.01.C, Payment is a pay-when-paid provision. As defined by the courts, under a pay-when-paid clause, if there is a delay in the Contractor’s receipt of payment from the Owner, the Contractor may pass that delay on to the Subcontractor for a time, but ultimately must pay the Subcontractor even if payment is not received from the Owner. Such provisions are generally enforceable in most jurisdictions. A harsher pay-if-paid clause would need to be carefully drafted to be effective; and even then, such clauses are unenforceable in construction subcontracts in many jurisdictions.

C-523 5.01.C provides for payment within 10 days of receipt from Owner. This should be checked for compliance with any applicable prompt payment statute.

- E. *C-523 8.05.D, Safety and Protection:* Although under the provisions of the Contract (the Prime Contract) the Contractor is responsible for construction safety (C-700 7.13 Safety and Protection) in accordance with federal OSHA regulations each employer is also responsible for the safety of its own employees at the Site. C-523 8.05.D empowers the Contractor to delegate certain aspects of safety for the Subcontractor's employees, and to delegate specific elements of safety responsibility. Often subcontractors have a high degree of expertise in safety as applied to their own area of specialization, and are in the best position to implement effective safety protocols for their workforce and their portion of the work. In nearly every case there will also be general safety procedures applicable to all constructors at the Site, and thus Contractor needs to issue written instructions to the Subcontractor regarding the Contractor's requirements for safety at the Site. The Subcontractor is further required to comply with the Owner's safety requirements when the Owner's requirements are made known to the Contractor which, in turn, shall make the Owner's requirements known to the Subcontractor.
- F. *C-523 10.01, Performance Bond, Payment Bond, and Other Bonds:* When performance, payment, or other bonds are not required under the Subcontract, the preparer of the Construction Subcontract should delete the provisions of C-523 10.01 and substitute in its location the words, "Not required."
- G. *C-523 10.02, Insurance—General Provisions, and C-523 10.03, Subcontractor's Insurance:* C-523 10.02 and C-523 10.03 coordinate with the Contractor's insurance requirements under C-700 and the sample language of C-800. Relative to additional insureds, C-523 10.03.H, Additional Insureds, requires that the Subcontractor's insurance be primary and non-contributory.

Under C-523 10.03.C, Commercial General Liability, Form and Content, and C-523 10.03.C.6 and 7, specific endorsements by the Insurance Services Office (ISO) are indicated. When the Construction Subcontract's insurance requirements are prepared, the suitability and validity of the specific endorsements indicated in the Construction Subcontract should be verified and, where necessary, revised in C-523 10.03.
- H. *C-523 15.01, Subcontractor's Representations:* The Subcontractor's representations are closely coordinated with the Bidder's representations in C-410, and the Contractor's representations to the Owner in C-520 and C-525. A change in any one of these provisions, as applicable, will likely necessitate corresponding changes in the associated provisions in other documents.

10.0 CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

10.1 *Appropriate Uses for the Small-Project Construction Contract*

EJCDC published the first edition of EJCDC® C-522, Contract for Construction of a Small Project, in 2016. The document was revised in 2018 for inclusion in the 2018 Construction Series. The document is a “short form” contract that combines Project-specific information, such as the Contractor’s compensation, the time for completion, and insurance coverage requirements, with general terms and conditions such as those addressing indemnification, warranty, and termination. In effect, C-522 is a condensed combination of an Agreement form (e.g., C-520), the General Conditions (C-700), and the Supplementary Conditions (C-800).

Because most of the provisions of C-522 are taken from other source documents (especially C-700), in many cases this Commentary will simply identify the source without elaboration, with the expectation that the reader seeking more information will proceed to the discussion of the source material here in the Commentary.

The Guidelines for Use of C-522, located at the beginning of the published document, explains the intended purpose of the Small-Project Construction Contract. It is intended for “smaller, less complex projects, such as small water and wastewater utilities, roads and paving, drainage improvements, and site development” whose price tag is under \$500,000 (2018 dollars) and time for completion is under one year. Its use should be limited to Projects in which there is little chance of significant:

- Changes or substitutions
- coordination with third parties at the Site
- differing site conditions or hazardous conditions;
- design delegation to Contractor.

As projects become more complex, expensive, and lengthy, their risk profile tends to increase and the need for a more comprehensive and detailed construction contract—one that is capable of addressing serious problems if they arise—increases. Short-form contracts have their place, but are not suitable for the majority of public or private infrastructure/facilities projects.

10.2 *Contents of the Small-Project Construction Contract*

- A. *C-522 Preamble*: The preamble is the location to identify the Owner and Contractor.
- B. *C-522 Article 1—The Work*: The name of the Project and the location of the Site will be identified here. The Work is defined by reference to the Contract Documents, which include the Specifications and Drawings.
- C. *C-522 Article 2—Contract Documents*: Provisions regarding the intent of the Contract Documents and the role of the Engineer as initial interpreter of the Contract Documents are similar to parallel clauses in C-700 Article 3. The Contract Documents should be identified with specificity, as in C-520 Article 7.
- D. *C-522 Article 3—Engineer*: The name of the entity or individual serving as Engineer will be identified here.
- E. *C-522 Article 4—Contract Times*: The times for attaining substantial completion and final completion will be entered here. C-522 4.02, Liquidated Damages, is for late substantial completion only, and is derived from the liquidated damages provisions in C-520 4.05. C-522 4.03, Delays in Contractor’s Progress, is a condensed version of C-700 4.05; C-522 4.04, progress Schedules, derives from C-700 4.04 and related clauses.

- F. *C-522 Article 5—Contract Price*: C-522 contemplates stipulated prices only—lump sum or unit prices (or a combination). See C-520 Article 5. No provision is made for a contract based on cost-plus-fee.
- G. *C-522 Article 6—Bonds and Insurance*: Performance and payment bonds are required—delete the requirement for projects that do not need to be bonded. See C-700 6.01 for more detailed bond requirements. C-522’s insurance requirements are a distillation of the provisions in C-700 and C-800, Article 6. The property insurance requirement (builder’s risk or similar), C-5226.02.G, requires Contractor to obtain this coverage, without elaboration.
- H. *C-522 Article 7—Contractor’s Responsibilities*: The clauses here are condensed versions of various clauses in C-700 Articles 7 and 8, together with a correction period obligation similar to that found in C-70015.08.
- I. *C-522 Article 8—Owner’s Responsibilities, and Article 9—Engineer’s Status During Construction*: These are shortened versions of C-700 Articles 9 and 10.
- J. *C-522 Article 10—Changes in the Work*: Basic provisions regarding Change Orders, Work Change Directives, and Field Orders. See C-700 Article 11.
- K. *C-522 Article 11—Differing Subsurface or Physical Conditions*: The differing site conditions clause provides two bases for a DSC claim, Type 1 (differs from Contract Documents) and Type 2 (of an unusual nature, differing from ordinary conditions). Unlike C-700 Article 5, there is no separate treatment of utilities and hazardous conditions.
- L. *C-522 Article 12—Claims and Dispute Resolution*: This abbreviates the requirements found in C-70011.09 (Change Proposals), and C-700 Articles 12 (Claims) and 17 (Final Resolution of Disputes). Claims in C-522 are directly between Owner and Contractor, without Engineer involvement, and disputes are to be resolved through litigation.
- M. *C-522 Article 13—Tests and Inspections; Correction of Defective Work*: A condensation of the more extensive requirements of C-700 Article 14.
- N. *C-522 Article 14—Payments to Contractor*: Most clauses here are taken from C-700 Article 15. The substance of C-522 14.03, Retainage, is addressed in C-520 6.02.A.
- O. *C-522 Article 15—Suspension of Work and Termination*: The Owner and Contractor have suspension, termination, and cure rights similar to those granted by C-700 Article 16.
- P. *C-522 Article 16—Contractor’s Representations*: This article contains four key representations derived from C-520 8.01.
- Q. *C-522 Article 17—Miscellaneous*: The source for these standard clauses on subjects such as giving notice and survival of obligations is C-700 Article 18, with the exception of C-522 17.06, Contractor’s Certifications, which is an abbreviated form of C-520 8.02.

EXHIBIT A - EJCDC DEFINITIONS

The definitions that follow are from EJCDC® C-700, Standard General Conditions of the Construction Contract (2018), Paragraph 1.01, unless noted otherwise.

1.01 *Defined Terms*

- A. Wherever used in the Commentary, Bidding Requirements, or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work

under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are

controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.

35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any

encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

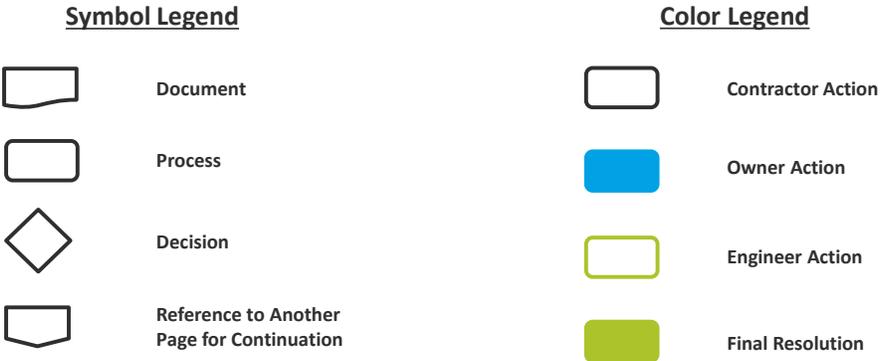
From EJCDC® C-200, Instructions to Bidders for Construction Contract, Paragraph 1.01.A:

1. *Issuing Office* – The office from which the Bidding Documents are to be issued.

EXHIBIT B - GRAPHICAL REPRESENTATION OF EJCDC® C-700 CHANGE PROVISIONS

Figure No.	Title
1	Flow Chart Legend and Abbreviations
2	Differing Site Condition and Underground Facility Decision Diagram
3	Hazardous Environmental Condition
4	Clarifications and Interpretations
5	Contractor Initiated Contract Modifications
6	Owner Initiated Contract Modifications
7	Change Resolution Process (CP, Claim, DR)

FIGURE 1: FLOW CHART LEGEND AND ABBREVIATIONS



Abbreviations

RFC	Request for Clarification
RFI	Request for Interpretation
CO	Change Order
CP	Change Proposal
DR	Dispute Resolution
GC	General Conditions
HEC	Hazardous Environmental Condition

**FIGURE 2: DIFFERING SITE CONDITION AND UNDERGROUND FACILITY
DECISION DIAGRAM**

(NOTE: SEE FIGURE 1 FOR LEGEND AND ABBREVIATIONS)

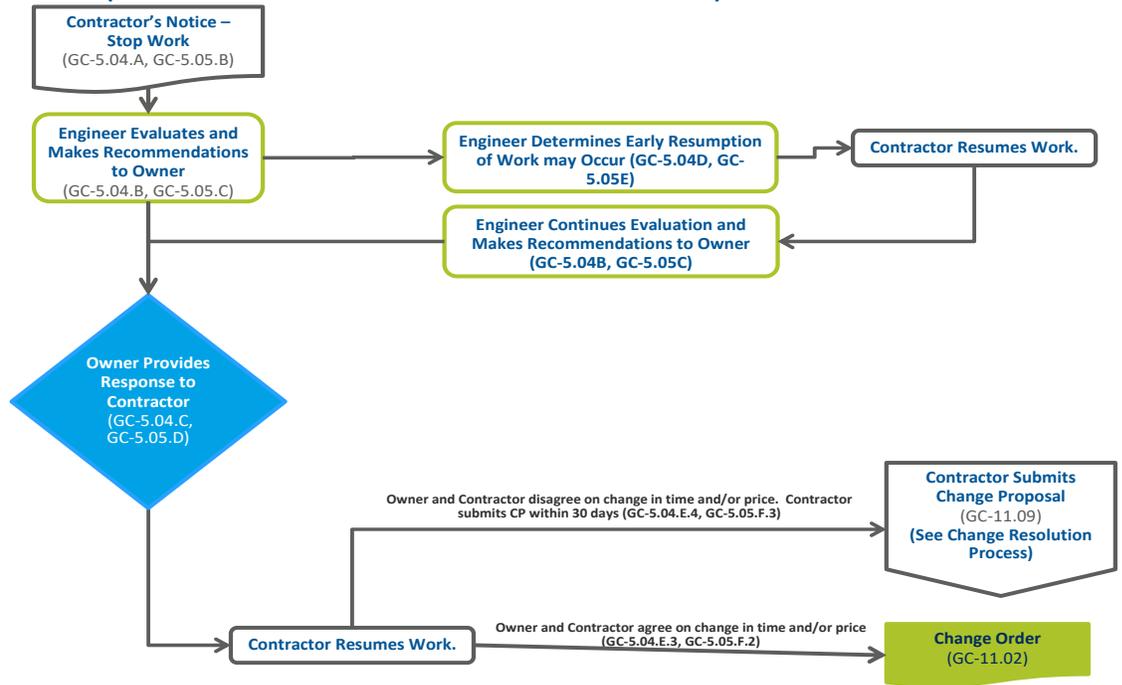


FIGURE 3: HAZARDOUS ENVIRONMENTAL CONDITION
 (NOTE: SEE FIGURE 1 FOR LEGEND AND ABBREVIATIONS)

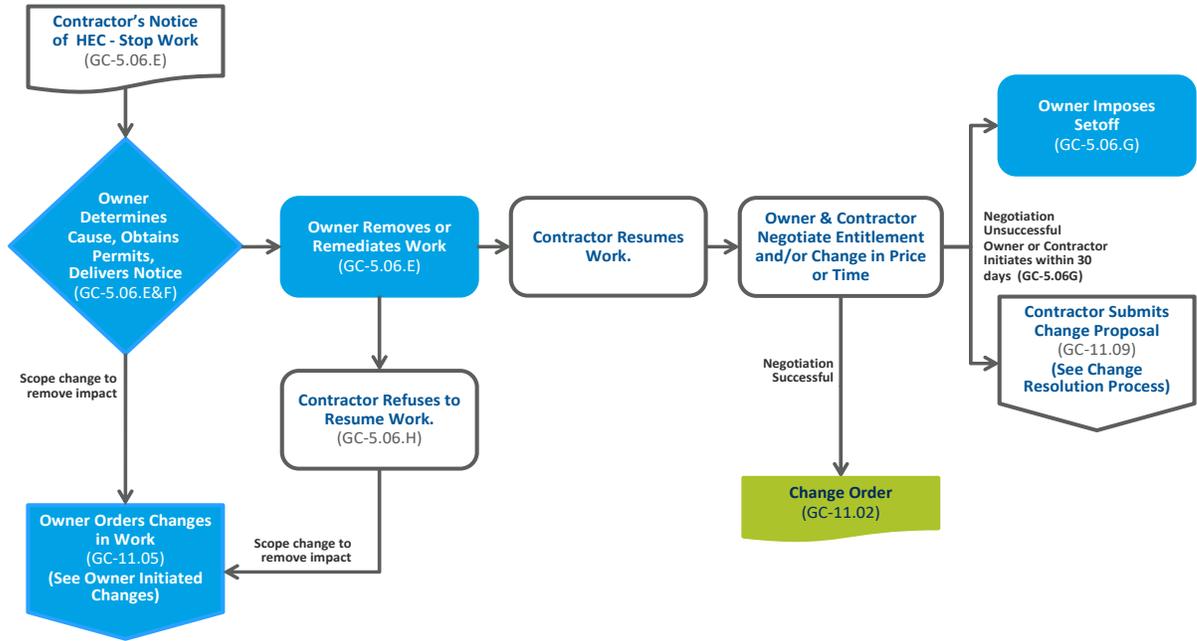


FIGURE 4: CLARIFICATIONS AND INTERPRETATIONS
 (NOTE: SEE FIGURE 1 FOR LEGEND AND ABBREVIATIONS)

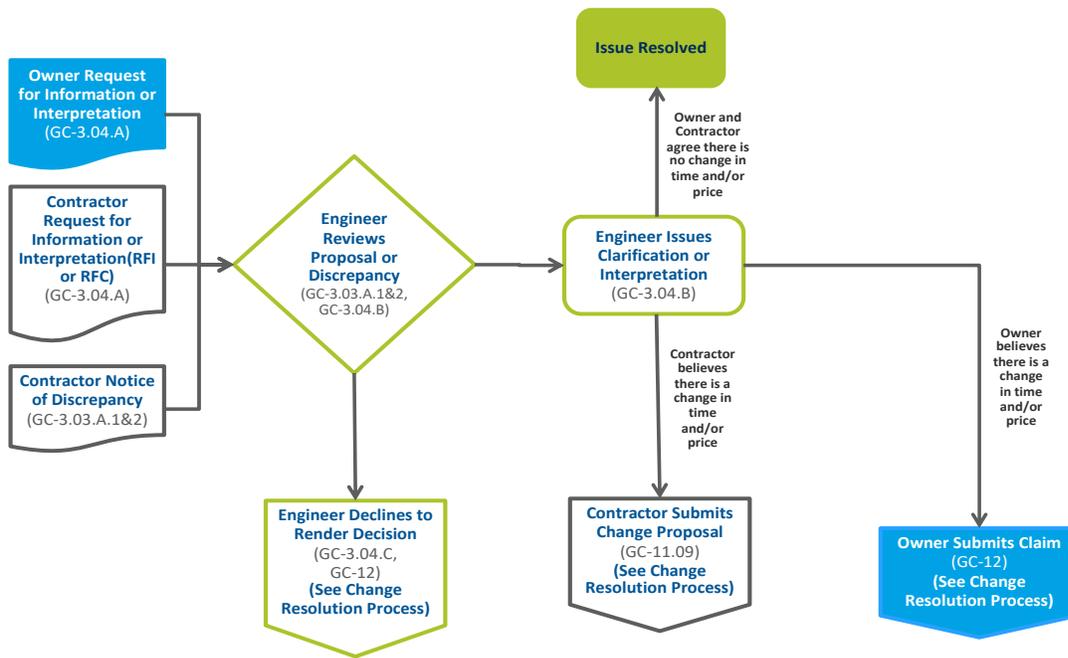
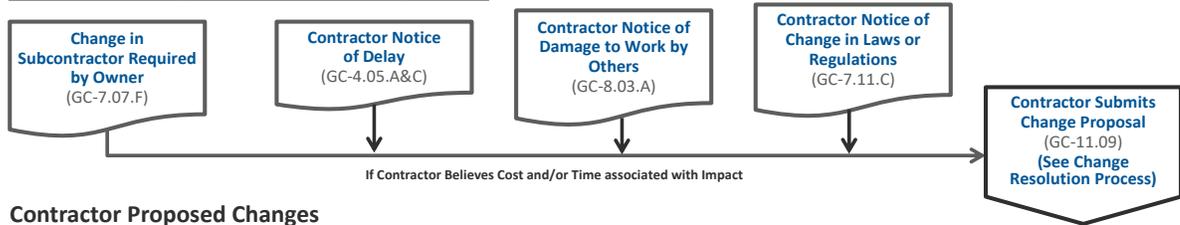
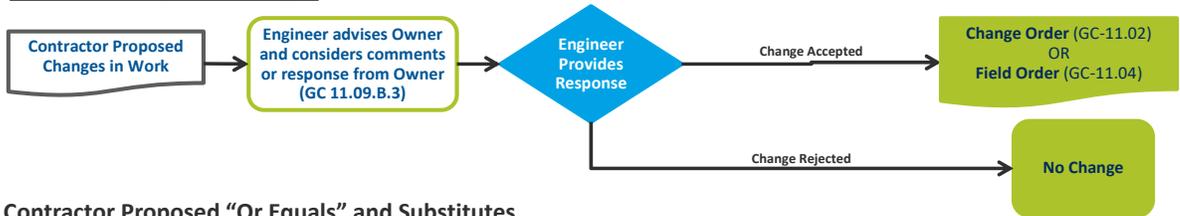


FIGURE 5: CONTRACTOR INITIATED CONTRACT MODIFICATIONS
 (NOTE: SEE FIGURE 1 FOR LEGEND AND ABBREVIATIONS)

Resolution of Impacts to Contractor by Others



Contractor Proposed Changes



Contractor Proposed "Or Equals" and Substitutes

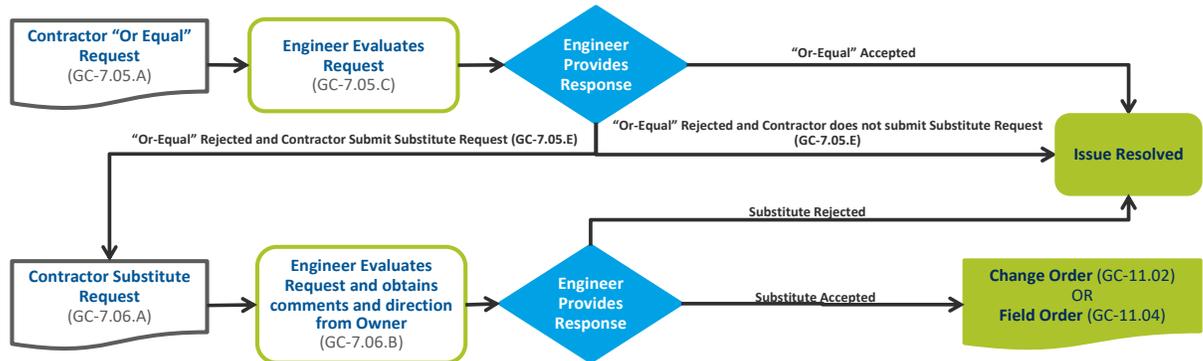


FIGURE 6: OWNER INITIATED CONTRACT MODIFICATIONS
 (NOTE: SEE FIGURE 1 FOR LEGEND AND ABBREVIATIONS)

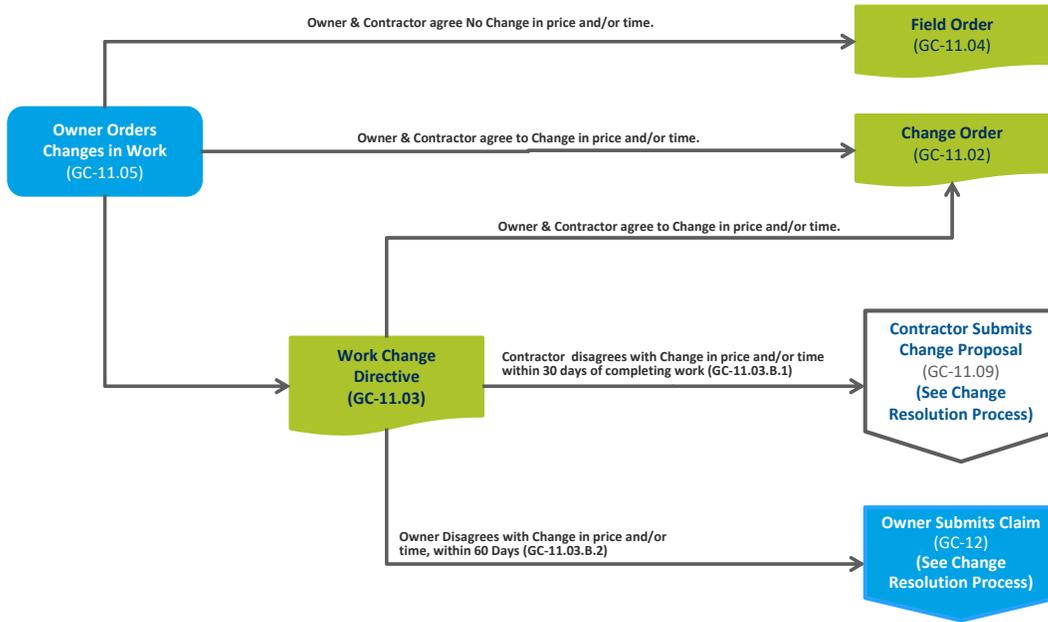


FIGURE 7: CHANGE RESOLUTION PROCESS (CP, CLAIM, DR)
 (NOTE: SEE FIGURE 1 FOR LEGEND AND ABBREVIATIONS)

