

2014 EJCDC Engineering Documents Series

Bruce D. Firkins, PE LS
Vice President
Bolton & Menk, Inc.

ACEC/ND Spring Conference
Bismarck, ND
May 14, 2014

Copyright © 2014 NSPE, ACEC and ASCE. All rights reserved



BOLTON & MENK, INC.
Consulting Engineers & Surveyors

EJCDC 
ENGINEERS JOINT CONTRACT
DOCUMENTS COMMITTEE

Presenter – May 14, 2014

Bruce D. Firkins, PE LS

Vice President

Bolton & Menk, Inc. Burnsville, MN



Practicing Since 1974

- Municipal/Civil Engineering
- Contracting & Risk Management
- Stormwater Management
- Surveys & Land Acquisition

EJCDC Committee Since 2006

Engineering Subcommittee Chair

NSPE Officer Liaison to EJCDC

Past National EJCDC Chair

Bolton & Menk, Inc.

www.bolton-menk.com



BOLTON & MENK, INC.
Consulting Engineers & Surveyors

Agenda

- EJCDC General Overview
- EJCDC Engineering Series
- 2014 Specific Documents and Changes

When Infrastructure Is Hanging By Threads, You Want Good Contracts



EJCDC Overview

- Three Sponsoring Organizations
 - ACEC
 - ASCE
 - NSPE
- Numerous Participating Organizations
 - APWA
 - USDA/RUS/RD
 - AGC
 - NUCA
 - CSI and others

EJCDC Overview

- Primary Purpose – Publish standard contract documents for engineer-designed construction
- Objectives
 - Logical risk allocation
 - Clear and thorough
 - Consistent with current practice and laws
 - Responsive to user needs
- Regular update/review cycles (Target at 5 years)

EJCDC Document Families

- Construction (Owner-Contractor)
- Engineering (Owner-Engineer, Engineer-Subconsultant, Teaming Agreement/Joint Venture, Task Order, others)
- Design/Build
- Environmental Remediation
- Procurement (Buyer-Seller; for major equipment purchases, etc.)

EJCDC Document Initiatives

- P3 Public Private Partnerships
 - Mid 2014
- Construction Management
 - Formative subcommittee activities

EJCDC Overview

- Coordinated across each family of documents for development of a full contract package
 - Each part of the package is coordinated with whole
 - Comprehensive guides, instructions and notes to users to assist
 - Designed to be integrated with other construction industry protocols (such as CSI) or to be basis of user's custom package

EJCDC Terms of Use 2013-2014

- Licensing is designed to provide the flexibility needed by owners, designers and other users
- Limited Non-exclusive License to use:
 - On any number of machines owned, leased or rented by your organization
 - For bona-fide contractual/project uses

EJCDC Terms of Use - Recognize

- Need to customize contracts and bidding documents for each project
- Editing needs for your project on your own system
- Your EJCDC-based project docs need to be distributed to bidders
 - Print, Digital and Web processes

EJCDC Terms of Use - Simple Limits

- Must show changes to Standard documents (Bonds, General Conditions, some others)
 - Maintaining as industry standard
 - Allowing end users to know what has been changed
- Discuss Engineering documents later

EJCDC Terms of Use - Simple Limits

- Unrestricted distribution to non-project-related entities is not authorized
 - e.g. Posting original EJCDC documents on an uncontrolled website that allows copying of original documents by anyone

Availability of EJCDC Documents

- Distributed in Microsoft Word (.doc) format
- Fully editable on your own system for your specific project needs without other proprietary processes or controls
 - Subject only to terms of the license

Availability of EJCDC Documents

- Available by direct on-line order/download at any Sponsor
 - **NSPE**
 - **ACEC**
 - **ASCE**
 - **EJCDC.org**
- Discounted pricing normally available for Sponsor members when ordered through that organization

2013 EJCDC Construction Series

EJCDC at 2013 North Dakota ACEC

- Joseph Eberle, PE
 - Ruekert & Mielke, Waukesha WI
 - EJCDC Vice Chair Construction Subcommittee
- Presented 2013 Construction Series
- Released simultaneously as entire package
 - 24 Documents (excluding Commentary)
- Commentary finalized and released Spring 2014
 - Excellent resource

C-Series Contract Areas Covered

- Preliminary Matters (Owner's Instructions)
- Procurement/Bidding (Ad, Instructions to Bidders)
- Contract Forms (Agreements, Notices)
- Project Forms (Bonds, Certifications)
- Conditions of Contract (GC's and SC's)
- Contract Administration (CO's, Pay Ap, etc.)
- Guidance and Commentary

2013 C-Series Highlights

- Recognized and incorporated common industry practices and trends into core language or guidance
- Among key areas addressed in 2013 C-Series
 - Facilitation of Electronic/Digital Documents
 - Clarification of Differing Site Conditions Processes
 - Claims and Changes to the Contract
 - Updated Insurance Provisions

2013 C-Series Highlights

- Focus and substantive changes to:
 - C-200, Instructions to Bidders
 - C-410, Bid Form
 - C-700, General Conditions
 - C-800, Supplementary Conditions
- Revisions, enhancements, and coordination of all 24 C-series documents

2013 C-Series Highlights

- Added three new documents:
 - C-111, Advertisement for Bids
 - C-451, Qualifications Statement
 - C-523, Subcontract
- Updated Commentary, C-001

2014 EJCDC Engineering Series

Engineering Series – Primary Focus

- Projects designed by engineers
- Public and private projects
 - Public infrastructure
 - Private site development and utilities
- Integrated with EJCDC Construction Series
 - Usable for other contract forms with modification

Engineering Series – Example Uses

- Water and wastewater treatment
- Water and wastewater conveyance facilities
- Public and private utility work
- Solid waste handling and disposal facilities;
- Transportation projects
- Production and processing facilities
- Heating, ventilating, and air conditioning systems

Engineering Series – Example Uses

- 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

2014 Engineering Series

- Previous update completed 2008-2010
- Incremental development process
 - Historically different process than Construction Series
 - Release key documents as they are developed
- Updates keyed to the 2013 Construction Series
- Work on new versions started in 2012
- Released 2014 through 2015

2014 E-Series Updates

- Recognize and incorporate common industry practices and trends into core language or guidance
- Clarify and improve general language
- Coordinate with 2013 C-Series changes
- Details to follow

2014 Engineering Series Process

- Engineering Subcommittee
 - Currently 14 members
- Full Committee Final Review/Approval
 - Rigorous review by practitioners familiar with other EJCDC series
 - Review by a diverse group of subject matter experts
 - Assures consistency and QA/QC

2014 Engineering Series

- Current Engineering Subcommittee make-up
 - EJCDC Staff Counsel
 - Public/Agency Engineers (2)
 - Practicing Engineers (4)
 - PL Insurance Counsel (2)
 - Professional Geologist
 - Attorney/PE (2)
 - Contractor;
 - Contract/Spec Specialist

Owner Engineer Agreements

- EJCDC® E-500 (2008), Agreement Between Owner and Engineer for Professional Services
 - **New Version Issued January 2014**
 - Flagship E Series Agreement – leads other updates
 - Discussing in Detail

Owner Engineer Agreements

- EJCDC® E-505 (2009), Agreement Between Owner and Engineer for Professional Services—Task Order Edition
 - **New Version Planned Issue Mid-2014**
 - Ongoing service relationships and public consulting “Pool”

Owner Engineer Agreements

- EJCDC® E-520 (2009), Short Form of Agreement Between Owner and Engineer for Professional Services
 - **Update Planned Issue Fall 2014**
 - Limited form of agreement for less complex projects
 - Minimal scope guidance

Owner Engineer Agreements

- EJCDC® E-525 (2009), Agreement Between Owner and Engineer for Study and Report Phase Professional Services
 - **Update Planned Issue Fall 2014**
 - Limited form of agreement for studies and reports

Owner Geotechnical Engineer

- EJCDC® E-530 (2010), Agreement Between Owner and Geotechnical Engineer for Professional Services
 - **Update Planned Issue in 2015**
 - Scope specifically addresses geotechnical investigations and studies engaged by Owner
 - Parallels scope of E-564 when geotechnical services are engaged by Engineer

Engineer Subconsultant Agreements

- EJCDC® E-570 (2010), Agreement Between Engineer and Consultant for Professional Services
 - **New Version Issued May 2014**
 - Flagship E Series Consultant Agreement – leads other updates
 - Discussing in Detail

Engineer Subconsultant Agreements

- EJCDC® E-560 (2010), Agreement Between Engineer and Land Surveyor for Professional Services
 - **Update Planned Issue Fall 2014**
 - Parallels E-570 with specific scope for Surveying services
 - Incorporates process to identify best methodology

Engineer Subconsultant Agreements

- EJCDC® E-564 (2010), Agreement Between Engineer and Geotechnical Engineer for Professional Services
 - **Update Planned Issue in 2015**
 - Scope specifically addresses geotechnical investigations and studies engaged by Consultant (in lieu of E-530 by Owner)

Engineer Subconsultant Agreements

- EJCDC® E-568 (2010), Agreement Between Engineer and Architect for Professional Services
 - **Update Planned Issue Fall 2014**
 - Parallels E-570 with specific scope for Architect services
 - For use when EJCDC Construction Documents control (vs. AIA)

Special Purpose Agreements - 2015

- EJCDC® E-580 (2011), Teaming Agreement to Pursue Joint Business Opportunity and Joint Venture Agreement Between Engineers
 - EJCDC® E-580—TA (Teaming Agreement to Pursue Joint Business Opportunity)
 - EJCDC® E-580—JV (Joint Venture Agreement Between Engineers for Professional Services)

Special Purpose Agreements - 2015

- EJCDC® E-562 (2011), Agreement Between Engineer and Engineer's Subcontractor
 - Intended for subcontracting non-professional services under a Owner-Engineer contract
 - Standard subcontract flow down provisions
 - Examples: Printing, construction activities, exploratories, Engineer's site facilities

Special Purpose Agreements - 2015

- EJCDC® E-581 (2011), Agreement between Owner, Design Engineer, and Peer Reviewers for Peer Review of Design

Commentary – Free Download

- EJCDC® E-001 (2013), Commentary on the EJCDC Engineering Services Documents
 - Current for 2008 Engineering Series
 - Update Pending
- **FREE DOWNLOAD from ASCE, NSPE, ACEC, EJCDC**
- http://www.asce.org/uploadedFiles/Books_and_Journals/Contract_Documents/E-001%20Engineering%20Commentary%202013.pdf

2014 E-500 Overview

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

**AGREEMENT
BETWEEN OWNER AND ENGINEER
FOR PROFESSIONAL SERVICES**

Prepared by



Issued and Published Jointly by



EJCDC Standard Notice

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

2014 E-500 Owner Engineer Agreement

- EJCDC® E-500 (2014), Agreement Between Owner and Engineer for Professional Services
 - **New Version Issued January 2014**
 - Flagship E Series Agreement
- Fully integrated with EJCDC 2013 C Series
- Considers active and emerging industry issues
- Clarifies the Owner/Engineer agreement process to reflect common practices

2014 E-500 Owner Engineer Agreement

- Changes are balanced with the stability of long-standing acceptance of E-500
- Retains general format and organization of prior versions
- Organized into Two Sections
 - MAIN AGREEMENT – 22 Pages
 - EXHIBITS – 11, Totaling 73 Pages
- Full Document is 95 Pages

2014 Main Agreement

- ARTICLE 1 – SERVICES OF ENGINEER
 - 1.01 Scope
- ARTICLE 2 – OWNER'S RESPONSIBILITIES
 - 2.01 General
- ARTICLE 3 – SCHEDULE FOR RENDERING SERVICES
 - 3.01 Commencement
 - 3.02 Time for Completion
- ARTICLE 4 – INVOICES AND PAYMENTS
 - 4.01 Invoices
 - 4.02 Payments

2014 Main Agreement

- ARTICLE 5 – OPINIONS OF COST
 - 5.01 Opinions of Probable Construction Cost
 - 5.02 Designing to Construction Cost Limit
 - 5.03 Opinions of Total Project Costs
- ARTICLE 6 – GENERAL CONSIDERATIONS
 - 6.01 Standards of Performance
 - 6.02 Design Without Construction Phase Services
 - 6.03 Use of Documents
 - 6.04 Electronic Transmittals

2014 Main Agreement

- ARTICLE 6 – GENERAL CONSIDERATIONS (Continued)
 - 6.05 Insurance
 - 6.06 Suspension and Termination
 - 6.07 Controlling Law
 - 6.08 Successors, Assigns, and Beneficiaries
 - 6.09 Dispute Resolution
 - 6.10 Environmental Condition of Site
 - 6.11 Indemnification and Mutual Waiver
 - 6.12 Records Retention
 - 6.13 Miscellaneous Provisions

2014 Main Agreement

- ARTICLE 7 – DEFINITIONS
 - 7.01 Defined Terms
- ARTICLE 8 – EXHIBITS AND SPECIAL
 - 8.01 Exhibits Included
 - 8.02 Total Agreement
 - 8.03 Designated Representatives
 - 8.04 Engineer's Certifications

2014 Exhibits

- Exhibit A
 - Engineer's Services.
- Exhibit B
 - Owner's Responsibilities.
- Exhibit C
 - Payments to Engineer for Services and Reimbursable Expenses.

2014 Exhibits

- Exhibit D
 - Duties, Responsibilities and Limitations of Authority of Resident Project Representative.
- Exhibit E
 - Notice of Acceptability of Work.
- Exhibit F
 - Construction Cost Limit.
- Exhibit G
 - Insurance.

2014 Exhibits

- Exhibit H
 - Dispute Resolution.
- Exhibit I
 - Limitations of Liability.
- Exhibit J
 - Special Provisions.
- Exhibit K
 - Amendment to Owner-Engineer Agreement.

Using E-500 As Source

Licensing – First the “Shrink-wrap”

- Four page License Agreement
- Establishes how documents may be used
- Establishes limits to use
- Governs but is not part of the actual Owner-Engineer Agreement
 - May be removed from the draft and final document
- Logo pages (2) may also be removed

License (4 Pages) Governs Use



License Agreement

Before you use this EJCDC document:

1. **Read this License Agreement in its entirety.** As purchaser, you agree to comply with and are bound by the License Agreement's terms, conditions, and instructions when you use the attached EJCDC document. **Commencement of use of the attached document indicates your acceptance of these terms, conditions, and instructions.** If you do not agree to them, you should promptly return the materials to the vendor.
2. **This License Agreement applies to the attached document only. Other licensing terms and instructions may apply to other EJCDC documents.**
3. The Engineers Joint Contract Documents Committee ("EJCDC") provides EJCDC Design and Construction Related Documents (including but not limited to the EJCDC document that is attached, and all other documents in the EJCDC Construction Series, Engineering Series, Design-Build Series, Remediation Series, Procurement Series, and Narrative Series) and licenses their use worldwide. You assume sole responsibility for the selection of specific documents

responsibility to assure the adequacy and consistency of the final document for your purposes.

How to Use This Document:

1. Although EJCDC has made reasonable efforts to achieve uniformity of formatting, some document controls (e.g., bold, underline, font size, indentation, numbering, pagination, table of contents) may be affected by software versioning and translators, user settings, changes during editing, and other factors, and may require user intervention to restore intended format and appearance.
2. The term "Standard EJCDC Text" for the attached document generally refers to all text prepared by EJCDC in the main body of the document, and does not include covers, logos, footers, instructions, license agreement, copyright notices, Notes to Users, or text options. The content of document exhibits (if any) is not Standard EJCDC Text for this purpose.
2. If you do not alter the Standard EJCDC Text of the attached document, you may use it as published, with all EJCDC logos, footers, and copyright notices

Terms of Use - Modifications

- EJCDC documents provided in Microsoft Word
- Engineering documents are designed to be modified - particularly:
 - Exhibit A (Engineer's Services) - Scope
 - Exhibit B (Owner's Responsibilities)
 - Exhibit C (Payments to Engineer)
 - Exhibit G (insurance)
- Include numerous required fields to be edited and added throughout the documents

NEW – Easier Required Fields Editing

- More easily identify fields requiring user supplied information; Search for “[“ or “]” to find prompts

*Perform or provide the following other Final Design Phase tasks or deliverables: [REDACTED] **[List any such tasks or deliverables here.]***

Furnish for review by Owner, its legal counsel, and other advisors, [REDACTED] copies of the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables, within [REDACTED] days of authorization to proceed with the Final Design Phase, and review them with Owner. Within [REDACTED] days of receipt, Owner shall submit to Engineer any comments regarding the furnished items, and any instructions for revisions.

Modifications – Approach #1

- Maintain EJCDC E-500 as absolute baseline for the contract
 - Parties fully informed of any variations from the E-500 standard form
- Redline ALL changes to the document
- Negotiate terms between Owner/Engineer
- Show ALL changes to E-500 language
- Preserve EJCDC logos and EJCDC copyright
- Accept changes and execute

Modifications – Approach #2

- Use EJCDC E-500 as source for a more customized contract
 - One of the parties typically takes lead on developing
 - Agree to protocol on redlines and notice of changes
- Modify main agreement as needed
 - EJCDC recommends that parties use redlining
- Customize exhibits as appropriate for the project
- Negotiate terms, accept changes and execute
- Remove EJCDC Logos, footers and copyright

Modifications – Approach #2

- Include the following attribution to EJCDC

This document is a MODIFIED version of EJCDC® Z-xxx, Copyright © 20xx by the National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers, or is based in part on excerpts from copyrighted EJCDC documents. Those portions of the text that originated in copyrighted EJCDC documents remain subject to the copyright.

- Do not represent the document as an unaltered EJCDC document

Modifications – Other Approaches

- Most situations will likely be hybrids of 1 and 2
- Many users develop their own standard contracts using EJCDC as baseline source
- Essential that both parties be informed of the process to be used in drafting the contract
- If the lead drafter is representing the source contract as an EJCDC document, redlining is a recommended tool

Using the Documents – Other Advice

- Formatting can be affected by editing
 - User intervention will usually be needed
- Section number cross-referencing is not automated
 - If you move or delete sections, reviewing all referenced section numbers is necessary
- Customization of required fields is not only allowed, it is essential

Terms of Use – Some Limits

- Limited Non-exclusive License for use on any number of machines owned, leased or rented by you
- Unrestricted distribution to non-project-related entities is not authorized
 - Posting of original EJCDC documents (in any format) on an uncontrolled website allows pirating. Use care!

Terms of Use – Some Limits

- Term of License and Use is 3 Years, but not more than 6 Years after Date of Issuance
 - Encourages use of the most current contracting processes
 - Outdated versions lose continuity with other Series
- Alternative licensing methods being considered

2014 E-500 Essentials & Changes

EJCDC E-500 Essentials

- Comprehensive, quality and timely resource
- Professional Standard of Care
- Fair and balanced allocation of risk
- Integrated with EJCDC Construction Series
- User flexibility

EJCDC E-500 Essentials

- Comprehensive, quality and timely resource
- Professional Standard of Care
- Fair and balanced allocation of risk
- Integrated with EJCDC Construction Series
- User flexibility

Comprehensive, Quality and Timely

- Broad content – 95 pages – covering most common project matters
- EJCDC process includes subject matter experts representing diverse construction interests
- Update addresses several emerging issues

2014 E-500 Changes

- 2014 update took extensive look at the agreement process and emerging practice
- 2014 update ...
 - Added an opportunity for Owner and Engineer to revisit adequacy of the scope at the start of each project phase based on prior phase findings

2014 E-500 Changes

- 2014 update ...
 - Clarified expectation of a site visit by Engineer during each phase of project
 - Update of Insurance provisions including clarification of Additional Insured requirements and Builder's Risk policy relative to Engineer

2014 E-500 Changes

- 2014 update ...
 - Provide means for consideration of BIM, civil info modeling, geotechnical baselining, innovative design and contracting, sustainability, etc.
 - Introduced concept of “Constructor” to more clearly define the Engineer’s relationship to Owner’s Contractor and other contractors on the project

2014 E-500 Changes

- 2014 update ...
 - Define Engineer's services to not be a "Municipal Advisor" under SEC and Dodd-Frank Wall Street Reform and Consumer Protection Act (2010)
 - Engineer should monitor its performance so as not to trigger Dodd-Frank registration requirements under pending rules

2014 E-500 Changes

- 2014 update ...
 - Use ASCE 38 “Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data” as a resource

EJCDC E-500 Essentials

- Comprehensive, quality and timely resource
- Professional Standard of Care
- Fair and balanced allocation of risk
- Integrated with EJCDC Construction Series
- User flexibility

Professional Standard of Care

- Critical to a good professional agreement
- Unchanged from prior versions
- Time and court tested balance between prudent exercise of professional knowledge and skill and absolute perfection in an imperfect world
- Sets a standard by which rest of document can be interpreted and enforced

EJCDC Standard of Care 6.01A

Standard of Care: The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Engineer.

- Complies with established legal criteria in majority of jurisdictions

Professional Standard of Care

- North Dakota case language relating to Standard of Care

In preparing plans and specifications for a project, a professional does not guaranty a perfect plan or satisfactory results; rather, the professional's duty is to exercise that degree of skill and care applied under all the circumstances in the community by the average, prudent, reputable member of the profession. *Johnson v. Haugland, 303 N.W. 2d 533 (N.D. 1981) and others*

EJCDC E-500 Essentials

- Comprehensive, quality and timely resource
- Professional Standard of Care
- Fair and balanced allocation of risk
- Integrated with EJCDC Construction Series
- User flexibility

Fair and Balanced Allocation of Risk

- EJCDC strives to assign a specific risk to the party best able to manage and control that risk
- Balanced and reasonable base language with optional approaches

Indemnification

- Key element of Risk Allocation
- One of most common and contentious negotiation issues
- Indemnification and Waivers
 - Covered in Section 6.11
 - Some other indemnification and risk allocation throughout the document

Indemnification - 6.11A

- Standard EJCDC form of indemnification

*Indemnification by Engineer: To the fullest extent permitted by Laws and Regulations, Engineer shall indemnify and hold harmless Owner, and Owner's officers, directors, members, partners, agents, consultants, and employees, from losses, damages, and judgments (including reasonable consultants' and attorneys' fees and expenses) arising from third-party claims or actions relating to the Project, provided that any such claim, action, loss, damages, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Engineer or Engineer's officers, directors, members, partners, agents, employees, or Consultants. **This indemnification provision is subject to and limited by the provisions, if any, agreed to by Owner and Engineer in Exhibit I, "Limitations of Liability***

Indemnification – 6.11

- Indemnification - Default
 - Default - Indemnification of Owner by Engineer
 - Arising from but only to extent caused by negligent act or omission
 - Default - Indemnification of Engineer by Owner
 - As required by Laws and Regulations
 - Default - Environmental Indemnification of Engineer by Owner for Constituents of Concern at Site

Indemnification – 6.11

- Indemnification of Engineer
 - Indemnification of Engineer by Owner – 6.11
 - As required by Laws and Regulations
 - Reuse of deliverables by Owner without adaptation by Engineer – 6.03.C
 - Waiver for Design without Construction Phase – 6.02
 - Waiver by Owner of all claims against Engineer connected to Construction Phase services except those part of Engineer's scope

Other Limits and Waivers – 6.11

- Mutual limitation on damages set to relative percentage of negligence of each party
- Mutual waiver of entitlement to special, incidental, indirect, or consequential damages

EJCDC Approach to Defense of Claims

- EJCDC indemnification has not normally included defense (except for reimbursement of legal costs)

Indemnification by Engineer: To the fullest extent permitted by Laws and Regulations, Engineer shall indemnify and hold harmless Owner...

EJCDC Approach to Defense of Claims

- 2014 Update has explicitly excluded defense unless expressly stated – 6.11.D
- Response to certain court cases where a defense obligation has been inferred

No Defense Obligation: The indemnification commitments in this Agreement do not include a defense obligation by the indemnitor unless such obligation is expressly stated.

Allocating Construction Risk

- Means, Methods and Safety – 6.01.H
 - The means, methods and safety clause is an essential integrating clause between EJCDC Construction and Owner/Engineer agreements

Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Site, nor for any failure of a Constructor to comply with Laws and Regulations applicable to that Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.

Changing the Allocation of Risk

- Exhibit I – Limitations of Liability
 - Some situations require different allocations of risk
 - Extremely complex designs, innovative methods, difficult or hazardous site conditions, etc.
- Optional Limitations
 - Engineer's Liability Limited to Stated Amount
 - Engineer's Liability Limited to Amount of Compensation
 - Engineers Liability Limited to Insurance Proceeds
 - Expansion or clarification of the exclusion of Special, Incidental, Indirect, and Consequential Damages

Changing the Allocation of Risk

- Main Agreement default general indemnification
 - Engineer indemnifies Owner
- Before 2008, default was mutual indemnification
 - Not acceptable for some jurisdictions and insurance conditions
 - Indemnification by Owner often rejected
 - Mutual Indemnification often a negotiated clause
- Mutual indemnification option in Exhibit I
 - Owner indemnifies Engineer

Indemnification – Alternate for 6.11.B

- Exhibit I Option for Indemnification by Owner

Indemnification by Owner. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and Consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Owner or Owner's officers, directors, members, partners, agents, employees, consultants, or others retained by or under contract to the Owner with respect to this Agreement or to the Project.

Insurance – Risk Management Tools

- Detailed review of insurance for 2014 E-500
- Key Insurance Terms – 6.05
 - Both Owner and Engineer have coverage obligations
 - Owner to be listed on Engineer's General Liability policy as Additional Insured
 - Types and Amounts of Insurance are set by Exhibit G
 - Certificates of Insurance required

Insurance – Risk Management Tools

- More Key Insurance Terms – 6.05
 - Certificates of Insurance required
 - 10 Day notice of cancellation or reduction in limits by endorsement
 - Builder's Risk/property insurers on Owner's construction must waive subrogation against Engineer and Owner in event of payment on policy

Insurance – Risk Management Tools

- Coverages in Exhibit G
 - Worker's Compensation (statutory)
 - Employer's Liability
 - General Liability
 - Excess of Umbrella Liability
 - Automobile Liability
 - Professional Liability (Engineer Only)
- Must identify Additional Insureds in G

Other Risk and Claim Related Items

- Accrual of Claims – 6.13.E

Accrual of Claims: To the fullest extent permitted by Laws and Regulations, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of Substantial Completion.

- Tied to Substantial Completion of construction
- Gives certainty to all parties as to time

Other Risk and Claim Related Items

- Dispute Resolution – 6.09 (Default)
 - Owner and Engineer agree to negotiate in good faith for 30 days prior to pursuing their rights at law
- Exhibit H sets Dispute Resolution Process
 - Either Mediation (before other DR or court)
 - Or, Arbitration
- If Exhibit H is not used,
 - Parties may exercise rights at law after 30 day good faith negotiation

Setting Expectations to Control Risk

- Ownership of Documents – 6.03.A and C

All Documents are instruments of service, and Engineer shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the Engineer) whether or not the Project is completed.

Owner may make and retain copies of Documents for information and reference in connection with the use of the Documents on the Project. Engineer grants Owner a limited license to use the Documents on the Project, extensions of the Project, and for related uses of the Owner, subject to receipt by Engineer of full payment due and owing for all services relating to preparation of the Documents, and subject to...

Setting Expectations to Control Risk

- Use of Documents – The “subject to...”
 - Use of documents is subject to completion by Engineer
 - Re-use of documents without adaptation by Engineer for the specific purpose is at Owner’s sole risk
 - Owner indemnifies Engineer for Owner’s use without adaptation by Engineer
 - License to Owner to use creates NO rights in third parties

Setting Expectations to Control Risk

- “Opinions of Probable Construction Cost” (i.e. “Cost Estimates”)

Engineer’s opinions (if any) of probable Construction Cost are to be made on the basis of Engineer’s experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors’ methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by Engineer. If Owner requires greater assurance as to probable Construction Cost, then Owner agrees to obtain an independent cost estimate.

Allocating Risk

- Make sure terms address specific needs
- Changing standard terms and language can have ripple effects
- Indemnification is often controlled by statute
 - Anti-indemnification laws address how one may transfer losses from own acts to others
 - Over-reaching indemnification language may be issue
- Always consult legal advice on risk allocation

EJCDC E-500 Essentials

- Comprehensive, quality and timely resource
- Professional Standard of Care
- Fair and balanced allocation of risk
- Integrated with EJCDC Construction Series
- User flexibility

Integrated with EJCDC C-Series

- E-Series and C-Series are closely coordinated
- Exhibit A (Engineer's Services) ties directly to many C-700 matters
- Other Exhibits also closely follow C-700
 - D (RPR)
 - E (Notice of Acceptability of Work)
 - G (Insurance) also closely follow C-700

Integrated with EJCDC C-Series

- Main Agreement terms also tie closely
- Means, Methods and Safety

Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Site ...

Integrated with EJCDC C-Series

- E-500 can be used with other General Conditions (such as Owner generated)
 - Careful coordination is required of Exhibits
 - Engineer's and Owner's Services, RPR, Insurance and various review forms - Exh. A1.02.A.8

... Also obtain and review copies of Owner's design and construction standards, Owner's standard forms, general conditions (if other than EJCDC® C-700, Standard General Conditions of the Construction Contract, 2013 Edition), supplementary conditions, text, and related documents or content for Engineer to include in the draft bidding-related documents (or requests for proposals or other construction procurement documents), and in the draft Construction Contract Documents, when applicable.

EJCDC C-Series and 2014 E-500

- C-Series Revised and Issued in 2013
- Important changes to the C-700 Claims process
- Adds a process prior to formal “Claim”
 - Change Proposal
 - Formalizes a long-standing pricing process for negotiating contractor extra proposals
- Removes Engineer out of certain changes
 - Non-technical changes and non-reviewable matters

C-700 Change Proposal

A written request by Contractor, ... 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 Documents.

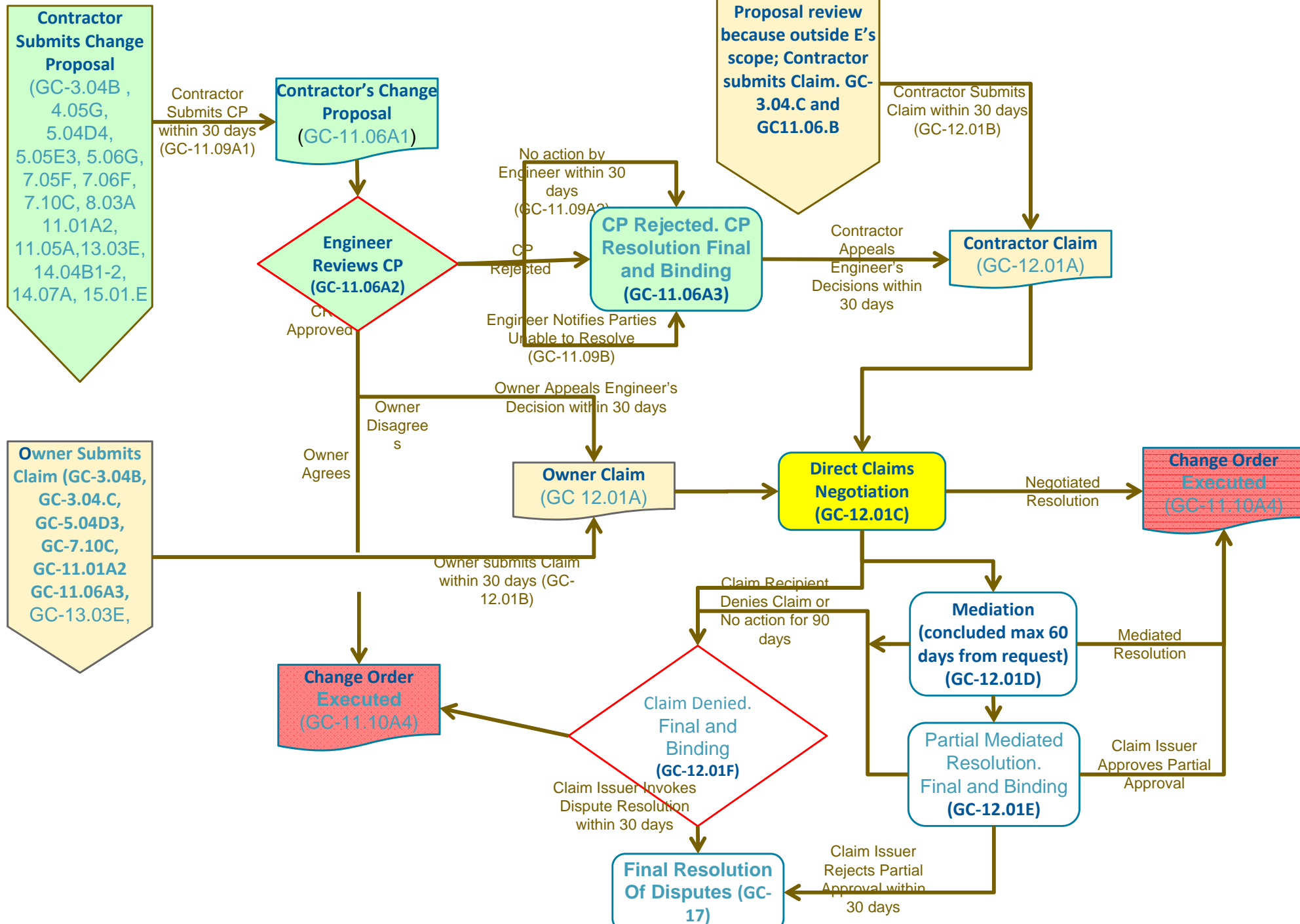
C-700 Non-Technical Changes

- Changes to the Work involving the design (Drawings, Specs) or other technical matters must be supported by the Engineer's recommendation. This will be accomplished through Engineer's signature on the Change Order form, as before.
- New Concept - Owner and Contractor may enter into contract changes that are non-technical (for example, a change to an insurance or indemnification provision) without Engineer's input, recommendation, or signature.

Differing Site Conditions



Change Resolution



EJCDC C-Series and 2014 E-500

- C-Series related changes to E-500 are not extensive, but important
 - Change proposals and Claims
 - Non-reviewable Matters
- Clarify how Work that is not compatible with design is addressed
 - A separate topic from Defective Work
- Exhibit E Notice of Acceptability of Work Updated

EJCDC C-Series and 2014 E-500

- Change Proposals and Claims – Exh A1.05.A.20

Change Proposals and Claims: (a) Review and respond to Change Proposals. Review each duly submitted Change Proposal from Contractor and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer will not resolve the Change Proposal. (b) Provide information or data to Owner regarding engineering or technical matters pertaining to Claims.

EJCDC C-Series and 2014 E-500

- Non-reviewable Matters – Exh. A1.05.A.13

Non-reviewable Matters: If a submitted matter in question concerns the Engineer's performance of its duties and obligations, or terms and conditions of the Construction Contract Documents that do not involve (1) the performance or acceptability of the Work under the Construction Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer will not provide a decision or interpretation

EJCDC C-Series and 2014 E-500

- Defective Work – Exh A1.05.A.10

Defective Work: Reject Work if, on the basis of Engineer's observations, Engineer believes that such Work is defective under the terms and standards set forth in the Construction Contract Documents. Provide recommendations to Owner regarding whether Contractor should correct such Work or remove and replace such Work, or whether Owner should consider accepting such Work as provided in the Construction Contract Documents.

EJCDC C-Series and 2014 E-500

- Compatibility with Design Concept – Exh A1.05.A.11

Compatibility with Design Concept: If Engineer has express knowledge that a specific part of the Work that is not defective under the terms and standards set forth in the Construction Contract Documents is nonetheless not compatible with the design concept of the completed Project as a functioning whole, then inform Owner of such incompatibility, and provide recommendations for addressing such Work.

EJCDC C-Series and 2014 E-500

- Notice of Acceptability of Work – Exhibit E
 - C-700 General Conditions (15.06.B.1) say regarding Final Payment:

If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled ... Engineer will also give written notice to Owner and Contractor that the Work is acceptable

EJCDC C-Series and 2014 E-500

- Notice of Acceptability of Work – Exhibit E
 - Been a part of E-500 for several editions
 - 2014 revised and reformatted form

The Engineer hereby gives notice to the above Owner and Contractor that Engineer has recommended final payment of Contractor, and that the Work furnished and performed by Contractor under the above Construction Contract is acceptable, expressly subject to the provisions of the related Contract Documents, the Agreement between Owner and Engineer for Professional Services dated _____, and the following terms and conditions of this Notice:

Notice of Acceptability of Work – Terms

This Notice is given with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.

This Notice reflects and is an expression of the Engineer's professional opinion.

This Notice is given as to the best of Engineer's knowledge, information, and belief as of the Notice Date.

This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation of the Contractor's work) under Engineer's Agreement with Owner, and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Agreement.

Notice of Acceptability of Work – Terms

This Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract, an acceptance of Work that is not in accordance with the related Contract Documents, including but not limited to defective Work discovered after final inspection, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Construction Contract Documents, or to otherwise comply with the Construction Contract Documents or the terms of any special guarantees specified therein.

This Notice does not relieve Contractor of any surviving obligations under the Construction Contract, and is subject to Owner's reservations of rights with respect to completion and final payment.

EJCDC E-500 Essentials

- Comprehensive, quality and timely resource
- Professional Standard of Care
- Fair and balanced allocation of risk
- Integrated with EJCDC Construction Series
- User flexibility

User Flexibility – E-500 as Standard

- Comprehensive and proven agreement form for most infrastructure projects
 - Covers broadest range of agreement and scope topics to be anticipated in any infrastructure project
 - Generalized scope adaptable to many types of improvements
- Essential standard on projects using EJCDC General Conditions C-700
 - Minimize contractual gaps, conflicts and oversights

User Flexibility – E-500 as a Source

- Risk Allocation can and should be addressed for project specifics
- Solid platform of accepted language and terms for both owners and engineers
 - Balanced starting point for negotiating a contract
 - Focused on the design and professional services side of construction contracting practices
 - Not just a re-write of a contractor/owner form

User Flexibility – E-500 as a Source

- Equally adaptable for Owner or Engineer as lead drafter
- Many public and private owner users
- Adopted with minor changes by USDA RUS and RD for Water and Waste Disposal projects
 - Bulletin 1780-26

User Flexibility – E-500 as a Source

- Can E-500 be too comprehensive?
 - Must weigh potential risks with user concerns about length, ease of review, over-scoping of the work
 - How do you predict which terms you won't need on any given project incident?
- EJCDC offers E-520 Short Form of Agreement Between Owner and Engineer
 - Due for issue in Fall 2014
 - Offers essentials for limited scope projects
 - Not suitable for all projects –depending on complexity

User Flexibility – Exhibit A Scope

- Exhibit A Engineer's Services
 - Updated 2014
- Detailed listing of services under each phase:
 - Study and Report Phase
 - Preliminary Design Phase
 - Final Design Phase
 - Bidding or Negotiating Phase
 - Construction Phase
 - Post Construction Phase
 - Additional Services

Schedule – Function of Exhibit A

- Agreement Article 3 sets the obligation to complete according to schedule and the means to adjust
- Exhibit A sets specific times of performance
 - Times for each phase with times for Owner review

Furnish [] review copies of the Preliminary Design Phase documents, opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables to Owner within [] days of authorization to proceed with this phase, and review them with Owner. Within [] days of receipt, Owner shall submit to Engineer any comments regarding the furnished items.

Revise the Preliminary Design Phase documents, opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables in response to Owner's comments, as appropriate, and furnish to Owner [] copies of the revised Preliminary Design Phase documents, revised opinion of probable Construction Cost, and any other deliverables within [] days after receipt of Owner's comments.

Exhibit A – “How to Engineer a Project”

- Review and prepare scope from Exhibit A
 - 86 significant project scope items to consider
- A typical list of individual services from study through completed Construction
- Ties closely to EJCDC construction General Conditions C-700
- Customize for project situation, locale, specific requirements

Exhibit A Directly Editable for Scope

any other Study and Report Phase deliverables to the Owner within [] days of receipt of Owner's comments.

- B. Engineer's services under the Study and Report Phase will be considered complete on the date when Engineer has delivered to Owner the revised Report and any other Study and Report Phase deliverables.

A1.02 Preliminary Design Phase

- A. After acceptance by Owner of the Report and any other Study and Report Phase deliverables; selection by Owner of a recommended solution; issuance by Owner of any instructions of for use of Project Strategies, Technologies, and Techniques, or for inclusion of sustainable features in the design; and indication by Owner of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by Owner, (1) Engineer and Owner shall discuss and resolve any necessary revisions to Engineer's compensation (through application of the provisions regarding Additional Services, or otherwise), or the time for completion of Engineer's services, resulting from the selected solution, related Project Strategies, Technologies, or Techniques, sustainable design instructions, or specific modifications to the Project, and (2) upon written authorization from Owner, Engineer shall:
 - 1. Prepare Preliminary Design Phase documents consisting of final design criteria, preliminary drawings, outline specifications, and written descriptions of the Project.
 - 2. In preparing the Preliminary Design Phase documents, use any specific applicable Project Strategies, Technologies, and Techniques authorized by Owner during or following the Study and Report Phase, and include sustainable features, as appropriate, pursuant to Owner's instructions.
 - 3. Provide necessary field surveys and topographic and utility mapping for Engineer's design purposes. Comply with the scope of work and procedure for the identification and mapping of existing utilities selected and authorized by Owner pursuant to advice from Engineer based on ASCE 38, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data," as set forth in Paragraph A1.01.A.12 above. If no such scope of work and procedure for utility mapping has been selected and authorized, then at a minimum the utility mapping will include Engineer contacting utility owners and obtaining available information.
 - 4. Visit the Site as needed to prepare the Preliminary Design Phase documents.

Exhibit A – Additional Services

- List of potential or commonly added services requiring pre-approval by Owner
 - 29 Individual items, such as:
 - Grant and funding applications
 - O&M Manuals & Owner training
 - Alternatives (beyond basic scope)
 - Multiple prime contracts (beyond basic scope)
 - Assisting in litigation and bid protests

Exhibit A – Additional Services

- List of potential services NOT requiring pre-approval by Owner, such as:
 - Administering construction changes requested by Owner
 - Evaluating excessive numbers of substitutes and repeat shop drawing reviews and reports
 - Evaluating unreasonable/frivolous RFI's
 - Compliance with requirements of Owner's or Contractor's safety programs that exceed normal safety program requirements
 - Services due to material shortages or delays

Exhibit C Payments to Engineer

- New user guidance
- 6 Industry standard payment methods supported
- 16 Separate compensation method sub-exhibits
- Allow separate payment methods for
 - Basic Services
 - Resident Project Representative
 - Additional Services

Standard Compensation Methods

- Lump Sum (Packet BC-1)
- Standard Hourly Rates (BC-2)
- Percentage of Construction Costs (BC-3)
- Direct Labor Costs Times a Factor (BC-4)
- Direct Labor Costs Plus Overhead Plus a Fixed Fee (BC-5)
- Salary Costs Times a Factor (BC-6)

Exh C – Basic Compensation

- There are 6 built in methods for compensation for Basic Services as described in Exhibit A

	Lump Sum	Standard Hourly Rates	Percentage of Construction Costs	Direct Labor Costs Times a Factor	Direct Labor Costs Plus Overhead Plus a Fixed Fee	Salary Costs Times a Factor
Use This Base Compensation Packet	Packet BC-1	Packet BC-2	Packet BC-3	Packet BC-4	Packet BC-5	Packet BC-6
Include This Appendix	Appendix 1 (if applicable)	Appendices 1 and 2	Appendix 1 (if applicable)	Appendix 1	Appendix 1	Appendix 1

Exh C – Compensation for RPR

- Resident Project Representative services can be compensated using these five Exhibit C packets

	Lump Sum	Standard Hourly Rates	Percentage of Construction Costs	Direct Labor Costs Times a Factor	Salary Costs Times a Factor
Use This RPR Compensation Packet	Packet RPR-1	Packet RPR-2	Packet RPR-3	Packet RPR-4	Packet RPR-5
Include This Appendix	Appendix 1 (if applicable)	Appendices 1 and 2	Appendix 1 (if applicable)	Appendix 1	Appendix 1

Exh C – Additional Services

- Compensation packets for Additional Services are provided for following cost methods

	Standard Hourly Rates	Direct Labor Costs Times a Factor	Salary Costs Times a Factor
Use This Additional Services Compensation Packet	Packet AS-1	Packet AS-2	Packet AS-3
Include This Appendix	Appendices 1 and 2	Appendix 1	Appendix 1

Exh C – Appendix 1 Expenses

- Standard expense categories included in Appendix 1 (intended to be customized)

8"x11" Copies/Impressions	\$ []/page
Copies of Drawings	\$ []/sq. ft.
Mileage (auto)	\$ []/mile
Air Transportation	at cost
CAD Charge	\$ []/hour
Laboratory Testing	at cost
Health and Safety Level D	\$ []/day
Health and Safety Level C	\$ []/day
Meals and Lodging	at cost

- Appendix 2 is Standard Hourly Rates table

Negotiating Contracts

- Typical Negotiating Issues
 - Indemnification
 - Arising from Negligent acts VS. ANY acts
 - Mutual
 - Including defense or excluding defense
 - Standard of Care
 - Professional or Absolute
 - Limits of Liability
 - Ownership of documents and Re-use
 - Terms of Insurance
 - Insurance Cancellation Notice
 - Dispute resolution and Controlling law

EJCDC® E-500 Agreement Between Owner and Engineer for Professional Services

- Currently Available through
 - ACEC
 - ASCE
 - NSPE
 - EJCDC.org
- Discounts for organization members

E-570

Agreement between Engineer and Consultant for Professional Services 2014 Changes

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

**AGREEMENT
BETWEEN ENGINEER AND CONSULTANT
FOR PROFESSIONAL SERVICES**

Prepared by



Issued and Published Jointly by



EJCDC E-570 Engineer - Consultant

- Subconsultant agreement between Engineer and its Consultant
 - Working under E-500
- Issued April 2014
- Closely parallels and integrated with E-500
- Structure generally identical to E-500
 - Main Agreement
 - Exhibits A to K

2014 E-570 Updates

- Consistent with E-500 changes
- Review of overall agreement with emphasis on clarity of flow-down obligations from Owner to Engineer to Consultant
- Improvement of Exhibit D for duties of Consultant's Resident Representative (CRR) and relationship to RPR

E-570 Compensation Options

- Since 2008, E-570 has provided 4 compensation payment options for Engineer and Consultant
- Allow parties to select payment process that best meets project needs and risks

E-570 Payment Options

- ***“Pay-When-Paid” but share risk of default***

For a time Engineer may postpone paying Consultant if Owner has not yet paid Engineer, but ultimately Engineer must pay Consultant, even if Engineer never receives payment from Owner; in this particular Pay-When-Paid, Engineer may not put off payment for more than 120 days. The express exception is for situations in which the reason for Owner’s non-payment is one of the listed forms of extreme financial trouble—bankruptcy, insolvency, termination of funding or financing, or formal reorganization—in which case Engineer and Consultant share in the adverse consequences of the non-payment.

E-570 Compensation Options

- ***“Pay-When-Paid” but ultimately pay***

This alternative does not expressly address the effect of Owner’s non-payment. Courts typically have categorized similar clauses in construction subcontracts as “Pay-When–Paid” clauses, allowing the intermediate party (here the Engineer) to postpone payment if Owner has not yet paid, but only for a reasonable time. Pay-When-Paid clauses affect the timing of payment, but typically not the ultimate obligation to pay.

E-570 Compensation Options

- ***“Pay” regardless of whether Owner pays***

This alternative unconditionally requires that Engineer pay Consultant.

E-570 Compensation Options

- ***“Pay-If-Paid”***

This is a “Pay-if-Paid” clause. Engineer’s obligation to pay Consultant is expressly conditional upon Engineer’s receipt of payment from Owner.

EJCDC E-505 Owner Engineer – Task Order

- Owner/Engineer Master Agreement for multiple work assignment by “Task Order”
 - Similar to most municipal “Consultant Pool” Contracts
- Follows E-500 very closely
- Structure generally follows E-500
 - Main Agreement
 - Exhibit A and others
 - Plus Task Order form

EJCDC E-505 Owner Engineer – Task Order

- Update is in final development
 - Likely release by August 2014
- Very useful for any situation where an Owner engages Engineer for repeat and ongoing services on different projects

EJCDC Standard Notice

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

EJCDC Engineering Series

Available Now

www.NSPE.org

www.ASCE.org

www.ACEC.org

EJCDC.org

Copyright © 2014 NSPE, ACEC and ASCE. All rights reserved

Additional EJCDC Resource Info – EJCDC Legal Counsel



Hugh Anderson

Attorney at Law

hugh.anderson@aecddocuments.com

www.ejcdc.org

Questions? – Speaker Contact Info



Bruce D. Firkins, PE LS

Vice President

Bolton & Menk, Inc.

brucefi@bolton-menk.com

T. 952.890.0509

Bolton & Menk, Inc.
12224 Nicollet Avenue, Burnsville, MN 55337
www.bolton-menk.com



BOLTON & MENK, INC.
Consulting Engineers & Surveyors