



حرفه مدیریت ساخت

(سند Capstone، از مراجع اصلی اخذ مدارک CMAA)

بخش هشتم: توسعه شغلی و مسیر حرفه‌ای مدیر ساخت

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CMAA Authorized Trainer

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What we will learn?

- ☐ Section Objectives
- ☐ Career Development
- ☐ Mentor Program
- ☐ Networking
- ☐ On-the-Job Experience
- ☐ Professional Development
- ☐ Certificates
- ☐ Certifications
- ☐ Licenses

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Section Objectives

Section objectives

☐ Explore

1. The **various** professional **opportunities** available to a CM **entering** the job market and
2. The **benefits** of a professional development plan.

☐ Learn about the **advantages** of participating in a mentor program.

☐ Understand **how networking** can play an **important role** in career development.

☐ Review

1. The **benefits** of on-the-job experience and
2. **Ways** to build a career in construction management.

☐ Understand the **different methods** of professional development such as obtaining certificates, certifications, and licenses.

❖ Learn the benefits of becoming a Certified Construction Manager® (CCM®).

Career Development

Introduction

- ❑ The **construction industry** offers **many opportunities** to work in markedly different, **but closely related**, disciplines.
- ❑ **Whether** CMs have a **degree** in construction management, architecture, or various engineering disciplines, they may find a **position** with **different types** of employers to include owners, developers, general and trade contractors, CMs, and design firms.

CMs may be tasked with a **role at any point** in the project lifecycle, from planning through design, procurement, construction, commissioning, and closeout.

Examples of construction management career options

- ☐ Accounting Firms
- ☐ Agency Construction Management Firms
- ☐ Architectural Firms
- ☐ At-Risk Construction Management Firms
- ☐ Construction Companies
- ☐ Engineering Firms
- ☐ Federal Agencies – GSA, transportation, military
- ☐ Management Consulting Firms
- ☐ Municipalities/Counties – public works, public education, utilities/transportation
- ☐ Private Sector – healthcare, education, real estate
- ☐ State Agencies – educational institutions, transportation, utilities/infrastructure

Examples of construction management career options

❑ The **first professional step** is to **find a good job** to begin learning the industry.

❖ As CMs **gain experience**, they will be able to focus on **developing a career** through

1. Credentials,
2. Networking, and
3. On-the-job experience.

Armed with a **professional development plan**, a CM's career path can be **greatly accelerated**.

Examples of construction management career options

Best Practice: CMs should take the time to prepare a professional development plan that includes:

- » Mentor program
- » Networking goals
- » On-the-job experience
- » Professional development goals

Mentor Program

- ☐ There are **many avenues** to pursue in the construction management industry, so it is **worthwhile to begin by investigating all** the available **opportunities**.
- ☐ While this can be done through **online research** and **review of trade journals**, a **more rewarding approach** is to talk to people within the CM industry.

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Mentor program

- ❑ The **CMIT program** is specifically **geared toward** CM professionals to ensure that **individuals entering** our profession have **every opportunity** for a **full** and **meaningful career** and **membership** in the professional community of practicing CMs.
- ❖ With that **strategic thought** in mind, CMAA instituted the **CMIT program**.
 - ✓ Upon application and acceptance into the **CMIT program** **participants** are required to select a **mentor** to carry on the **valuable process** outlined in the CMAA Mentor Guide.

❑ The **CMAA Mentor Guide** helps explain

1. The mentoring process and

2. Is geared directly to

❖ a protégé entering the profession or

❖ in the transition from another discipline or career path in the A/E/C industry.

❑ The mentoring process is a **human development function** that facilitates personal and professional growth.

How to Become a Mentee

To become a mentee, individuals must first successfully complete the CMIT application and pass the CMIT exam. After passing the CMIT exam, individuals are sent further information to access the mentor directory. For more information about how to sign up and become a CMIT, please visit CMAA's website or see the [CMIT Handbook](#).

- ❑ A **relationship is formed** in which
 - one or more experienced** individuals share
 - their wisdom and experience, and provide the support, advice, and counsel necessary for
 - others, less experienced to
 - grow, develop, and assume positions of greater authority and responsibility in the construction management industry.

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Mentor program

❑ **Most successful employees** have benefited from at **least one mentor** in their careers.

❖ Mentors provide

- ✓ experience,
- ✓ organizational knowledge,
- ✓ intuition,
- ✓ common sense, and
- ✓ credibility

to help them

1. **achieve** their goals and
2. **discover** and **enhance** individual gifts and talents.



Mentor program

❑ It is also helpful to **talk** with **other members of CMAA** at

1. Regional chapter meetings,
2. Query the guest speakers at student chapter meetings, and
3. Even attend meetings of other professional associations.

❖ **Topics** at those meetings often **relate** to the state of the industry or the projects and programs in design or under construction locally.

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Mentor program

- ❑ There will be opportunities to contact potential employers or professionals who can identify the decision-makers within their organizations.
- ❖ It will also be an opportunity to **ask** these professionals about their individual job responsibilities, which the CM can use to **better refine** professional **goals**.
 - ✓ This networking will **pay dividends** by helping identify career objectives and conducting job searches.
 - o Developing industry **relationships** will help any **CM evolve** their **professional career**.

Networking

□ Networking is

1. The development and
2. Maintenance

of a **group** of contacts, and **sources** of information.

□ The **most successful people** in the construction industry are those who have developed large and strong networks.

❖ The leaders of the **top CM firms** in the country **know one another**.

❖ While they are **frequent competitors** in the field,
they **also work together** from time to time.

Networking

❑ It takes focus and time to be a good networker, but it is **not complicated**.

❖ CMs should **start** by

setting goals of attending a networking event every **few months**

to practice meeting new people and talking about the industry.

✓ As **confidence** grows,

those goals can be **bumped up** to one networking event or meeting a month if possible.

○ Make a goal to **attend** networking events **regularly**.

☐ The next step is making connections.

- ❖ When CMs **develop** a **rapport** with other **professionals**,
it's time to **share** **contact information** or **business cards** and
take the **initiative** to keep in touch.
- ❖ **Social media platforms** are a good tool to **aid** in making and maintaining
professional connections,
but there is **no substitute** for developing **in-person relationships** with
other professionals
based on the **demonstration** of competence and reliability over time.

- ☐ CMs may want to **make notes** or **include information** for each **new contact** in their smartphone.
 - ❖ **Adding information** like the meeting location, discussion topics, and company information will help keep track of each new contact.
- ☐ An important part of a professional development program is to **follow up** with those **new contacts**.
- ☐ The result will be an **ever-growing network** of **like-minded professionals** that can help with **career growth**.

Networking

- ❑ **Networking** enhances the **job search** since it offers **opportunities** to identify target firms and meet professionals at those firms.
- ❑ Networking also provides
 1. **knowledge** of the current state of the market and
 2. the industry,which allows CMs to assist their firm and their clients in making **decisions** regarding projects and programs.
- ❑ Networking develops the **ability to effectively communicate** with clients and peers.

❑ Last, but not least,

networking can be **very satisfying personally**.

To have a **community** of colleagues and trusted friends who
share a passion for the construction industry
can be **very rewarding**.

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On-the-Job Experience

On-the-job experience

❑ Networking and credentialing objectives and accomplishments are **very important** to professional development,

but one of the **most important element** is on-the-job experience.

❖ A CM's **first assignment** in the industry will likely **not be** as the PM on a **multi-million-dollar capital** building project,
but with **time** and **effort**, all is possible.

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On-the-job experience

- ❑ There is **no set career path** in the construction industry.
- ❖ That **flexibility** allows individuals to grow and progress at a **pace** they are **comfortable** with.
 - ✓ For example, if a **CM goes** to work for an owner,
that **career path** will be **different** from someone working for a GC.

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On-the-job experience

❑ At the beginning of a career,

CMs are usually in a **supporting role** to a more senior construction professional for

some period of time, whether in an office environment or in the field.

❖ With time,

the CM will be granted **additional responsibilities** that will help with **advancing in the hierarchy** of construction and project management teams.

Possible career track for a new CM graduate working for a general contractor



On-the-job experience

- ❑ **Career advancement** from **this point** on will primarily depend on the structure and management approach of the **firm** where the **CM is working**.
 - ❖ **Some firms** may have district or regional offices that require **leadership**.
 - ❖ **Some firms** may have seasoned construction personnel serving in a **sales** and **marketing** capacity.
 - ✓ There may be **opportunities to serve** on management committees, strategic planning committees, or quality assurance committees.
 - ✓ A firm may **ask the CM** to represent them on a regional and national level on the **boards** of trade or professional associations.

Finally, there are always the senior executive leadership positions for the firm itself.

Professional Development

Professional development

❑ **While** most continued professional development is voluntary, it **demonstrates** to employers and peers that a CM is well qualified to **manage** the **complex** construction process.

❖ The **three primary methods** of professional development are

1. Certificates,
2. Certifications, and
3. Licenses.

Professional development

- ❑ A **certificate** is typically from a **college** or **university**,
focuses on **one specific topic**, and is **separate** from a degree program.
- ❖ A **certificate** can be earned by new and experienced professionals, and
often **leads** to a degree program.

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Professional development

- ❑ **Certifications** are awarded by a third-party, such as a professional organization or university, to indicate that the CM has **successfully completed** a program's set of standards.
- ❖ **After earning** the certification, CMs can often add the **designation after their name** to demonstrate their professional accomplishment.
 - ✓ Certifications are often **valid** for a specified amount of time before renewal is required through a **fee**, and possibly continued education.

Professional development

❑ **Licenses** are like **certifications** because they are obtained in a similar manner and also require renewal,

but a license is **typically administered** by a federal, state, or local government agency.

A license may also be a **requirement to practice** a given profession in certain jurisdictions.

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Certificates



Certificates

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بخش هشتم: توسعه شغلی و مسیر حرفه‌ای مدیر ساخت

☐ Below are **some of the credentials** available to construction management professionals.

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☐ National Association of Safety Professionals

- ❖ The Environmental Health & Safety Professional Certificate
- ❖ Hydrogen Sulfide Safety Train-the-Trainer (HST)
- ❖ Safety Auditor Certificate (SAC)
- ❖ CMAA Authorized Trainer

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Certifications

☐ Association for the Advancement of Cost Engineering

- ❖ Certified Cost Technician (CCT)
- ❖ Certified Scheduling Technician (CST)
- ❖ Certified Cost Professional (CCP)
- ❖ Certified Estimating Professional (CEP)
- ❖ Earned Value Professional (EVP)
- ❖ Planning & Scheduling Professional (PSP)
- ❖ Certified Forensic Claims Consultant (CFCC)
- ❖ Decision & Risk Management Professional (DRMP)



Certifications

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بخش هشتم: توسعه شغلی و مسیر حرفه‌ای مدیر ساخت

- ☐ Certified Construction Manager (CCM)
- ☐ Certified Professional Constructor (CBC)

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Certifications

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❑ Construction Financial Management Association

❖ Certified Construction Industry Financial Professional (CCIFP)

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☐ Construction Specifications Institute

- ❖ Certified Construction Contract Administrator (CCCA)
- ❖ Certified Construction Product Representative (CCPR)
- ❖ Certified Construction Specifier (CCS)
- ❖ Construction Documents Technology (CDT®)

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Certifications

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- ☐ Designated Design-Build Professional (DBIA®)
- ☐ Leadership in Energy and Environmental Design (LEED®) Certification

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☐ National Association of Safety Professionals

- ❖ Certified Safety Manager (CSM)
- ❖ Certified Safety Manager Construction (CSMC)
- ❖ Certified Safety Director (CSD)
- ❖ Certified Environmental Manager (CEM)
- ❖ Certified Environmental Professional (CEP)

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Certifications

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بخش هشتم: توسعه شغلی و مسیر حرفه‌ای مدیر ساخت

- ☐ The US Occupational Safety and Health Administration (OSHA) Training
- ☐ Project Management Professional (PMP®)

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Licenses



Licenses

حرفه مدیریت ساخت (بر اساس سند مهمی از CMAA)
بخش هشتم: توسعه شغلی و مسیر حرفه‌ای مدیر ساخت

- ☐ General Contractor (GC)
- ☐ Registered Architect (RA)
- ☐ Professional Engineer (PE)
- ☐ National Association of Safety Professionals
 - ❖ Licensed Safety Professional (LSP)

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Licenses

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بخش هشتم: توسعه شغلی و مسیر حرفه‌ای مدیر ساخت

- ❑ There are also state-specific programs, so CMs should **research all** the available professional development opportunities in the construction industry to decide which is **best for their career**.

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بخش نهم: اسناد قراردادی مدیر ساخت از منظر CMAA و مقایسه با اسناد قراردادی همسان در ایران

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What we will learn?

- ☐ CMAA Documents
- ☐ Responsibilities Defined by the Agency Series
- ☐ Responsibilities Defined by the CM-at-Risk
- ☐ Performance is Judged According to a Standard of Care
- ☐ Construction Contract General Conditions for Agency CM
- ☐ Review of the CMAA Document A-3 General Conditions of the Construction Contract

☐ موافقتنامه و شرایط عمومی همسان قراردادهای خدمات مدیریت طرح

CMAA Documents

CMAA contract documents for CM

- ❑ Currently, there are **four basic standard forms** of agreement issued by CMAA for use when an owner retains a **CM as an agent** of the owner to represent it in the project management process. These documents are as follows:
- ❖ CMAA Document A-1, Standard Form of Agreement Between Owner and Construction Manager (CM as Owner's Agent)
 - ❖ CMAA Document A-2, Standard Form of Contract Between Owner and Contractor
 - ❖ CMAA Document A-3, General Conditions of the Construction Contract; Owner-Contractor Contract
 - ❖ CMAA Document A-4, Standard Form of Agreement Between Owner and Designer.

CMAA contract documents for CM

❑ The **four CMAA Standard Forms** of Agreement for **CM at-Risk (CMAR)** where the CM has responsibility for construction performance are as follows:

- ❖ CMAA Document CMAR-1, Standard Form of Agreement Between Owner and Construction Manager
- ❖ CMAA Document CMAR-2, Standard Form of Agreement Between Construction Manager and Contractor
- ❖ CMAA Document CMAR-3, General Conditions of the Construction Contract Between Construction Manager and Contractor
- ❖ CMAA Document CMAR-4, Standard Form of Agreement Between Owner and Designer

CMAA contract documents for CM

- ❑ It took **several years** for CMAA to **develop a standard** scope of CM services and contract forms.
- ❑ The **first editions** of the CMAA Standard Forms of Agreement were issued in **1988**;
 - ❖ Since then, as the **documents** have been used and CMAA has received **comments from the different parties**,
both sets of documents have been reviewed and **updated** **periodically**.

 A1-2013
 A2-2013
 A3-2013
 A4-2013
 CMAR1
 CMAR2
 CMAR3
 CMAR4

CMAA contract documents for CM



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CMAA Document A-1

**Standard Form of Agreement Between
OWNER AND CONSTRUCTION MANAGER**
Construction Manager as Owner's Agent

2013 EDITION

This document is to be used in connection with the Standard Form of Contract Between Owner and Contractor (CMAA Document A-2), the General Conditions of the Construction Contract (CMAA Document A-3), and the Standard Form of Agreement Between Owner and Designer (CMAA Document A-4), all being 2013 editions.

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CMAA Document A-4

**Standard Form of Agreement Between
OWNER AND DESIGNER**

2013 EDITION

This document is to be used in connection with the Standard Form of Agreement Between Owner and Construction Manager (CMAA Document A-1), the Standard Form of Contract Between Owner and Contractor (CMAA Document A-2), and the General Conditions of the Construction Contract (CMAA Document A-3), all being 2013 editions.

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CMAA contract documents for CM



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CMAA Document A-2

Standard Form of Agreement Between OWNER AND CONTRACTOR

2013 EDITION

This document is to be used in connection with the Standard Form of Agreement Between Owner and Construction Manager (CMAA Document A-1), the General Conditions of the Construction Contract (CMAA Document A-3), and the Standard Form of Agreement Between Owner and Designer (CMAA Document A-4), all being 2013 editions.

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CMAA Document A-3

General Conditions of the Construction Contract Between OWNER AND CONTRACTOR

2013 EDITION

This document is to be used in connection with the Standard Form of Agreement Between Owner and Construction Manager (CMAA Document A-1), the Standard Form of Contract Between Owner and Contractor (CMAA Document A-2), and the Standard Form of Agreement Between Owner and Designer (CMAA Document A-4), all being 2013 editions.

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Responsibilities Defined by the Agency Series

Responsibilities defined by the agency series

❑ The following focuses on the **responsibilities as allocated** between

1. CM and designer in the CMAA A-1 (owner/CM) and
2. CMAA A-4 (owner/designer) documents.

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Project Planning and Selection of a Designer

- ❑ The CM is **employed prior** to the **designer**.
 - ❖ The CM prepares a management plan, which includes project budget, master schedule, management information system, quality standards, and other components for **acceptance** by the owner and implementation during the project.
- ❑ **Following acceptance** of the management plan by the owner, the CM
 - ❖ **Prepares** a **milestone schedule** for the design,
 - ❖ **Assists** the owner in **selecting a designer**, and
 - ❖ **Assists** in **review** and **preparation** of the agreement between the owner and designer.

The Project Management Plan

- ❑ The CMAA system **emphasizes** pre-design and pre-construction phase planning through use of the Project Management Plan.
 - ❖ The **Project Management Plan** **defines** the project requirements in **narrative** form and **establishes** the strategy for fulfilling those requirements.
 - ❖ As the **project progresses** and its **documentation** becomes **more definitive**, various aspects of the Project Management Plan may be **revised** and **refined**.
- ❑ The **designer** may make **recommendations** for **revisions** to components of the **Project Management Plan**, including the project requirements, master schedule, project budget, and the management information system.

The CM is the owner's principal agent

- ❑ The CM is the **owner's principal agent** in providing CM services for the project.
- ❑ The **designer** provides and has **sole responsibility** for all professional design services in connection with the project.
 - ❖ The CM and designer **each recognize** the **other's** role and responsibilities.
 - ❖ The **documents** detail the **CM's services** as principal agent.

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CM and Designer agree to cooperate.

- ☐ CM and designer services are intended to be **complementary, not duplicative.**
- ☐ CM and designer are each **entitled to**
rely on the services and work products of the other
for **proper performance** of services.

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The CM prepares estimates

- ❑ The CM **prepares** estimates of the construction costs and the **designer** has **final determination** as to the **suitability** for the **design** of **recommendations** made by the CM.
- ❖ The project costs are estimated by the CM and **incorporated** into the Project Management Plan and the **designer** is entitled to **rely on** such data while preparing its **drawings** and **specifications**.
- ❖ The designer has **sole responsibility** for design,
 1. Makes final decisions regarding **recommendations** made by the CM concerning the design and
 2. Makes final determination as to the **specification** of **materials** and **equipment** for the project (subject to **any directives** issued by the **owner**).

The Designer develops design criteria.

❑ The **designer** develops design criteria

based on the **information set forth** in the Project Management Plan.

❖ The **design criteria** **evolve** from preliminary to detailed and definitive
in the manner **established** in the Project Management Plan.

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CM and Designer cooperate to achieve compliance with the project budget.

- ❑ During the **design phase**, the CM and designer are required to maintain close liaison and have constant interchange of information and documentation.
- ❑ The **designer provides** to the **CM** drawings and specifications as required in the Project Management Plan.
- ❑ During the **design phase** of the project, the **designer receives** from the CM advice, cost analyses, value analyses, and information as to constructability, clarity, consistency, and coordination in the documentation.

The Designer prepares design documentation for construction.

- ☐ **Design documentation** is prepared in the **appropriate format** for contracting (single or multiple-prime) indicated in the Project Management Plan.
- ☐ Design documentation is prepared and coordinated so as to **permit** scheduling and sequencing of **construction as required**.
- ☐ During the **procurement phase**, the designer
 - ❖ **prepares** addenda,
 - ❖ **attends** conferences, and
 - ❖ **determines** the acceptability of substitutions.

The Designer's construction phase services are limited.

❑ It is **not** intended by the CMAA A-4 documents that

the **designer** will (as a part of basic services)

1. **Visit** the **site** to become generally familiar with or
2. **Check** the **quality** or **quantity** of work, or
3. **Determine** that the **work** is **proceeding** in accordance with the **contract documents**.

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The Designer's construction phase services are limited.

- ❑ As a part of its **basic services** provided in **CMAA A-4**,
the designer will, during the construction phase,
perform **certain services** in connection with
- ❖ interpretation and clarifications,
 - ❖ substitutions,
 - ❖ change orders,
 - ❖ submittals and
 - ❖ subsurface and physical conditions.

The Designer's construction phase services are limited.

❑ For example, **subparagraph 3.4.3** of the **A-4 agreement** provides:

❖ “Upon **receipt** from the CM...of written requests for **clarifications** and **interpretation** of

the drawings, specifications and other design-related information,

the **designer** shall

1. **review** the same and

2. **issue** (through the CM)

in **writing** appropriate clarifications and interpretations.”

The Designer's construction phase services are limited.

- ❑ The **designer's participation** in **review** or **approval** of **applications for payment** is treated as additional services.
- ❑ **Other additional services**, such as
 - ❖ visits by the designer to the site in addition to those necessary to perform its basic servicesare described in Article 4 of the A-4 agreement.

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The Designer's construction phase services are limited.

❑ The **scope** of the designer's construction phase administration services under the CMAA A-4 agreement is **reduced**

compared to the scope provided in AIA Document B132-2009.

Consequently, the designer's services fee and its exposure to liability for its services related to **administration** of the **construction** is **reduced**.

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The Designer's construction phase services are limited.

- ❑ During the construction phase, the **designer visits** the **site** as necessary in order to:
- ❖ Provide interpretation and clarifications.
 - ❖ Determine the acceptability of substitutions.
 - ❖ Prepare design documents arising from change requests or change orders.
 - ❖ Review shop drawings and other submittals.
 - ❖ Prepare design documents arising from questions regarding subsurface conditions.

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The CM makes certain determinations during the construction phase.

- ❑ The CM **determines** contractor compliance with the contract documents and **reviews** and **approves** contractor's applications for payment.
- ❑ Coordination, scheduling, or sequencing of the contractor's work that is **required** by the **owner** and **CM Agreement** will be **provided** by the CM, and any coordination, scheduling or sequencing **required by the contractor** (i.e. as part of contractor's means, methods, techniques and sequences of the work) will be **provided by the contractor**.
 - ❖ The CM, in **consultation** with the designer,
issues certificates of substantial and final completion.

The CM makes certain determinations during the construction phase.

☐ The **designer** provides, as **additional services**,

those **services resulting** from

1. Significant changes in the general scope, extent, or character of the project
or
2. Its **design as fixed** in the project management plan, and **in connection with**
certain visits to the site as may be **requested by the owner or CM**.

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The CM's leadership role as contemplated by the agency series

- ❑ The CMAA documents are **innovative** in that they define the **responsibilities** between the CM and designer in a system where the **CM is entrusted** by the **owner** to **lead** the **process** of design and construction.

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The CM's leadership role as contemplated by the agency series

- ❑ During the design phase, the CM's services may relate principally to the following:
 - ❖ Matters of scheduling and coordination of the activities of all parties involved.
 - ❖ Coordinating and expediting the flow of information between the owner, designer, and others.
 - ❖ Evaluation of constructability.
 - ❖ Cost estimating.
 - ❖ Preparing and revising the project budget.
 - ❖ Developing time and sequencing considerations related to design alternatives prepared by the designer.
 - ❖ Providing recommendations as to the separation of the construction contracts into various categories of work.
 - ❖ Commenting on clarity, consistency, and coordination of the design documentation.

The CM's leadership role as contemplated by the agency series

☐ During the procurement phase, they may include:

- ❖ Assist in attracting bidders, prequalifying bidders.
- ❖ Conduct pre-bid conference, distribute addenda.
- ❖ Assist in bid opening, evaluation, and award.

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The CM's leadership role as contemplated by the agency series

□ During the construction phase, the CM's services involve:

- ❖ Serving as the owner's principal agent at the site.
- ❖ Reviewing contractor schedules.
- ❖ Administering the prime contracts for construction on the owner's behalf.
- ❖ Monitoring the quality and quantity of the work.
- ❖ Monitoring cost and time during construction.
- ❖ Coordinating and expediting communications.
- ❖ Functioning as the initial arbiter of disputes between the owner and contractor.

The CM's leadership role as contemplated by the agency series

- ☐ The CM has the **obligation** during the construction phase to **determine** that the **work** is **being performed** in accordance with the **contract documents**.
- ☐ The CM also **determines** the **amounts owed** to the contractor and **issues** Certificates of Payment.

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The CM's leadership role as contemplated by the agency series

- ❑ The **CM's leadership role** and **primary management responsibility** exposes the CM to **potential liability** should it **fail** to properly perform its services.
- ❖ By providing services and **assuming authority**, the CM can **more effectively control risk**.
 - ❖ *For example, the management services provided by the CM in connection with the design schedule increases the likelihood that design documents will be developed and delivered without delaying construction.*

The CM's leadership role as contemplated by the agency series

- ❑ The CM's obligation to **certify amounts** owed to contractors, rather than making **recommendations** to the designer for certification enhances the CM's ability to **facilitate** the contractor's compliance with the project schedule and quality requirements.

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Responsibilities Defined by the CM-at-Risk

Responsibilities defined by the CM-at-risk

- ❑ The **CM-at-Risk** series documents are similar in many respects to those in the Agency series documents.
- ❖ The following section **notes** the **differences** in responsibility allocations for the **CM** and **designer** in the at-Risk Series documents as contrasted with the Agency Series.

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Project initiation through establishment of a guaranteed maximum price.

- ❑ From the **inception** of the project **until** the time that the **owner requests**, and either accepts or rejects,
a **guaranteed maximum price (GMP)**, the CM is the **owner's principal agent** and performs **nearly all** of the **services specified** in the Agency Series.
- ❑ At the **time a GMP is requested**,
the **role** of the **CM** may **change** depending upon whether or not the owner accepts the GMP as proposed by the CM.

Owner Rejection of the GMP.

1. The **owner** may elect to **not accept** the **CM's proposed GMP**,
2. The owner **may elect** to **stop** the **project** without recourse (termination for convenience), or
3. The **owner** may elect to **proceed** with the project with the CM and **designer performing** essentially in roles **contemplated** by the agency series documents.

Owner Acceptance of the GMP.

☐ If the owner **rejects** the **GMP** and

instructs the CM and designer to **continue** with the project with the CM **acting as an agent** of the owner,

both the CM and designer **agreements** should be **modified**.

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Owner Acceptance of the GMP.

❑ If the owner **stops** the project, **either** or **both** the CM and designer contracts may be **terminated** for convenience.

❖ In this case, the CM and/or designer are **paid**

1. **Their bona fide costs** to the date of termination, plus
2. **Reasonable termination expenses** as defined by the **contracts**.

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Owner Acceptance of the GMP.

- ❑ If the owner **accepts** the **GMP proposed** by the CM,
the CM **becomes responsible** for the ultimate cost of the construction.
 - ❖ If the **cost exceeds** the GMP provided by the CM, the **CM is responsible** for the **excess costs**.
 - ❖ **Unlike** other standard forms of agreement,
the CM is **not eligible** to perform any of the work
 1. **Unless** the CM submits a bid (with the other bidders) and
 2. **Unless** the CM is the **low bidder**.
- In this case, the owner and CM will **enter** into a separate agreement for the **performance** of and **payment** for this work.

Owner Acceptance of the GMP.

- ❑ Because of the CM's responsibility for construction performance, the CM **becomes** in many ways the equivalent of a general contractor during the construction phase.
- ❖ However, the **relationship** between the owner, CM, and designer, as **created** by the **CMAA CM-at-Risk series** is **unique** among those organizations promulgating standard form contracts in the construction industry.
- ✓ In the **CMAA system**, the 'project team' concept is maintained **throughout** all project phases and the required standards of performance are specified.

**Performance is Judged According to a
Standard of Care**

Performance is judged according to a standard of care

❑ The CMAA documents **maintain**

the legal principle that the **duty owed** by the CM and designer

in performance of their services is **measured** by a **standard of care**.

❖ The CM and the designer **each agree** generally to perform their services

in accordance with

1. the standards of their professions and
2. as defined by the applicable contracts or law.

Performance is judged according to a standard of care

❑ **Neither** the CM **nor** the designer warrants or guarantees **perfect results**.

❖ **Whether** the CM or designer has performed **according** to the required standard of care

will be **determined** by a variety of **factors** such as

1. The manner in which professionals in the industry generally perform,
2. The experience of the CM or designer, and
3. The specific requirements of the contract and the project.

Construction Contract General Conditions for Agency CM

Purpose

- ❑ The **purpose** of this section is to **review** the General Conditions recommended for use in **construction contracts** where the owner has elected to use an **agency CM** to **manage** the construction process.

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Background

- ❑ A **typical set** of construction contract documents contains
 1. A **detailed statement** of terms,
 2. **Conditions** and the **administrative requirements** with which the contractor will be required to **comply**, along with
 3. The **technical specifications** and **drawings** describing the facility or infrastructure to be constructed.

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Background

- ☐ These terms, conditions, and administrative requirements can be
1. **Brief** and **general** as they typically are in residential construction projects,
or
 2. **Lengthy** and **detailed** as they are in most major public works and infrastructure projects.

This section is intended to **address** the terms, conditions, and administrative requirements **generally associated** with

large, complex capital projects, where agency construction management is most common.

Background

☐ On large public works projects,

public agencies generally utilize one of three standard forms of contracts, if they do not already have their own contract documents.

☐ These are:

- ❖ The American Institute of Architects Contract Documents.
- ❖ The Engineers' Joint Contract Documents Committee Contract Documents.
- ❖ Construction Management Association of America Contract Documents.

Background

□ This section will **review** the CMAA Document A-3, General Conditions of the Construction Contract Between Owner and Contractor.

❖ The intent of the General Conditions is to:

- ✓ Clearly define owner and contractor rights and responsibilities.
- ✓ Clearly define the role and responsibility of the CM.
- ✓ Clearly assign risks to the contractor and owner.
- ✓ Provide a procedure for executing changes in the work scope in a fair and equitable manner.

**Review of the
CMAA Document A-3
General Conditions of the Construction
Contract**

THE CMAA GENERAL CONDITIONS

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AIA Document C132-2019

**Standard Form of Agreement Between
Owner and Construction
Manager as Adviser**

 AIA® Document C132® – 2019

Standard Form of Agreement Between Owner and Construction Manager as Adviser

AGREEMENT made as of the _____ day of _____ in the year _____
(In words, indicate day, month, and year.)

BETWEEN the Owner:

(Name, legal status, address, and other information)

and the Construction Manager:

(Name, legal status, address, and other information)

for the following Project:

(Name, location, and detailed description)

The Architect:

(Name, legal status, address, and other information)



This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132®-2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; A232®-2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition; and B132™-2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition.

AIA Document A232-2019 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

The Owner and Construction Manager agree as follows.

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DRAFT AIA® Document C132® - 2019

Standard Form of Agreement Between Owner and Construction Manager as Adviser

AGREEMENT made as of the 8 day of in the year Two Thousand Twenty-Four
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address, and other information)

Ogdensburg City School District
1100 State Street
Ogdensburg, NY 13669

and the Construction Manager:
(Name, legal status, address, and other information)

for the following Project:
(Name, location, and detailed description)

Ogdensburg City School District – 2024 Capital Improvement Project

Preconstruction and Construction related services for the Ogdensburg City School District in connection with a capital improvement approved pursuant to a public referendum on January 23, 2024.

The Architect:
(Name, legal status, address, and other information)

Bernier, Carr & Associates, Engineers, Architects and Land Surveyors, P.C.»»
15 Public Square
Watertown, New York 13601»
«Telephone Number: (315) 782-8130»

The Owner and Construction Manager agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132™-2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; A232™-2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition; and B132™-2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition. AIA Document A232™-2019 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

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موافقت نامه و شرایط عمومی همسان قراردادهای خدمات مدیریت طرح

شماره ۵۴/۲۰۱-۱۰۵/۷۳۵

تاریخ ۱۳۸۰/۱/۲۸

نشریه ۲۴۱۲۱



ریاست جمهوری
سازمان مدیریت و برنامه ریزی کشور
دفتر رئیس سازمان

بسمه تعالی

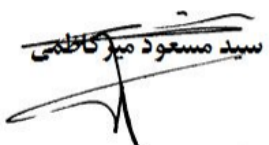
شماره: ۱۰۵/۷۳۵۵۴/۲۰۱	به دستگاههای اجرایی، واحدهای خدمات مدیریت طرح،
تاریخ: ۱۳۸۰/۱/۲۸	واحدهای خدمات مشاوره و پیمانکاران
موضوع: موافقتنامه و شرایط عمومی همسان قراردادهای خدمات مدیریت طرح	
به استناد آیین نامه استانداردهای اجرایی طرحهای عمرانی موضوع ماده ۲۳ قانون برنامه و بودجه و در چهارچوب نظام فنی و اجرایی طرحهای عمرانی کشور (مصوبه شماره ۲۴۵۲۵/ت/۱۴۸۹۸ هـ مورخ ۱۳۷۵/۴/۴ هیأت وزیران) به بیوست مجموعه موافقتنامه و شرایط عمومی همسان قراردادهای خدمات مدیریت طرح، همراه با مقررات ذیربط، از نوع گروه اول ابلاغ می شود تا از تاریخ ابلاغ برای انعقاد قراردادهای مدیریت تهیه و اجرای طرحها با واحدهای خدمات مدیریت طرح به اجرا درآید. رعایت کامل مفاد این نشریه از طرف دستگاههای اجرایی، واحدهای خدمات مدیریت طرح، واحدهای خدمات مشاوره، پیمانکاران و عوامل دیگر در طرحهای عمرانی الزامی است. محمد رضا عارف معاون رئیس سازمان	

موافقت نامه و شرایط عمومی همسان قراردادهای خدمات مشاوره

شماره ۱۴۰۱/۴۷۶۶۴۵

تاریخ ۱۴۰۱/۰۹/۰۷

نشریه ۳۴۱۸

 ریاست جمهوری سازمان برنامه و بودجه کشور رئیس سازمان	
باسرتعالی	
شماره:	۱۴۰۱/۴۷۶۶۴۵
تاریخ:	۱۴۰۱/۰۹/۰۷
بخشنامه به دستگاه های اجرایی و مهندسان مشاور	
موضوع: موافقت نامه و شرایط عمومی همسان قراردادهای خدمات مشاوره	
به استناد ماده (۳۴) قانون احکام دائمی برنامه های توسعه کشور و آئین نامه اجرایی آن، موضوع تصویب نامه شماره ۲۵۲۵۴/ت/۵۷۶۹۷ ه مورخ ۱۴۰۰/۰۳/۰۸ هیات محترم وزیران و ماده (۲۳) قانون برنامه و بودجه، به پیوست، مجموعه موافقت نامه و شرایط عمومی همسان قراردادهای خدمات مشاوره، بصورت لازم الاجرا، ابلاغ می گردد تا برای انعقاد قراردادهای خدمات مشاوره در امور مطالعات کارهای ساختمانی، رسته راه و ترابری، رسته آب و فاضلاب، طرح جامع و تفصیلی شهرها، طرح های توسعه و عمران جامع ناحیه، طرح هادی روستایی، مرحله اول بهسازی لرزه ای پل های موجود، مرحله اول بهسازی لرزه ای ساختمان های موجود، طرح بهسازی لرزه ای ساختمان های موجود و خدمات مشاوره در دوره ساخت و تحویل کار (خارج از حوزه فناوری اطلاعات)، موضوع بند (۱) بخشنامه شماره ۱۰۰/۳۱۳۹۱ مورخ ۱۳۸۹/۰۴/۲۶، از تاریخ ۱۴۰۲/۰۱/۰۱ مورد عمل قرار گیرد. معاونت فنی، امور زیربنایی و تولیدی تا مدت ۶ ماه پس از لازم الاجرا شدن این بخشنامه، موارد اصلاحی (احتمالی) را اعمال و از طریق پایگاه اطلاع رسانی Nezamfanni.ir اعلام می نماید. این بخشنامه، جایگزین بخشنامه شماره ۵۴/۲۴۶۰-۵۴/۸۴۲-۱۰۵ مورخ ۱۳۷۹/۰۴/۲۹ می باشد.	
 سید مسعود میرزا علی	

موسسه مهندسی و مدیریت ساخت علوی پور (ACEMI)

دفتر آموزش



تهران، بلوار فردوس شرق، مجتمع آبگینه، طبقه سوم اداری، واحد C42



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