

# Alternate Project Delivery in Horizontal Construction

Design & Construction is  
Intended to be an Integrated Process

***“Celebrating Quality & Value”***

Michael J. Ladino, Esq.– Valley Metro Rail, Inc.

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# What Created the Need for Alternate Procurement Delivery Methods?

- ✓ Dissatisfaction with Design-Bid-Build
- ✓ Need for faster delivery of projects
- ✓ Compliance with project budget
- ✓ Selecting the most qualified team, not low bidder
- ✓ Increased quality and value
- ✓ Desire to work in a team atmosphere
- ✓ Frustration with errors & omissions, change orders, claims, warranty issues, etc.

# What is CMAR?

(Also known as CM/GC)

## “Defining” Characteristics:

- ✓ Simultaneous Selection with Design Consultants
- ✓ Selection Based upon Qualifications
- ✓ Separate Contracts for Design & Construction
- ✓ CMAR Holds Trade Contracts/ Performance Risk

## “Typical” Characteristics:

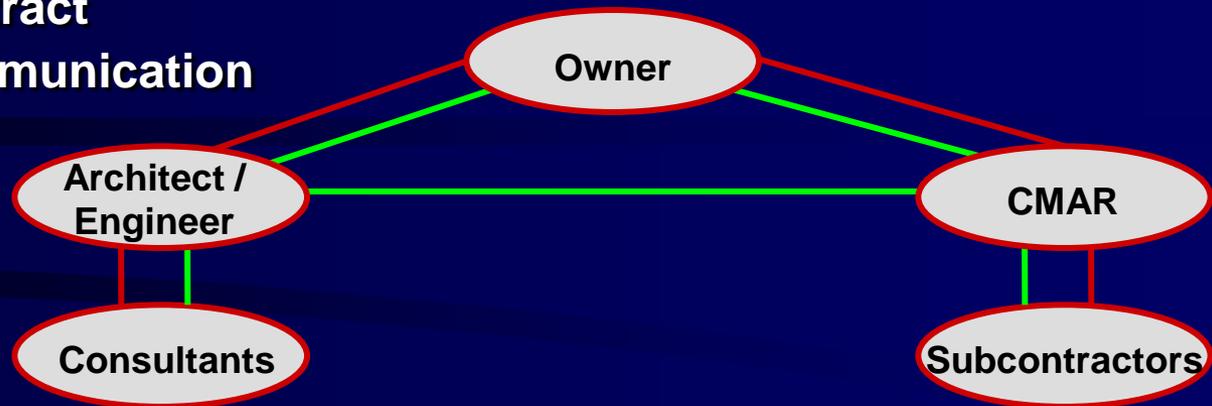
- ✓ Collaborative Team Effort
- ✓ Preconstruction Services
- ✓ Fast-Track & Overlap Design & Construction

# Construction Manager at Risk

(Lump Sum or GMP)

— Contract

— Communication



- Architect/Engineer (Qualifications Based Selection)

- Design services with active CMAR participation
- Some construction administration/participation

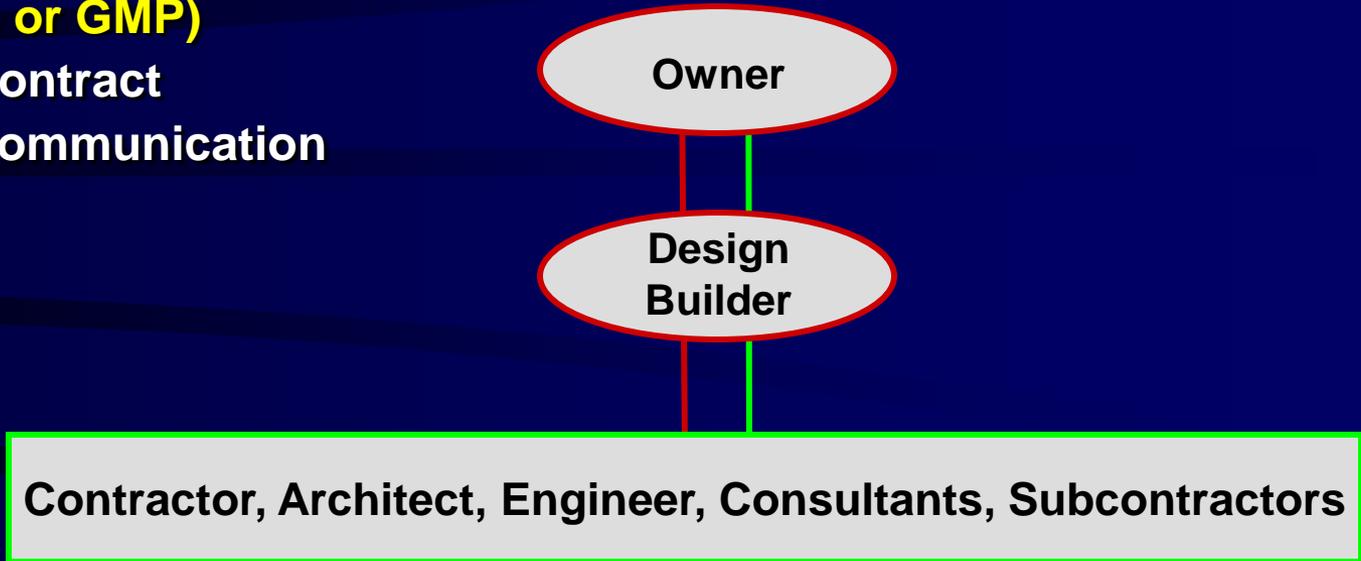
- CMAR (Qualifications Based Selection)

- Preconstruction and construction phase services
- Management of bid process and trade subcontractors
- “Open book” culture & requirement

# Design-Build

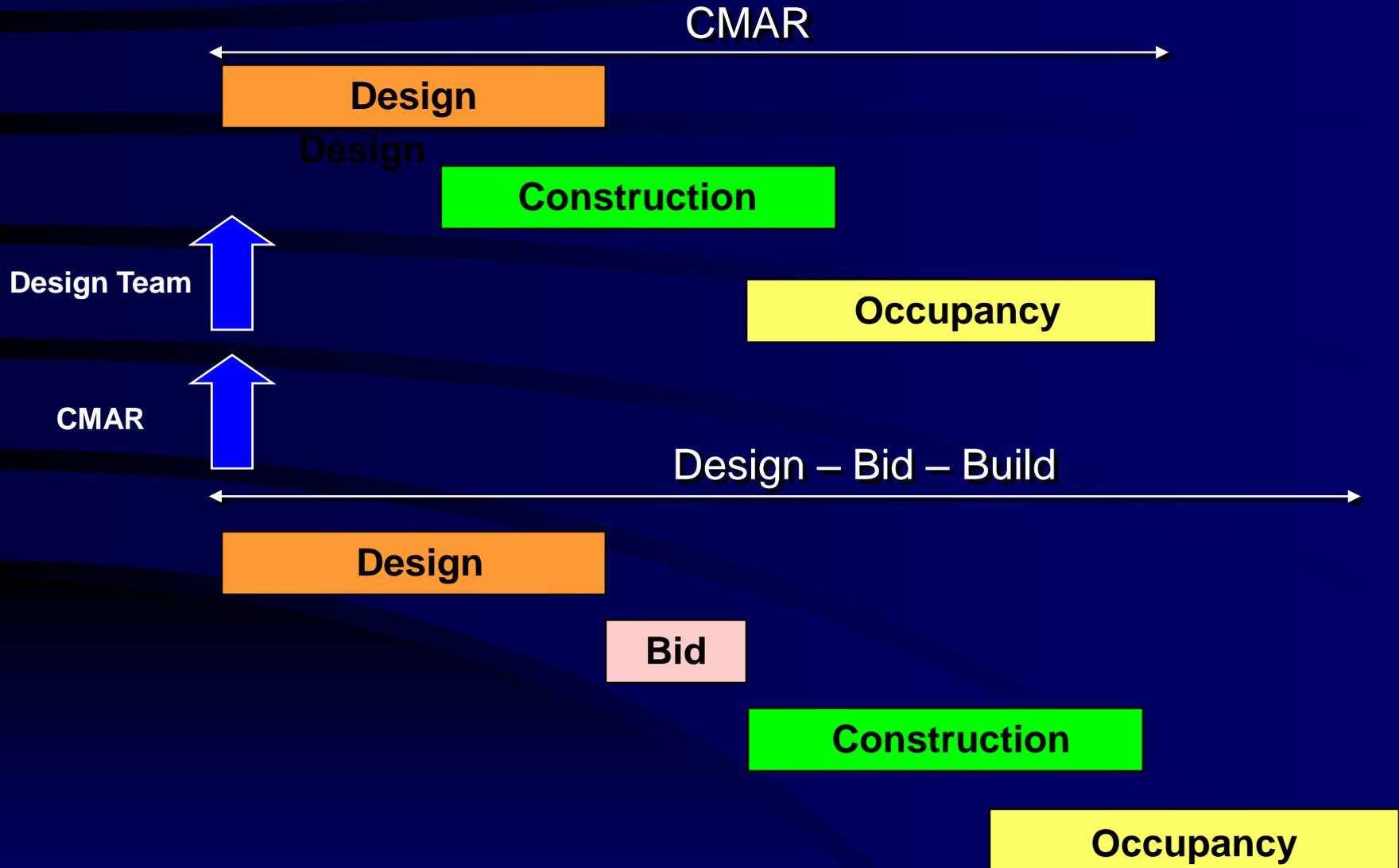
(Lump Sum or GMP)

— Contract  
— Communication



- Design Builder (Qualifications Based Selection or Best Value)
  - Design and construction
  - Management of design services
  - Management of bid process and trade subcontracts
  - “Open book” or lump sum

# Typical CMAR



# Selection Committee Composition - AZ Statute

- Selection team:
  - Minimum of 3 not more than 7
  - One licensed contractor, Sr Management
  - One registered architect or engineer

**Diversity required for transparency**

# Qualifications Based Selection (QBS)

- Demonstrated competence
- Qualifications
  - ✓ Experience
  - ✓ Personnel
  - ✓ Performance
  - ✓ Project Issues and Solutions
  - ✓ Management, budget, schedule, safety

Qualifications criteria and associated weighting are defined by the Owner

# Owner Responsibilities

- Pre-work with selection committee
- Pre-work with project stakeholders
- Develop scoring and weighting criteria based upon project needs
- Cannot request or consider fees, price, man-hours or any other cost information in the selection or order of preference
- Indicate relative weight of criteria in RFQ

# Owner Responsibilities

- Evaluate Statements of Qualifications in accordance with criteria and weighting approved by Owner
- Enter negotiations with highest qualified firm
- Construction shall not commence without a fixed price or GMP agreement on construction
- Scoring must be made available to the competing teams upon request after execution of the contract (**transparency**)

# Qualifications Based Selection

“When multiple prices are on the table,  
the owner is not in control; the price is.”

ACEC

# Qualifications Based Selection

"QBS means that the owner gets a qualified, competent team known to have the qualifications for a specific project and the taxpayer receives a quality Project."

City of Phoenix

# **CMAR Glendale perspective**

By

Kenneth A Reedy, P.E.

# Why Use CMAR?

- Develops partnerships
- Creates a working relationship
- Allows Contractor and Design firm to understand the options better
- Keeps the focus on cost, quality and problem solving
- Avoids conflicting agendas
- Prevents change orders
- Reduces potential for errors and omissions
- Reduces the timeline for the project while improving the information for decision making

# Glendale Projects \$200mil

- Coyote Hockey Arena
- Fleet Maintenance Facility
- Transportation street improvements
- Waterlines
- Water Treatment Plant
- Recreation Facility
- Major League Baseball Spring Training Facility
- Parking lots for Superbowl
- Parking Garage
- Downtown streetscape
- Citywide bus bays

# VALLEY METRO RAIL, INC. PERSPECTIVE

Michael J. Ladino, Esq.

# Metro's Lessons Learned

- Pure QBS for preconstruction phase not always understood by Federal funding agencies
- No fundamental differences when applied to either horizontal and vertical construction

# Sample Selection Criteria

## Evaluation Criteria

## Points

- |   |            |
|---|------------|
| 1) General Information  | 50         |
| 2) Experience and Qualifications of the CMAR and Systems                                    | 500        |
| 3) Contractor Understanding of the project and approach to performing the required services | 350        |
| 4) Overall evaluation of the firm/team and its ability to provide the required services     | <u>100</u> |

**Total Points**

**1,000**

# Owner Advantages of APDM

- Simultaneous team selection – Engineer and Contractor
- Open book – eliminates hidden agendas
- Greater savings opportunities
- Better planning
- Designing to contractor's strengths
- Improves quality and value
- Shorter project schedules

# Owner Advantages of APDM

- Continuity through preconstruction and construction phases
- Ability to “design to cost model”
- Attracts higher quality constructors
- Prequalification of subcontractors
- Bid process managed by constructor
- Industry is geared to relationships

# Construction Manager At Risk

## Opportunity or Threat?

- Creates “win-win-win” environment
- Not suitable for every owner, designer, builder or legal department
  - Requires different culture and people
  - Requires different procurement methods
  - Requires different processes
  - Requires different contracts
- Focus on quality and value – not low bid
  - Construction is not a commodity

# Construction Manager At Risk

## Opportunity or Threat?

### *Enlightenment through Preconstruction Services*

- Team structure – strategy for success
- Develop “**Cost Model - Then Design**”
- **Ability to introduce technology; ie., BIM**
- VE solutions/Life cycle cost studies
- Phasing/sequencing plans
- Timing of the price (Lump Sum or GMP)
- Establishment of contingencies/allowances

# Construction Manager At Risk

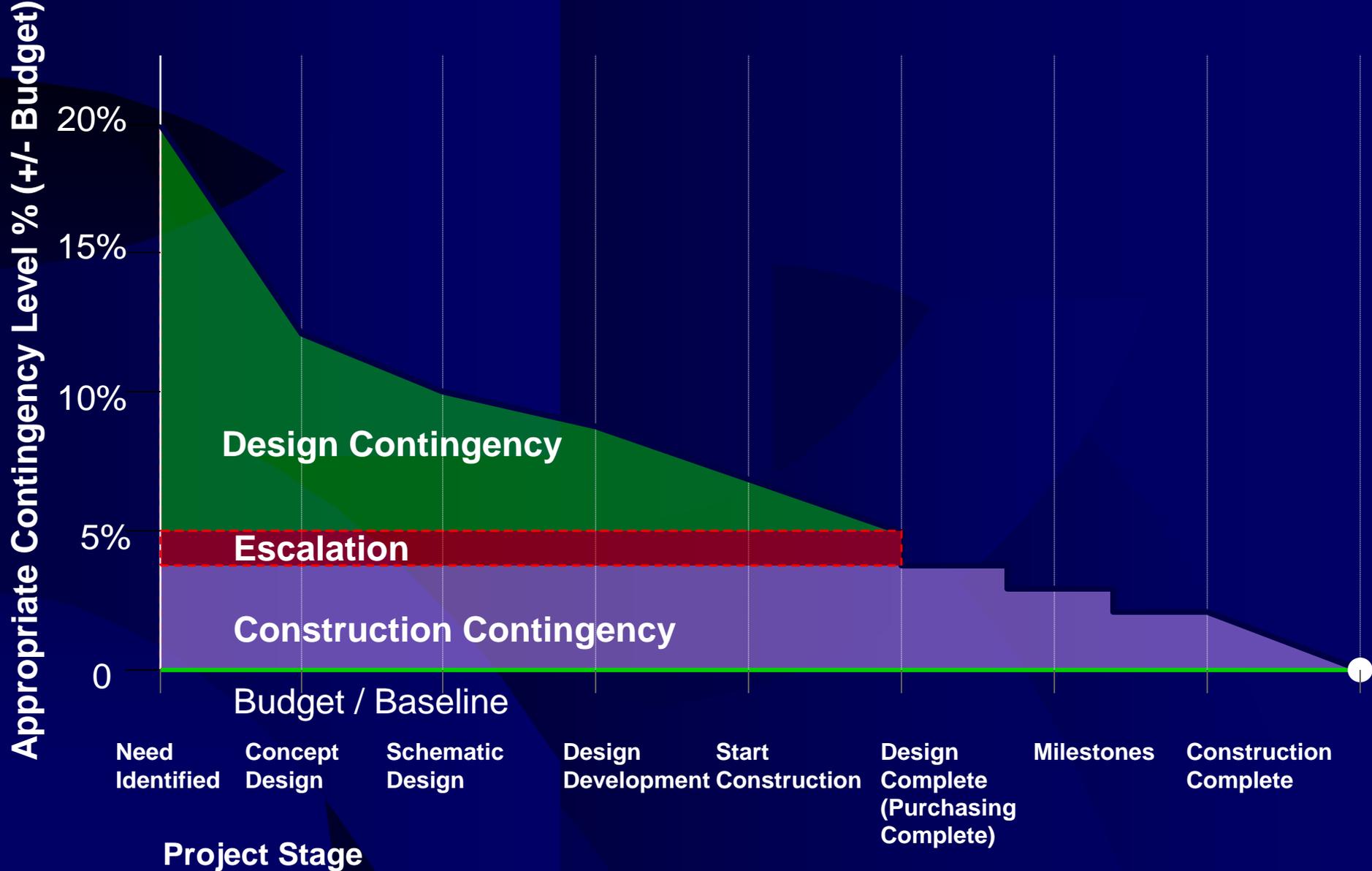
## Opportunity or Threat?

### Team Cost Management (Design)

- Validate Owner's Budget through Cost Model
- Proactive Budget Management during Design
- Create Allowances for Unidentified Items
  - “Fill in the Holes”
- Create Escalation Account
- Development Contingency Accounts
  - Design
  - CMAR
  - Owner



# Contingency Management



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