THE MORPHING OF THE ARCHITECT'S ROLE AND HOW IT IS IMPACTING THE CM

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NATIONAL CONFERENCE & TRADE SHOW
LOEWS CORONADO BAY RESORT
SAN DIEGO, CA

OCTOBER 13-15, 2002

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ABSTRACT

From the inauguration of the Master Builder the role of the Architect has evolved and is now, more than ever, in a state whereby its role is defined on a project-by-project basis, rather than a universally acknowledged definition. Today's economy, professional liability, changes in the insurance industry, and the Architect's need to maintain its image and prestige are all fueling conflict and change among the project participants.

Furthering this conflict and change, just about forty years ago, was the introduction of a fourth party into the traditional triumvirate of the Owner, Architect and Contractor. The Construction Manager, a role in itself that is still seeking universal acceptance and definition, has contributed to the morphing of the Architect's and Owner's role and the risks each is willing to accept.

The result of this conflict and change in the Architect's role impacts many facets of the project, in all phases of construction. These impacts directly influence the scope of services, fees, liability, and quality of the services provided by the entire project team. Not addressing these impacts often prompts duplication of effort, incomplete contract documents (gaps or leave-outs), conflicts between the project participants, finger pointing and other negative side effects.

This paper will examine the morphing of the Architect's role on the project with emphasis on changes caused by the introduction of the Construction Manager into the process. The paper will look into conflicts with the Architect's and Construction Manager's roles inherent in the standard contract agreements produced by the American Institute of Architects (AIA), the Construction Management Association of America (CMAA) and the Associated General Contractors of America (AGC) – representing the interests of the primary parties involved in a project today.

INTRODUCTION

In 1951, construction became the largest industry in the United States exceeding agriculture[1]. But long before 1951, organizations representing architects, engineers, and contractors in the construction industry began jockeying for position.

The root cause may be profit, protectionism or both. The issue is scope – responsibility and accountability. The parties involved are the Architect and Construction Manager. The victim, if there is one, may be the Owner.

The reality is that the Owner, often unsophisticated, hires an Architect, Construction Manager and eventually Contractors to meet its objective of building or renovating something, but let's not be very specific and globalize it and refer to it the project. Inherently, the [unsophisticated] Owner takes a back seat thinking it has done everything it was supposed to do and waits for the magic to happen on their project. The Owner basically assumes the parties will talk and coordinate with each other.

Innocently and unknowingly, the Owner, usually on the advice of counsel, a board member, a peer or a friend, uses standardized contract agreements that are not coordinated or custom produced agreements. These uncoordinated and custom agreements most often result in duplication and gaps in services and eventually lead to some sort of conflict on the project. Adding to this dilemma, the parties, long before any type of contract was spoken of, lobbied the Owner during the selection phase, for more scope – more services equal more profit. But which party is supposed to do what and what does "more" scope mean? This is the crux of the issue.

[1] Source: ***www.agc.org***

Traditionally, Architects have been associated with design, Construction Managers with the management of the project and Contractors with building, i.e. the work. The issue is that Architects are not just linked with the design and Construction Managers are often involved in the management of the entire project[2], from inception to completion. This paradox can lead to conflict and can result in project paralysis – a huge thorn in the side of the Owner and potentially very costly.

Conversely, if the Owner does not engage the CM to provide services on the project until the beginning of the construction phase, different problems may arise and provide fuel for conflicts, but not necessarily related to the contractual services of either the Architect or the CM. A case in point may be the Architect preparing the scoping documents that annex the bid packages. Without solid construction input, the Architect may leave certain work out of the bid packages or may include scope items in a certain trade's package that more appropriately belongs in a different trade's package for reasons of economy, time or quality control. If the design professional firms have employees that are 'construction professionals' as opposed to 'designers', this example (issue) could be moot. But, not all design professional firms employ construction professionals, and likewise, not all CM firms employ design professionals[3].

Professionally speaking, most ethics policies[4] state that *professionals* should practice within one's own area of expertise. In this Architect vs. Construction Manager battle for scope, these firms often circumvent the ethical considerations by hiring employees, outside its normal core business, with the experience necessary to perform the services for which it is selling and for which it will be eventually engaged.

Notwithstanding the ethical considerations, architectural firms supply services that today may be more appropriate for a professional construction management firm to provide. Similarly, construction management firms supply services today that may be more appropriate for a design firm to provide. Within this framework is born the issue – what should an Owner do?

One cannot begin to explore the Architect and CM roles on a project without briefly examining the origins of their practice and how that practice has evolved in response to changes in the construction industry, the least of which includes Owner concerns, trade association lobbying and insurance industry changes.

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[2] According to the Construction Management Association of America (CMAA), **Construction Management** is a professional service that applies effective management techniques to the planning, design, and construction of a project from inception to completion for the purpose of controlling time, cost and quality. Construction Management is a discipline and management system specifically created to promote the successful execution of capital projects for owners. These projects can be highly complex. Few owners maintain the staff resources necessary to pay close, continuing attention to every detail--yet these details can "make or break" a project. A professional CM can augment the owner's staff with pre-planning, design, construction, engineering and management expertise that can assure the best possible project outcome no matter what type of project delivery method used. Source: ***www.cmaanet.org.***

[3] Refer to the ***History of Construction Management*** section. Read the 1975 letter authored by the AIA, AGC and ACEC regarding the special skills needed to be a Construction Manager.

[4] The American Institute of Architects ***Code of Ethics and Professional Conduct*** states: "Rule 3.102 Members shall undertake to perform professional services only when they, together with those whom they may engage as consultants, are qualified by education, training, or experience in the specific technical areas involved."

The Construction Management Association of America ***Code of Professional Ethics of the Construction Manager*** states: "Representation of Qualifications. I will only accept assignments for which I am qualified by my education, training, professional experience and technical competence, and I will assign staff to projects in accordance with their qualifications and commensurate with the services to be provided."

HISTORY OF ARCHITECTURE

The history of architecture and the practice of architecture as we know it today is a topic way beyond the scope of this paper but suffice it to say, scholars are still seeking answers and exploring the subject.

Today's "designer" or "architect" originated from the organization of the stonemasons in medieval times[5]. The term Architect is derived from the Greek term meaning "head builder". Arkhitekton[6] was used to describe the leading stonemason of the ancient Greek temples of around 500 B.C. – *Arkhi* meaning head, chief or master and *Teckton* meaning worker or builder. A related word Tekhne means art or skill.

Consistent with the date of the Greek stonemasons, virtually no structures above the ground floor exist prior to the sixth century B.C.[7] In addition, only one book written about architecture exists in the whole of classical literature covering the period of 1600 B.C. to the sixth century A.D., a period longer than from the present day back to the birth of Christ.[8]

In exploring the origin of architecture, it is important to make the distinction between *archaeology* which is the discovery of the sequence of events and exactly what actually was built; while on the other hand, *architecture* is building conceived as an art. To truly study the history of architecture, one would have to examine the significance of the column.[9] To the Egyptians, Mesopotamians, Minoans and others, columns were much more than a means of supporting a roof – they were a symbol, much less precise and mathematical than we think of columns today – they were art tied to emotion.

Columns are important because through archaeology we can find and distinguish columns from other building elements. Post sixth century B.C., the column plays an important role in the history of architecture and in discussing the role builders and artisans played.

Many of us associate the practice of architecture with events in or about the Dark Ages when the Master Builder was the planner, designer, drafter, engineer and superintendent of massive cathedrals and castles still standing today. Although not documented as such, it is not hard to imagine the genesis of the first Owner-Architect agreement being based on the Master Builder performing all the modern day functions a team of professionals would normally provide, including the Construction Manager.

HISTORY OF CONSTRUCTION MANAGEMENT

While the debate over "What is Construction Management?" still rages, so does the claim over its origin, but little is published that documents the actual facts behind the birth of CM. What appears to consistently surface is that the parents of CM appear to be the nation's largest general contractors in the early 1960s.

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[5] Swaan, Win, ***The Late Middle Ages***, Cornell University Press, Ithaca, NY 1977, Page 17.

[6] Source: ***www.arkhitekton.com.***

[7] Allsopp, Bruce, ***A History of Classical Architecture***, Sir Isaac Pitman & Sons, Ltd., 1965.

[8] ***Ibid.***

[9] ***Ibid.***

In a speech entitled *Construction Management – A Professional Approach to Building* presented by John L. Tishman at the University of Michigan's Center for Construction Engineering and Management on April 13, 1988[10], Tishman asserts that Tishman Realty & Construction Co., Inc. (TR&C) is generally acknowledged to have pioneered CM as a professional service during the 1960s. The inspiration, according to Tishman for devising this new service was the growing Owner's need for accurate and knowledgeable guidance throughout the entire life cycle of a project due to the increasing size and technical complexity of projects.

According to Tishman, his firm's first major construction management assignment was the construction of Madison Square Garden in New York City in 1963. Later in 1965 it was used again by TR&C on the 100-story John Hancock Center in Chicago and again two years later by TR&C on today's ill-fated twin towers of what was New York's World Trade Center.

On September 3, 1968 a Federal Government study of the construction contracting procedures of the Public Buildings Service, General Services Administration was approved[11]. The purpose of which was to study "all reasonable alternative means of construction contracting" with the hope of finding which method was most advantageous for the construction of public buildings. The government was looking for the best method to reduce construction times and cost. In fact, the real impetus behind the study was that the government hoped that the "best" method would result in "the avoidance of contracts with contractors who are prone to contract disputes, are unduly claim-conscious, or take cost cutting actions that are incompatible with quality construction."

The 1970 study revealed to the GSA that its current methods of contracting were resulting in the duration of its buildings being constructed in more than twice the time as similar buildings in the private sector[12]. The report recommended the GSA abandon its "outmoded procedures" and use phased construction in conjunction with Construction Management. The first GSA project to use this new method[13] was the $42 million National Air and Space Museum, later turned over to the Smithsonian Institution in 1975.

Adding to the confusion, and probably one of the events that give rise to the definitional issues facing CM today, the Department of Health, Education and Welfare (HEW), in the early 1970s, embarked on their own CM system of delivery projects[14]. HEW employed Construction Management with Guaranteed Maximum Price (CM-GMP) contracts for federally assisted hospital, school and laboratory construction.

In August 1975, the three controlling associations in the construction industry met and issued a general statement and position about construction management[15]. In Denver, the National CM committees of the Associated General Contractors of America, the American Institute of Architects and the American Consulting Engineers Council (the Architects, Contractors and Engineers) unanimously agreed and issued the following statement:

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[10] Source: Handout distributed at ***The Robert B. Harris Inaugural Lecture*** on April 13, 1988 by John L. Tishman

[11] March 17, 1970, Final Report on ***Public Buildings Service Construction Contracting*** to the Honorable Robert L. Kunzig, Administrator of General Services.

[12] ***The GSA System for Construction Management***, Public Buildings Service, GSA, April 1975.

[13] ***Ibid.***

[14] ***Using Construction Management for Public and Institutional Facilities***, Public Technology, Inc., March 1976.

[15] ***Ibid.***

Denver, Colorado
August 15, 1975

The Construction Management Committees of the AIA, AGC, and ACEC, in joint conference, recognize the importance of the Construction Management process and have agreed to work together collectively on a National Comprehensive Construction Management Program to implement the following:

1. To define, develop, and disseminate the standards and levels of quality of Construction Management;

2. To develop guide lines and educational programs for the *assist*ance of Members and Owners engaged in Construction Management;

3. To relate and coordinate with all elements in the industry performing Construction Management services, to develop acceptable industry-wide standards for Construction Management;

4. To monitor and to make joint recommendations with respect to legislation and regulations at the federal, state, and local levels affecting Construction Management; and

5. To communicate and maintain liaison with the Owners and Users of Construction Management services, advising and *assist*ing them on the best and most economical procedures.

The following statement is made with respect to Construction Management services provided to the Owner or the User/Client, being referred to hereinafter as CM.

Construction Management requires a number of skills relating to the knowledge of construction process, and knowledge of the design process, and the fundamentals of general and project management.

A background in construction contracting, architecture, and engineering can provide a basis of experience for entering the field on [of] Construction Management. However, the basic minimum capabilities of contractors, architects, and engineers do not necessarily and automatically provide an individual with all of the skills required of a competent CM [Construction Manager].

From a practical standpoint, an effective CM organization is likely to be a multi-discipline organization. However, CM is an appropriate function for construction contractors, as well as

> architectural or engineering firms or divisions thereof, so long as said organization or division, in fact, has CM capabilities.
>
> It is the view of this group that neither architects, engineers, nor contractors should take any action in connection with the licensing or other laws which would have the effect of reserving to themselves Construction Management markets.

To solidify their definition and vision of construction management, the AIA issued its first Owner-CM agreement that year, in 1975. The Associated General Contractors issued its first Owner-CM agreement in 1979 based on agreements, with permission, previously published by the American Institute of Architects[16]. The American Consulting Engineers Council, as a member of the Engineers Joint Contract Documents Committee, has not published an Owner-CM agreement.

In 1979, Richard Schultz (Schenkel & Schultz, Indiana), began contacting members of a local Indiana Construction management group about taking their organization national. The idea was tabled for a couple of years to test the interest of the construction community. The attendance and enthusiasm exhibited at a preliminary meeting in Indianapolis in October 1981 sparked the two-day inaugural meeting of the Construction Management Association of America at the Brown Palace Hotel in April 1982 in Denver, Colorado.

According to one of the founders of CMAA, the GSA may have given Construction Management its name, but should not be credited with CM's development as it is practiced today. The credit should go to the scores of firms in the private sector that pioneered a new contracting system that grew into a viable alternative for Owners.

CONTRACT AGREEMENTS

The American Institute of Architects (AIA), the Construction Management Association of America (CMAA), and The Associated General Contractors of America (AGC) define the Architect's and Construction Manager's role and legal liability on a project in standardized contract agreements available to the public. Each association has developed and revised its contract agreements over the years. Today, the AIA has not only produced agreements defining the Owner–Architect relationship, it also has produced an agreement for the Owner–Construction Manager relationship. Likewise, CMAA and AGC both have Owner–Construction Manager and Owner–Architect (or Design Professional) type agreements. The assumption is that within any one association the use of both agreements would define all the services normally required by the Owner, and clearly delineate which party would provide those services.

With the advent and innovation of project delivery systems, associations have responded to each party's changing roles and responsibilities by developing contract agreements specifically designed to be used under certain conditions. For example, the AGC has two Owner–Architect/Engineer agreements. AGC Document No. 240 is to be used when the project has no Construction Manager and AGC Document No. 530 is to be used where a Construction Manager, acting as an Agent, has been retained by the Owner. The AIA publishes two comparable Owner-CM agreements.

Other contract forms in the construction industry are published by the Engineers Joint Contract Documents Committee (EJCDC), the Construction Owners Association of America (COAA) and the

[16] From a recognition and marketing perspective, this was a very clever strategy. Today's AGC's Owner-CM agreements do not reference the AIA or its documents.

Associated Owners and Developers (AOD). The EJCDC is a committee made up of members of the National Society of Professional Engineers, the American Consulting Engineers Council, The American Society of Civil Engineers and the Construction Specifications Institute. The EJCDC has published numerous forms of agreements and guidelines for the construction industry.

COAA has two suites of inaugural agreements available – *Contract for Professional Services* (Architect's Form), and *Contract for Construction* (General Contractor's Fixed Price Form). The AOD published its first agreement in 2000 titled the *Standard Form of Agreement between Owner and Contractor* where the Price is Lump Sum and AOD has plans for developing other contract agreements.

Only the contract agreements developed by AIA, CMAA and AGC have been considered in the writing of this paper.

AIA Contract Agreements

The American Institute of Architects (AIA) was founded in 1887. Its inaugural contract agreement was published in 1888[17] (see Exhibit A) and was developed by a joint committee of the AIA, the Western Association of Architects and the National Association of Builders. The three-page agreement mirrored today's AIA A201 agreement between the Owner and Contractor.[18]

It was not until 1917 that the AIA published *The Standard Form of Agreement between Owner and Architect* (see Exhibit B). This one page, twelve provision agreement, provides a broad definition of the Architect's scope of services, but deals mostly with payment terms and administrative issues between the Owner and Architect.

In 1975, the AIA launched its inaugural Owner–Construction Manager agreement designated B801. It describes the Construction Manager as an Agent of the Owner.

Today, the AIA maintains and publishes a myriad of contract agreements. The AIA B141-1997 is the latest Owner–Architect standard agreement and the AIA B801/CMa published in 1992 is the latest version of the Owner–CM agreement where the CM is not the constructor.

As the leading suite of agreements in use today, it is important to examine the AIA agreements a little further. The AIA Board of Directors has assembled Documents Drafting Principles[19] from various policies adopted by the AIA over the course of many years. These drafting principles are:

- To establish and maintain, for nationwide application, standardized legal forms in order to enhance the stability and order of design and construction legal transactions.
- To provide assistance to users who otherwise could not obtain knowledgeable legal counsel in a timely or economical fashion by:

[17] As an aside to the scope of this paper, I think it fascinating that in 1888, the AIA documents speak of binding arbitration by a panel of three; liquidated damages; delay, claims; default in today's terms; and liens. It appears that in 1888, Owners were having the same problems we have today and therefore sought protection through this contract.

[18] Note that the AIA's first contract document was not an Owner–Architect agreement but rather an Owner–Contractor agreement.

[19] Source: taken directly from ***http://www.aia.org/documents/drafting.asp.***

- Providing standard documents as an alternative to expensive, custom-drafted documents.
- Promoting flexible use through the publication of supplemental guides demonstrating, with model language and instructions, the adaptability of the standard documents to particular circumstances.

❖ To provide continuing education on the proper use of the documents.

❖ To strive for balanced and fair documents by:

- Conforming to common law and statutory precepts adopted in the majority of jurisdictions.
- Allocating risks and responsibilities to the party best able to control them[20]; to the party best able to protect against unexpected cost; or to the owner when no other party can control the risk or prevent the loss.
- Seeking industry consensus among all parties whose interests may be significantly impacted by individual documents

❖ To publish documents that are subject to uniform legal interpretations so as to be predictably enforceable and thus reliable

❖ To express unambiguous intentions in language comprehensible to the users and interpreters (courts and lawyers) of the standard documents

❖ To reflect industry customs and practices, where practices are consistent among regions, rather than to impose new practices; where practices are inconsistent or no guidelines for practice exist, to provide a consensus-based model for practitioners to follow.

The AIA document revision policy[21] [with an emphasis on the 1987 to the 1997 update of the Owner-Architect agreement] is as follows:

❖ **Industry practices change**

We are in the most dynamic period of change ever experienced, particularly in the electronic field. AIA documents recognize those changes. New methods of communication require new contract provisions. The contract documents of today must reflect changes in communication that did not exist when the 1987 documents were published.

❖ **The economics of the profession change**

Architects have been searching for ways to expand the services they provide to clients. Many have entered into nontraditional methods of project delivery or want to specialize in one or more areas, both of which are different from the traditional scope of the owner - architect relationship envisioned by the 1987 documents. As the scope of services changes, so do the tools available to the practitioner. AIA contract documents must reflect changes in economics, in the construction industry, in project delivery, and in the practice of architecture.

[20] While the AIA and its members may consider its documents as conforming to this policy, many in the construction industry do not share this view.

[21] Source: taken directly from ***http://www.aia.org/documents/revpolicy.asp.***

❖ **Relationships change**

Service to the client is the cornerstone of the B141 [Owner-Architect agreement] relationship. Disclosure and discussion have been placed in the forefront. These changes reflect a change in the view of the architect in today's environment.

❖ **Legal issues**

The AIA Documents Committee does not ignore legal issues. Rather, it incorporates new developments in legal thought and acceptable industry practice into the AIA documents. For example, mediation was rejected in the 1970s by most insurers of design professionals, but by 1997 it was accepted by all industry participants, including those same insurers, as one of the best practices to terminate disputes at an early stage, with less cost in dollars and damages to the relationships among the affected parties.

Another issue, mutual waiver of consequential damages, replaced unilateral limitations of liability as acceptable methods to reduce exposure of industry participants to inappropriate claims. As these concepts have been incorporated into the industry, they have been incorporated into the AIA documents.

❖ **Elimination of abuse**

As concepts such as construction change directives have been accepted into construction industry practices, abuses have developed. Owners would not pay contractors for monies properly expended on performance of work required by construction change directives until a change order was signed, often months later. This abuse needed to be stopped. The 1997 edition of A201 provided a mechanism to do so.

❖ **Acknowledging new participants**

AIA documents address the roles of new participants-for example, construction managers, design-builders, and project managers-in the design and construction process."

CMAA Contract Agreements

The Construction Management Association of America (CMAA) was founded in 1981. Its first set of contract agreements, published in 1990, included the A1 Owner–Construction Manager and A4 Owner–Design Professional agreements. Other CM-GMP agreements were also developed. The authors of these agreements were senior members of firms providing construction management services with the input of legal counsel specializing in construction matters.

In 1993, CMAA revised and reissued both agreements. Today, the 2002 version of the agreements are in use. It is important to note that many of the issues raised in this paper regarding the coordination and scope issues, are being addressed and revised by a committee currently updating the 2002 family of agreements, and are due to be published before year-end.

AGC Contract Agreements

The Associated General Contractors of America (AGC) was founded in 1918 in response to a request by then President Woodrow Wilson that sought to create an organization to represent the

construction industry nationally[22]. In 1919, the AGC began to produce standardized agreements and in 1920 opened its headquarters in Washington, DC.

The AGC published the *Standard Form of Agreement Between Owner and Construction Manager* for the first time in June 1979. AGC Document No. 510 was created on the basis that the Owner awarded all trade contracts, making the Construction Manager, not at risk and an Agent of the Owner. The latest version of this agreement was published in 1997.

The AGC first published its *Standard Form of Agreement Between Owner and Architect/Engineer* in 2000 in two forms – Document Nos. 240 and 530. Document 240 is intended to form the agreement between the Owner and the Architect/Engineer performing design and administrative services for the project during construction. Document 530 differs only in that it contemplates that the Owner has retained the services of a Construction Manager acting as an Agent of the Owner.

SERVICES (TASKS) IN CONFLICT

If you speak to any Architect or Construction Manager today they can recant tales of issues, disputes and minor squabbles about whom would provide specific tasks needing to be performed on behalf of the Owner. The thesis is that these conflicts of scope are primarily caused by the agreements the Owner has chosen to engage the Architect and Construction Manager. These conflicts in scope have led to duplication, gaps (leave-outs), and incomplete and/or conflicting overlap in services to the Owner. To prove this point, in-depth research into the scopes of work of the Architect and CM, as defined by the AIA, CMAA and AGC contract agreements, was performed.

For whatever reason, Architects and Construction Managers (and even Contractors) have stepped out beyond their traditional roles to provide a myriad of services outside their core business. As a result, the basic and additional services provided Architects and Construction Managers, as expressed in the contract agreements produced by AIA, CMAA and AGC, are potentially boundless. The contract agreements provide for either the Architect or the Construction Manager to perform a variety of tasks that can be classified as either within their core business, outside their core business, or in the gray zone, and it is in the gray zone that we have the greatest interest.

The conflicts resulting from the morphing of the Architect's and Construction Manager's roles manifest in all three phases of a project – preconstruction, construction and post-construction. This paper will only explore the conflicts in the preconstruction and construction phases of the project life-cycle.

The source of conflicts between the Architect and the CM are born out of traditional practice in the field [how things get done in the real world] and the contracts each party signs. Rarely do contracts actually describe the "exact" scope of work performed by the Architect and CM in enough detail. And if the Architect and CM performed explicitly to their contracts, projects might never get started, but for sure, they would never get finished – a statement proven true for the contractor as well. But if the scope in the contracts were complete and no gaps or duplication existed, problems still exist.

A primary concern in contract agreements is the use of verb "*assist*". A legal definition of *assist* is "to help", "aid", "To contribute effort in the complete accomplishment of an ultimate purpose intended to be affected by those engaged"[23]. There seems to be no apparent issues over the use of the word "shall".

[22] Source: ***www.agc.org.***

[23] Nolan, Joseph and Nolan-Haley, Jacqueline, ***Black's Law Dictionary***, West Publishing, St. Paul, MN 1990.

Shall as used in contracts and statutes generally means "imperative or mandatory". Further it "means an obligation" or in ordinary word usage means "must" [24].

Warning To Owners

No matter the construction sophistication of the Owner, no matter whether in government or private industry, no matter the type or size of project, no matter what, the contract agreements being used between the participants on the Owner's team must be coordinated. Each National association in developing and updating their contract forms, has purportedly coordinated its agreements to remove unwanted duplication, conflicts, and ambiguities in scope.

An Owner in theory reduces its risk of uncoordinated agreements by utilizing the agreements from a single association like CMAA that has a suite of agreements for virtually any project. The real risk to the Owner is the use of inter-association agreements, e.g. using the AIA Owner-Architect agreement in conjunction with AGC's Owner-CM agreement. The Owner can be assured that these agreements have never been coordinated and can expect to have gaps, unwanted duplication of services, and scope ambiguities show up at some time in the project. These issues lead to problems during the project life-cycle that could have an impact on the time, cost, quality, scope and the performance of the parties involved on the project – whether or not they are a party to the agreements in question.

Worse yet is the Owner's use of hybrid or custom-drafted contracts. The provisions of contracts are legal, technical, and administrative. An attorney representing the day-to-day business of a school district, for example, is not generally armed with the technical knowledge to know what should and should not be in the contracts of parties involved in a construction project. This task is larger than any one individual, to get it right.

Many Construction Managers today are producing a *Project Management Plan* or a *Construction Management Plan* (PMP or CMP) that delineates the detailed tasks of the Architect and CM [and contractors] only broadly covered in their contracts. These plans are analogous to the military's *Rules of Engagement* and not only describe what will be done but who will do it, when and how often[25].

An Owner is wise to include in the scope of services of its CM, the development a PMP or CMP with input from the Architect. This will become the roadmap to accomplishing the scopes of work contained in the Architect and CM agreements with the Owner.

Contract Agreements Reviewed

To understand how the services of the Architect and CM have changed, past and current versions of the contract agreements of AIA, CMAA and AGC were examined. These agreements include:

AIA, *Owner-**Contractor** Agreement*, 1888

AIA, *The Standard Form of Agreement Between Owner and **Architect***, 1917

AIA B141, *The Standard Form of Agreement Between Owner and **Architect**,* 1987

[24] The use of the word s*hall* and *will* are interchangeable. ***Ibid***.

[25] An excellent method of summarizing these plans is in the form of a responsibility matrix.

AIA B141, *Standard Form of **Architect's** Services: Design and Contract Administration,* 1997

AIA B141/CMa, *The Standard Form of Agreement Between Owner and **Architect** {Construction Management Edition},* 1980

AIA B141/CMa, *The Standard Form of Agreement Between Owner and **Architect** {Construction Manager-Advisor Edition},* 1992

CMAA Document A-4, *The Standard Form of Agreement Between Owner and **Design Professional***, 1993

CMAA Document A-4, *The Standard Form of Agreement Between Owner and **Designer***, 2002

AGC Document No. 530, *The Standard Form of Agreement Between Owner and **Architect/Engineer** {Where a CM acting as Agent has been retained by the Owner}*, 2000

AGC Document No. 240, *The Standard Form of Agreement Between Owner and **Architect/Engineer***, 2000

AIA B801, *Standard Form of Agreement Between Owner and **Construction Manager**,* 1987

AIA B801/CMa, *Standard Form of Agreement Between Owner and **Construction Manager** {Where the CM is not a Constructor},* 1992

CMAA Document A-1, *The Standard Form of Agreement Between Owner and **Construction Manager** {CM as Owner's Agent}*, 1993

CMAA Document A-1, *The Standard Form of Agreement Between Owner and **Construction Manager** {CM as Owner's Agent}*, 2002

AGC Document No. 510, *The Standard Form of Agreement Between Owner and **Construction Manager** {Owner awards all trade contracts}*, 1979

AGC Document No. 510, *The Standard Form of Agreement Between Owner and **Construction Manager** {CM as Owner's Agent and Owner awards all trade contracts}*, 1997

The Owner-Architect agreements referenced in this paper could mean either the Owner-Design Professional or Owner-Architect/Engineer agreements entitled by CMAA and AGC, respectively. The use of the Owner-Architect convention was simply adopted for simplicity and nothing more should be construed from this other than poetic license.

Also, the AIA, AGC and CMAA *General Conditions* were not examined. Regrettably, the General Conditions, in describing the covenants of the contractor's work, infer services needing to be performed by the Architect and CM that are not in the Owner-Architect or Owner-CM agreements. This is a coordination issue that needs attention.

Beyond the Architect and CM agreements and General Conditions of the AIA, CMAA and AGC, there are other documents that add to the scope bewilderment. Documents such as the *Instructions to Bidders*, infer scope for the Architect and CM that are not explicit to their respective contracts. The relevancy is that the "document coordination" issue reverberates past just the Architect and CM agreements.

Issues of Scope Examined

While the Architect and CM have literally scores of services that each are responsible for pursuant to their respective agreements, both parties have scores of tasks not specifically called-out in the agreements. For those tasks that are explicitly referenced and for those that are not in the agreements, conflicts exist.

To determine which issues and tasks to examine, an informal survey of still practicing Architects and Construction Managers was performed. A single simple question was posed to each: *In construction today, what gaps, duplication of services, or conflicts exist between the Architect and the CM (serving as an Agent of the Owner)? In other words, where do you find either CM disputes with the Architect, or vice versa, on whom should perform certain services on the project?*

The following is a list of the scope items generated from the survey. For each item listed, the contract agreements of AIA, CMAA and AGC were examined.

- Determination if the work performed by trade contractors is in accordance with the contract agreements.
- Administration of the trade contracts
- Production of record documents (as-builts)
- Services during the bid (procurement) phase
- Changes in the work during the construction phase
- Contractor pay applications
- Verification of field conditions
- Substitutions by trade contractors
- Sequencing or phasing the work of trade contractors
- Requests for information or clarification
- Value engineering change proposals
- Claims by trade contractors

A review of the contract agreements of all three associations follows as a means to determine if the primary reason for scope disputes between the Architect and CM are born in the provisions of the agreements.

Determination If The Work Performed By Trade Contractors Is In Accordance With The Contract Agreements

Since 1917, the AIA Owner-Architect agreements have consistently stated that the Architect:

- …will guard the Owner against defects and deficiencies in the work of contractors…
- …will become generally familiar with the quality of the work to determine if it's in accordance with the contract agreements…
- …will certify payments…
- …has the authority to reject nonconforming work…

- …will keep the Owner informed as to the quality of the work…
- …will inspect the work to determine the dates of substantial and final completion…
- …will perform the final inspection…

Except for determining the dates of 1) substantial and 2) final completion and performing the 3) final inspection, the AIA Owner-CM agreements also place many of these duties on the CM. The 1973 AIA Owner-CM agreement states that the Architect shall perform these three tasks. The 1992 version of the same agreement states that the CM shall *assist* the Architect in these duties.

On the other hand, the CMAA Owner-Architect and Owner-CM agreements remove entirely the Architect from the duty of determining if the work is being performed in accordance with its contract agreements – the CM has these duties.[26] In fact the CMAA Owner-Architect agreement explicitly states that the Architect "shall not" perform these duties.

The AGC agreements align very closely with the AIA agreements. Interestingly, the AGC Owner-CM agreements state that the CM shall determine the dates of substantial and final completion, but give the Architect the responsibility of final inspection, which is consistent with AGC's Owner-Architect agreements.

The CMAA Owner-Architect agreement has the Architect *assist*ing the CM in the final inspection of the work. What may be troubling is that the Architect, nor other design professionals, will be able to see work that has been covered-up, thereby relying on the CM's ability to know for sure that the covered-up work conforms to the contract agreements.

Of additional interest is the use of words like "inspect", "determine in general", "in cooperation with" and "if requested". It appears that the associations have determined that the word *inspect* has a different legal connotation than *determine in general*, and has therefore abandoned the word inspect in more recent agreements. Also, The Owner needs to settle on if the Architect or CM will get additional compensation if one or the other elects to *request* the other to perform or *assist* them in a task?

Administration Of The Trade Contracts

The contract administration of the trade contracts encompasses a multitude of tasks. Since 1888, the AIA Owner-Architect and the later Owner-Architect (with CM) agreements clearly state that the Architect shall perform this duty. The AIA Owner-Architect agreement (with CM) states that it is the Architect's duty, but that it should be accomplished in cooperation with the CM. It unmistakably indicates that it is not the CMs duty.

This is contrary and in conflict with the AIA Owner-CM agreement. It states that the "Construction Manager shall provide administration of the Contracts for Construction in cooperation with the Architect." It may be possible for both to administer the trade contracts but the Owner should appoint either entity to lead and have the ultimate responsibility.

The CMAA and AGC agreements have the CM administering the trade contracts. This makes sense since the contractor's work is continuous, for the most part, and CM is typically on-site when work is being accomplished and the Architect only makes periodic visits.

[26] The CMAA version of project delivery relieves the Architect from just about all its responsibility for being on-site during the construction phase, unless the CM requests their assistance. This is a complete departure from the AIA and AGC agreements.

Production Of Record Documents (As-Builts)

No project is constructed exactly as depicted on the plans and described in the specifications. The trade contractors are in the best position to record changes in the work. The issue is two-fold: 1) Does the Owner want marked-up (red-lined) documents or more formal reproducibles and who will produce the latter and 2) Who is contractually obligated to mark up the contract agreements in the first place?

The contract agreements of AIA, CMAA and AGC all list preparing reproducibles as an additional or optional service for Architects. The AIA and AGC Owner-CM agreements state that the CM shall maintain a set of record documents marked currently to record changes. The CMAA Owner-CM agreement states that the CM shall coordinate and expedite the submittal of information from the trade contractors for the preparation of a record set of contract agreements for transmittal to the Owner. The CMAA agreements do not clearly indicate which party is actually producing the as-builts.

Services During The Bid (Procurement) Phase

Based on the survey of CMs and Architects, bid phase services may have generated the most comments and issues. The first reason for this is that the contract agreements of the three associations do not describe in enough detail the tasks to be accomplished. The second reason for this is that the contract agreements do not necessarily obligate the most qualified or capable entity to perform tasks. The third reason is that the semantics in the agreements are not universally understood and some gray areas of definition exist.

The bid phase is characterized by a few primary events – determination of selection procedures, preparation of bid documents, identification of bidders, document distribution, bid opening, bid analysis, and award. These divisions do not even begin to remotely describe the amount of work that needs to be done.

Without acknowledging the disparity between public and private projects, a complete bid package could include the following documents:

- ❖ Contract Drawings ☑
- ❖ Contract Specifications ☑
- ❖ Invitation to Bidders
- ❖ Instruction to Bidders
- ❖ General Conditions
- ❖ Supplemental Conditions ☑
- ❖ Special Conditions ☑
- ❖ Contract Form
- ❖ Summary of Work[27] ☑
- ❖ Bid Forms ☑
- ❖ Non-Collusion Certification
- ❖ Bid Bond
- ❖ Performance Bond
- ❖ Payment Bond

Recognizing some of these documents as legal and some as technical, some of these documents are also somewhat boilerplate and some are very project specific (those documents marked with the ☑ symbol). The Owner, depending on their level of sophistication and whether they are represented by Counsel, may have "their" form of these documents already on file for use by the Architect and CM. Other Owners will look to the Architect and CM to produce these documents.

[27] The ***Summary of Work*** document can be a combination of the scoping document and a milestone or more detailed anticipated construction schedule. Alternatively, the bid form breakdown and the scope document can be combined into a single document.

Extracted from the AIA, CMAA and AGC Owner-Architect and Owner-CM agreements, the following compilation describes in great detail the services required during the bid phase:

- Review and evaluate Owner's proposed procurement methods.
- Recommend method of selecting contractors.
- Establish bidding schedules.
- Recommend breakdown of bid packages to be let.
- Prepare forms of contracts and proposals.
- Preparation of construction contracts.
- Preparation of general conditions.
- Preparation of supplemental conditions.
- Preparation of special conditions.
- Preparation of Instruction to Bidders.
- Preparation of Invitation to Bidders.
- Preparation of Summary of Work.
- Preparation of the Bid Form.
- Preparation or collection of the Payment, Performance and Bid Bond forms.
- Preparation or collection of the Non-Collusion Certificate.
- Reproduction of bid package documents.
- Conduct a campaign to increase bidder interest in the project.
- Prepare and place notices and advertisements to solicit bids.
- Prepare prequalification criteria for bidders and prequalify bidders.[28]
- Prepare design documents for alternative bids.
- Distribution of bid documents.
- Prepare addenda.
- Review addenda.
- Reproduce and distribute addenda.
- Maintain a log of bidders.
- Expedite delivery of bid documents to bidders.
- Organize and conduct pre-bid meetings.
- Administer the bid clarification process and coordinate responses to bidders.
- Prepare responses to requested clarifications during bid phase.
- Evaluate requests for substitutions during bid phase.
- Organize and conduct bid openings.
- Receive, evaluate and analyze bids for responsiveness and price.
- Conduct post-bid conferences.
- Notify bidders of bid results.
- Negotiate with bidders.
- *Assist* in contractor selection.
- Organize and conduct pre-award meetings.
- Attend pre-award meeting.
- Assembly, delivery and execution of contract documents.
- *Assist* in the award of contracts.
- Approve subcontractors and suppliers.
- Prepare summary of negotiations document.
- Issue Notice to Award.

The scope described above is substantial, time consuming and can for the most part be provided by the Architect or CM, or maybe more correctly by both.

[28] If allowed by statute

If the Owner does not employ a CM as Agent, the Architect according to the AIA Owner-Architect agreements, takes the lead during the bid phase. The 1997 agreement is much improved over the 1987 version in that it spells out in greater detail the scope of services of the Architect during the bid phase. But two issues still exist.

First, in the latest version of the AIA Owner-Architect agreement, the Architect is to only *assist* the Owner in obtaining competitive bids or negotiated proposals; *assist* in awarding and preparing contracts; *assist* in establishing a list of prospective bidders; and *assist* in bid validation or proposal evaluation. The Owner that does not have the sophistication or resources to perform these tasks may find this part of the process troubling.

Second, many of the tasks listed earlier are not spelled out in either the Architect or CM agreements, leaving one to wonder as to whether the Owner has the responsibility of either providing these tasks or arranging for their execution. If this was true however, these items would be delineated in the section that describes the services provided by the Owner, but they are not.

For the most part, the AIA agreements shift the majority of tasks needing to be performed to the CM, when the Owner has engaged a CM as an Agent. The 1992 AIA Owner-Architect (with a CM) agreement simply states that the Architect will *assist* the Construction Manager in obtaining bids or negotiated proposals and *assist* in preparing contracts for construction. In a contract this language is too broad and will be a source for conflict.

When examining the latest versions of the AIA Owner-CM and Owner-Architect (with CM) agreements, gaps and ambiguity exist in what should be coordinated agreements. The most noteworthy gaps may be in the preparation of the bid package documents.

Unlike the Owner-Architect agreements, the AIA Owner-CM agreements do not list a separate section for the bidding or negotiation phase – all provisions are listed under the banner of pre-construction. In the CM agreement, the CM shall *assist* the Owner in preparing construction contracts. The Architect under its agreement is also to *assist* in preparing the contracts for construction. Reading both agreements together would lead one to infer, rightly or wrongly, that the Owner is preparing the contracts. But beyond this, tradition and semantics raise the issue of "What documents are included in the *contracts for construction*?" Do they include the contract form, general conditions, supplemental provisions, special provisions, and the long list of documents included in a bid package? How is the effort divided between the Architect and CM – this is one area of contention between Architects and CMs on projects today and a favorite topic of discussion during the survey interviews.

The CMAA Architect and CM agreements are better coordinated and include a more thorough description of scope than the corresponding AIA agreements. The AGC agreements, on the other hand, lack any detailed description of the scope in both the Architect and CM agreements. This lack of detail will lead to disputes between the Architect, CM and Owner about which entity is handling the long list of tasks needing to be performed.

While the CMAA CM agreements do have some issues regarding the use of the word *assist*, they are very specific and virtually all the tasks listed earlier are covered in either the Architect's or CM's agreements. But a few gaps and ambiguities do exist.

The CMAA Owner-Architect agreement specifically states that the Architect *shall not* be involved in accepting or rejecting subcontractors or suppliers. With such a specific provision called out for in the Architect agreement, the CM agreement should correspondingly refer to the task, but it does not. Does that mean that the Owner has this responsibility? Alternatively, one might infer that the CM is evaluating the subcontractors and suppliers, but that the Owner is actually accepting or rejecting them.

The CMAA Owner-Architect agreement states that the Architect shall prepare the final design documentation for construction consisting of the: final drawings, sixteen divisions of technical specifications, technical descriptions used for permitting; general conditions, bid documents including alternative bid information, addenda and other customary design documents. The CMAA Owner-Architect agreement states that the CM[29] will prepare supplemental conditions and general conditions [specifically] for separate material and equipment procurement. The CM agreement goes on to state that the CM shall give these to the Architect for inclusion in the "Design Documents"[30]. Two issues still exist – which entity produces the Supplemental Conditions for the project and does it not make sense that the entity that produces the technical specifications for equipment and materials, be the one that should produce the supplemental and general condition [specifically] for "material or equipment"? The Owner needs to decide this with input from the Architect and CM.

The CMAA agreements, like the AIA and AGC agreements are silent on which entity prepares the other agreements necessary for the bid packages. This is an important point that the Owner must recognize. Additionally, the CMAA agreements state that the Owner will take the lead on the preparation of a perspective bidders list, placing notices and solicitations for bidders, preparing prequalification criteria, organizing and conduct bid openings and the CM will *assist* the Owner in assembling, delivering and executing the contract agreements.

Lastly, the CMAA Owner-CM agreements state that the CM will recommend to the Owner and Architect the division of the work into bid packages. The CMAA Owner-Architect agreements are silent on the subject, as are the AIA Owner-Architect (with a CM as Agent) agreements. The AGC Owner-Architect (with a CM as Agent) and the AGC Owner-CM agreements both indicate that the Architect and CM will assist in determining the division of work into bid packages. These agreements need to be coordinated.

The CM has the requisite skills to determine the most efficient way to divide the work into packages. The Owner should explicitly require the CM to provide this service with the assistance of the Architect, as required.

Changes In The Work During The Construction Phase

The AIA, CMAA and AGC contract agreements should mirror the reality of the typical construction project. The reality is that projects change – and that is not necessarily bad. In anticipation, the three contracts agreements are inundated with provisions and covenants, directly, but most often indirectly, associated with change. Let's concentrate on the changes associated with scope and the contractor's work.

In practice, when the Owner employs a CM as its Agent, the administration of the change process, for the most part, cascades to the CM. When a CM is not employed, the responsibility falls to the Architect. Contract administration is in large part the management of change. The CMAA, AIA and AGC Owner-CM agreements state that the CM provides contract administration; the AIA Architect agreement, with or without a CM, states the Architect provides contract administration. The AIA needs to correct this coordination issue.

[29] This coordinates with the Owner-CM agreement.

[30] Besides the terms "contract documents" and "bid documents", the expression "design documents" is used, but no universally accepted definition of any of these seem to exist.

The AGC Owner-Architect agreements (with or without a CM) have virtually no language in them concerning changes in the work. The only task mentioned is that the Architect will *assist* the CM in the processing of change orders[31]. The AGC Owner-CM agreements do address the issue of change in any more detail.

There appears a gap between the latest versions of the AIA Owner-Architect (with a CM) and the corresponding Owner-CM agreements. Both agreements are silent on which party *prepares, reproduces and distributes drawings and specifications to describe changes in the work*. An owner can easily address this issue up front with each party and can memorialize the outcome in the appropriate agreement.

The 1997 version of the AIA Owner-Architect agreements outlines more tasks than its 1987 predecessor. The newer version states that the Architect shall: advise the Owner of the effect proposed changes has on the schedule, prepare estimates of time and cost for proposed change orders, maintain records relative to changes in the work, make recommendation concerning changes to the Owner, and advise the Owner to the effect changes have on the project and construction budget.

Contractor Pay Applications

The 1888 and 1917 AIA Owner-Architect agreements implicitly state that the Architect will certify that the work has been done satisfactorily for payment. The 1987 and 1997 versions state that the Architect *shall* provide this certification. This is also true of the AIA Owner-Architect agreement in which a CM is engaged. The CMAA Owner-Architect agreement implies that this is an additional service and the AGC Owner-Architect agreements are silent on the issue and therefore assumed not to be in the Architect's scope of work.

The latest versions of AIA's Owner-Architect (with CM) and Owner-CM agreements appear to have both the Architect and CM certifying contractor pay requests. While this may add a layer of protection sought by the Owner, administratively the process needs to be developed before the Architect and CM start certifying payments because conflicts can arise without a single entity taking the lead.

The AIA, CMAA and AGC Owner-CM agreements all state that the CM is to develop and implement a procedure for the review and processing of contractor applications for payment. Initially in the process, CMs and Architects do not always agree on the breakdown and distribution of costs on the *Schedule of Values*. If a cost-loaded CPM schedule is specified, it becomes another area of conflict between the CM and Architect. This is another reason for the Owner to encourage the Architect and CM to work together early in the project and delineate specific responsibilities.

Many CMs require contractors to submit a rough draft or pencil-copy of the application for payment ten days before the due date. For both the Architect and CM to certify the final application for payment, both must evaluate, discuss and negotiate the pencil-copy with each contractor. This is difficult for the Architect that just takes a quick *swing* through the site just before the meeting to review the work and establish progress. The contract agreements should clearly state which party is in the lead to minimize conflict. The issue is that the Architect and CM certifications carry equal weight and liability, but someone must pilot the effort.

After the details are worked out on the rough draft, the next issue that arises is who will sign the application first – the Architect or the CM? If the CM is writing the procedures, it will usually state that

[31] It is exactly this type of contract language that leads to disputes. Here the broadly defined word *assist* is used in conjunction with the expression *processing change orders*, which could mean anything.

the Architect will sign first and the CM last. This does not always sit well with Architects and again needs to be hashed-out.

Verification Of Field Conditions

This may be the one scope item that is most consistent among the AIA, CMAA and AGC agreements. The latest versions of both the Owner-Architect and Owner-CM agreements consistently list any type of verification of existing conditions as an additional or an optional service. The Owner must be aware that should a situation warrant the verification of existing conditions, this may or should result in an extra to either the Architect or CM, or both.

Examples of tasks this could include are:

- Preparing measured drawings of existing conditions or facilities.
- Verifying the accuracy of drawings (could be as-builts) or other information furnished by the Owner (surveys, deeds, property descriptions, maps, etc.).
- Making investigations, inventories of materials or equipment, or valuations and detailed appraisals of existing or new facilities or surveys of such.
- Providing consultation concerning replacement of work resulting from fire or other cause during construction.

If the project is a renovation or rehabilitation, the Architect must rely on as-built information provided by the Owner to perform its design. Oftentimes, Owners do not have as-builts and if they do, the accuracy of these drawings is questionable. Intuitively, the Architect must perform some level of existing conditions assessment and survey. Owners need to realize that this is not part of the Architect's basic services.

Substitutions By Trade Contractors

The AIA Owner-Architect agreements, with or without a CM on the team, state that services in connection with the evaluation of substitutions proposed by a contractor and making revisions to the contract agreements in connection with substitutions, are an additional service to the Owner. The AIA Owner-CM agreements are silent on the issue.

The CMAA Owner-Architect agreements state that upon receipt from the CM, the Architect *shall* evaluate substitutions proposed by the contractors and in fact, are given the final authority to approve or reject substitutions. However, actually recording these or any other changes on to the contract agreements is considered an extra for the Architect.

The CMAA Owner-CM agreements state that the CM shall establish and implement procedures for managing substitutions and that the CM shall also provide trade-off studies. The CMAA position on substitutions explicitly shifts the burden and liability for evaluating substitutions to the Architect. Yet, in the AIA suite of agreements, this service is an additional service, rather than part of the Architect's basic services.

The AGC Owner-Architect agreements are silent on the issue of substitutions, but the Owner-CM agreements maintain that the CM shall review, evaluate and make recommendations regarding trade contractor request for changes. This would clearly encompass substitutions.

Sequencing Or Phasing The Work Of Trade Contractors

The AIA and CMAA Owner-Architect agreements are silent on the role of the Architect in sequencing, phasing or preparing schedules for the work performed by contractors. The AGC Owner-Architect agreement, where the Owner has retained a CM, states that the Architect will review the schedule prepared by the CM and the corresponding Owner-CM agreement is consistent. The AGC Owner-Architect agreement where a CM has not been retained, states that the Architect will prepare the schedule for the Owner's review – this makes sense because in theory the Owner does not possess the skill.

A review of the AIA, CMAA and AGC Owner-CM agreements all have the CM preparing a preliminary project schedule, but differ in which entity prepares the detailed construction schedule. The latest AIA Owner-CM agreement states that the CM will prepare a project construction schedule providing for the components of the work in the preconstruction phase and that the CM shall schedule and coordinate the sequence of construction in accordance with the contract agreements and the latest approved project construction schedule during the construction phase.

The CMAA Owner-CM agreements call for the CM to review the construction schedule prepared by the contractors and the AGC Owner-CM agreement does not address the issue beyond the preparation of a preliminary schedule during the preconstruction phase.

The actual sequencing or phasing or the work depends on a number of factors not specifically addressed in the contract agreements:

- The timing of when the CM is hired by the Owner.
- The packaging or division of the work, i.e. single or multiple prime and if the latter, the quantity of prime packages to be let.
- Restrictions placed by the Owner, e.g. many school districts allow new construction and additions to be constructed while school is in session, but restrict renovation work to when school is not in session – major holidays and summers.
- Funding restrictions, e.g. when money is available as dictated by a bond referendum agreement.

In the best situation the Architect and CM should work together to sequence the work. The practice of the Architect producing Phasing (or Sequencing) Plans, as part of the typical contract agreements, has waned over the years. With these phasing drawings, contractors during the bid phase would better understand the relationship and impact their work has on predecessor, adjacent and follow-on contractors.

Requests For Information Or Clarification

During the survey, Architects and CMs discussed issues about the RFI process, yet an examination of the AIA, CMAA and AGC yields no apparent conflicts or duplication in scope. The agreements are well coordinated intra-association. If an AIA contract is used for the Architect and a CMAA contract for the CM, a question would arise as to which party actually receives the RFI from the contractor and which entity takes the lead in assuring a timely response. This issue would normally be sorted out in the *Construction Management Plan* or some sort of administrative procedure.

Interestingly the 1997 AIA Owner-Architect agreement, it lists as a "Change in Service" the review of RFIs where the information requested is available to the contractor from a "careful study and

comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project Correspondence or documentation." In other words, the Architect would receive additional compensation for responding to an RFI where if the contractor had done their homework, the answer would have become apparent. There is no provision similar for the CM in any agreement and we know that on large complex projects, the endless stream of RFIs is fraught with flawed RFIs.

Value Engineering Change Proposals

A value engineering change proposal (VECP) is a document submitted by a trade contractor that is asking for permission to change the work depicted in the contract drawings and/or specifications. The result of the suggested change will usually be a significant savings in time or money, or both. The savings are usually large enough to warrant the effort of evaluating the suggested change.

The issue is that the AIA, CMAA and AGC agreements do not specifically address a VECP, but each association has addressed the review or evaluation of change proposals submitted by the Owner or Contractor[32].

The concern is that none of the Associations have addressed the issue of "ownership" of the VECP change. For example, a curtain wall contractor suggested a major change on how its panels would connect to a State Building. The Architect checked the building's structural integrity for the new loadings and determined the building was fine. The Architect, CM and Owner required the new design to be sealed by a Professional Engineer. The CM facilitated the change with the Owner, Architect and Contractor and reviewed the new design for constructibility. The new system was approved and the State and Contractor shared a large savings equally.

A few years later the curtain wall failed and lawsuits and allegations were abound. The issue was which party "owned" the new design – was it the Architect's responsibility, the CM's, the Owner's or the Contractor's? Contract language needs to be written that clearly defines the parties' responsibilities for deviations to the original design – a design that went through a long process to ensure it was free from errors and omissions, biddable, and constructible.

Claims By Trade Contractors

For the purposes of this discussion and consistent with the contract agreements from all three associations, the term claim has distinct meaning and is treated separately from a change, a request for change, a change order, a change directive or other deviation from the contract documents. The term claim is straightforwardly and simply implied to mean a request for adjustment that has escalated because of a dispute or rejection of the request. While this may not be the legal definition of a claim, this definition is understandable and fits exactly with the intent of the AIA, CMAA and AGC agreements.

Before there was a CM, as with the 1888 AIA Owner-Contractor agreement, the Architect certified and awarded time for delays, was the entity on which notice of claim would be served and lastly determined the damages associated with a claim. Although the language is not as explicit as so stated, the intent was clear.

[32] See section on **"Changes In The Work During The Construction Phase".**

Today, the AIA and AGC Owner-Architect and Owner-CM agreements concur in that the Architect is the lead entity to render decisions regarding claims and disputes. The AGC agreements state that the CM will *assist* the Architect in that duty. The CMAA Owner-Architect agreements explicitly state that the CM is the "arbiter" of all disputes between the Owner and Contractors pertaining to the work and that the Architect will be paid an additional fee for services in connection with any dispute between the Owner and contractors, except as related to the services of the Architect. The CMAA Owner-CM agreement states that the CM shall render decisions concerning disputes between the contractor and Owner.

Should an Owner mix the AIA and CMAA agreements, the scope of services of the Architect and CM, regarding claims needs to be worked out in advance.

CONCLUSION

The morphing of the Architect's role over the years might be better described as risk-shifting rather than a dramatic change in scope traditionally provided. Clearly, the AIA Owner-Architect agreements that do not contemplate a CM on the project, conflict with agreements that embrace the CM on the team. AIA addressed the CM issue by developing a new set of Owner-Architect agreements that acknowledge the morphing of scope due to the CM.

The Owner-Architect and Owner-CM agreements within each of the three associations are not poorly coordinated, but there is room for improvement. The danger for the Owner lies in using a traditional Owner-Architect (non CM version) agreement and then engaging a CM, regardless of contract form. Further risks are inherent in the use of custom drafted agreements, especially when used with a standard association agreement.

All agreements from the three associations can be improved by describing in more detail the scope for the Architect, CM and even the Owner. The use of the word "*assist*" is overtly divergent from the use of the words "shall" and "will". The issue is that *assist* could mean virtually anything: study, prepare, evaluate, review, do, supervise, administrate, delivery, reproduce, maintain, conduct, organize, approve, execute, expedite, clarify, respond, request, analyze, write, read, distribute, procure, recommend, select, negotiate, testify, present, receive, summarize, or any of a hundred other verbs. The use of the word assist should be eliminated and in its place terms to describe actual scope should be substituted.

The AIA, CMAA and AGC should study the other association's agreements to be sure that their agreements depict the full breadth of the scope of work for the Architect and CM inclusive of the Owner's role. Concessions need to be made in the agreements for the level of sophistication and the resources of the Owner. Yes, the Owner must appoint a representative to the project, but nothing says that this person has the skills to fulfill its obligations as stated in the agreements – either the Architect or CM, or some other entity, needs to cover the gaps in scope.

On the presumption that the AIA contract form for the Architect is the most widely used agreement in the US, coupled with the fact that CMAA's agreements are not necessarily in wide use, I risk suggesting that CMAA develop an Owner-CM agreement that is compatible with the AIA B141/CMa Owner-Architect agreement. This would give Owners a sense of confidence because of the use of the time-tested, litigation tested, AIA agreements for the Architect and that it is coordinated with the CM agreement.

I began the writing of this paper with the thesis that all the conflicts between Owners, Architect and Construction Managers were principally caused by problems with the contract agreements. I conclude that while the state of the agreements is a contributing factor, it is not the primary issue. The

primary reason for conflict may be the difference between how the Architect and CM agreements define their roles and how tradition has shaped what they continue to do. How many times have you heard "…the Architect always does that…" without regard for the scope of the Architect's agreement. This issue holds as true for the Architect as it does for the CM and even the Owner.

Different project delivery systems are morphing the traditional roles of the Owner, Architect and CM and the contract agreements may not have caught up to modern-day practice. Rather than the AIA, CMAA and AGC engaging their members to update specific provisions of scope and liability, maybe each association needs to take a step back and examine their agreements in contrast to the way architecture, contracting and construction management is practiced today.

If nothing else, this paper may raise more questions than I initially set out to answer.

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ACKNOWLEDGEMENTS

Gary Berman would like to thank the following individuals and organizations for the *assist*ance in providing many of the reference agreements used in the preparation of this paper:

The Associated General Contractors of America

The American Institute of Architects

The Construction Management Association of America

Thomas Driscoll, URS Corporation

Additionally, I would like to thank my partner Constantinos (Gus) Xenakis, a degreed Architect and Senior Construction Manager of GREYHAWK North America and Danelle Prezioso, CMAA Communications Director, for their assistance in the review of this paper.