

Construction Consultant - General Contractor (CCGC) Project Delivery Model

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Outline

Introduction

CCGC Description and Intent

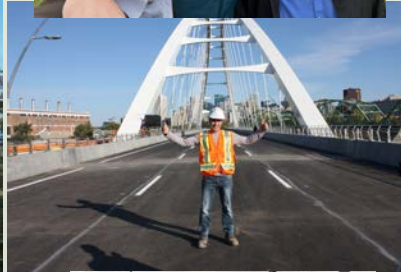
CCGC Projects and Lessons Learned

Planned Improvements

Questions

Introduction

A CCGC Story

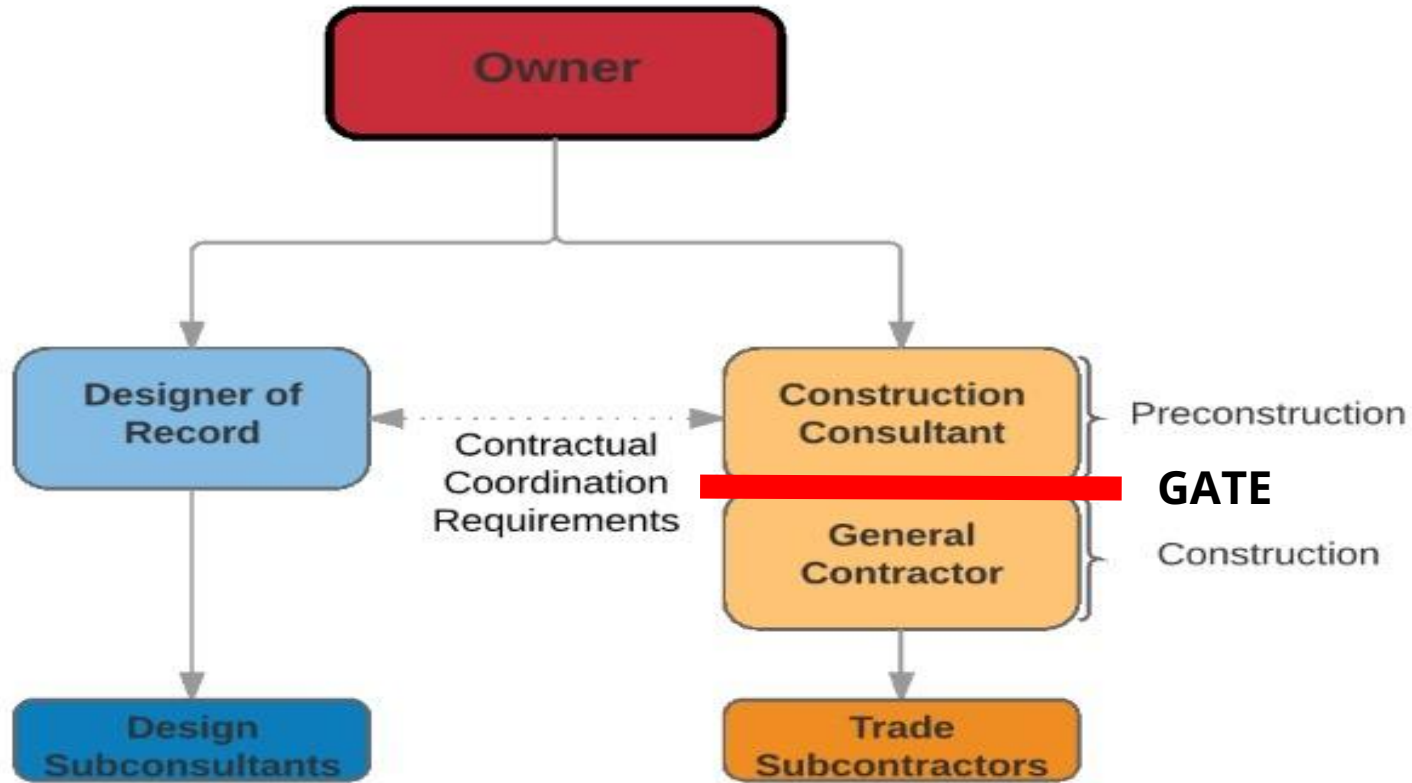


Description - CCGC

What is CCGC?

- **Project Delivery Model tailored for Government to help build Trust through design and construction with Consultants and Contractors**
- **Open, Transparent, Defendable - Meets all Public Work Trade Agreements**
- **Tool for Early Contractor involvement during the Design phase of a Project.**
- **Benefits of both Design-Bid-Build and Construction Management**

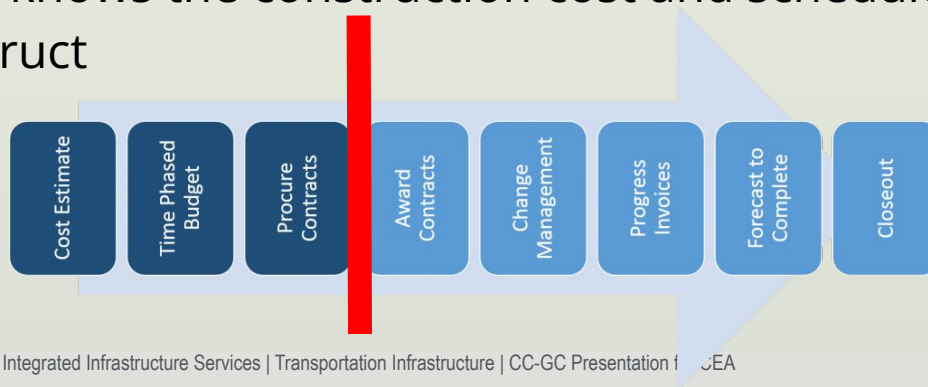
Description - CCGC



Description - CCGC

Variance from Construction Management At Risk:

- City selects Contractor only to provide the pre-construction services, not significant construction
- The work is not phased in sequential trade packages
- The City knows the construction cost and schedule before committing to construct



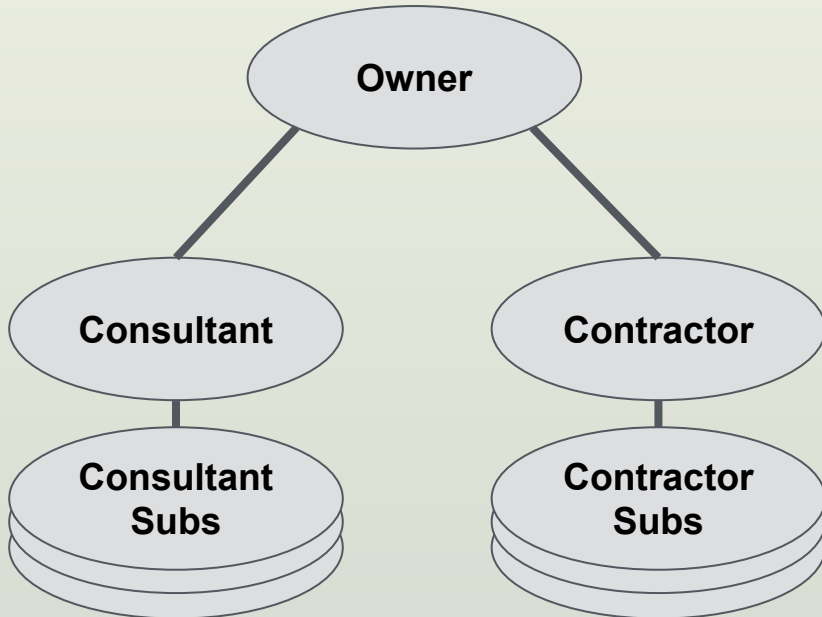
Intent

Why do we typically deliver public works using lowest price?



Intent

Typical Delivery Model



Intent

THE CITY OF EDMONTON

A Municipal Corporation

(the "City")

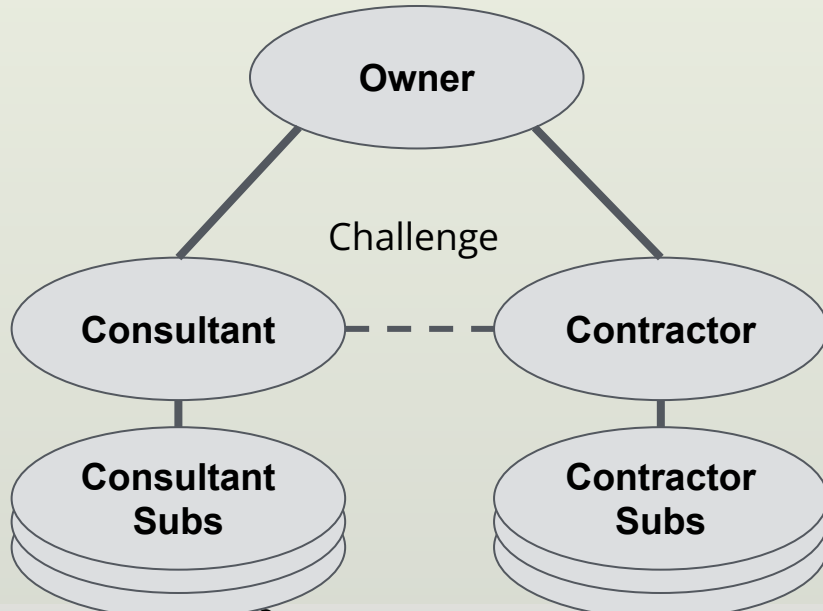
- and -

CLARK ENGINEERING INC.

(the "Consultant")



We create separate contracts



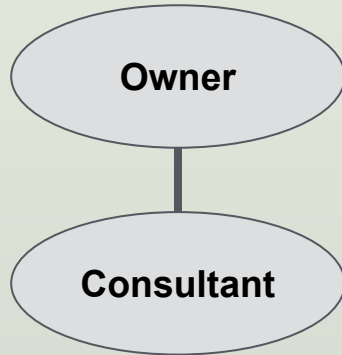
Challenges with this model:

- Changes
- Disputes
- Combative
- Timing of Reliable Information for Decisions

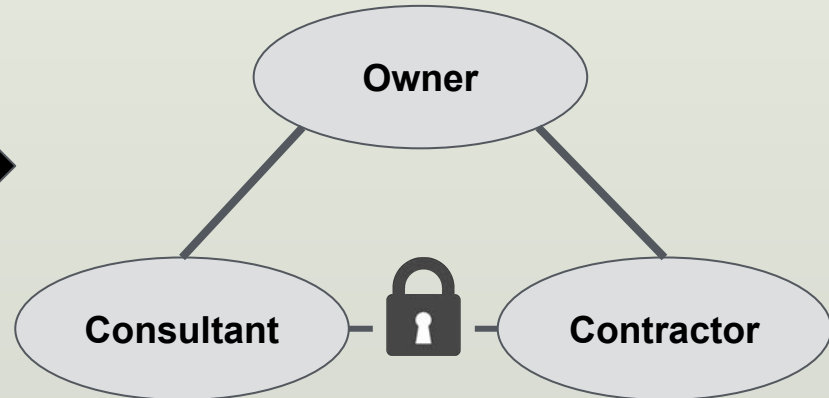
Intent

If Project Communication is the “key” to success; the timing of reliable information is the “lock” that create challenges in typical delivery models.

Design Decisions



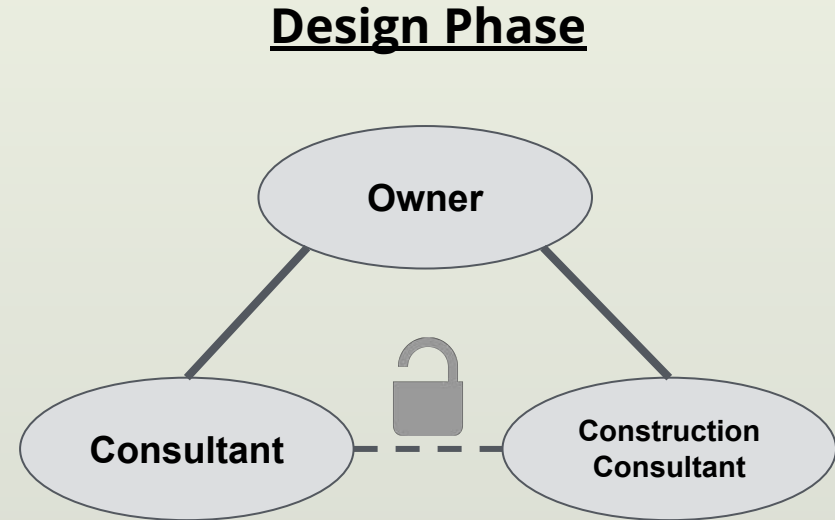
Construction Challenges



Description - CCGC

Why CCGC?

- **Perspectives of success**
 - **Owner**
 - **Consultant**
 - **Contractor**
- **Manage Expectations**



What kind of project characteristics benefit most from CCGC?

- High level of technical complexity
- High level of risk
- Complex phasing
- Budget constraints



CCGC Roles and Responsibilities

- **CCGC IS NOT:**

- Responsible for Design
- Engineer of Record

- **The DESIGN CONSULTANT is:**

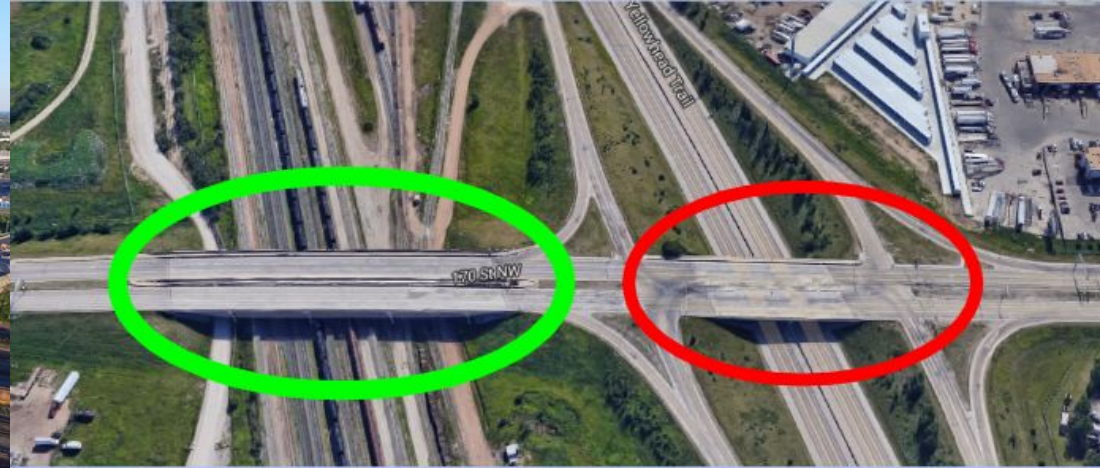
- Fully in control of all engineering and design requirements
- Is not governed by the CCGC

- **The City is:**

- Responsible to oversee and audit the design and construction process
- Act as Owner and use the resources available to make decisions
- In control of each contract separately (all report to City independently)

City of Edmonton CCGC Projects

170 Street over CP Rail - Transportation



City of Edmonton CCGC Projects

170 Street over CP Rail - Transportation



Item	Preliminary Design Report	Construction Consultant
Cost	\$3.9M	\$5.0M
Schedule	189 days (1 season)	274 days (2 seasons)
Traffic	3 traffic switches	2 traffic switches

Conclusion: Large risk to the City for potentially “over promising and under delivering” if we assume the work can be completed in 1 year.

City of Edmonton CCGC Projects

50th Street Over CP Rail - Transportation



City of Edmonton CCGC Projects

50th Street Over CP Rail - Transportation



City of Edmonton CCGC Projects

Some items from the 50th Street Bid Form

PART A - GENERAL REQUIREMENTS		
PART A1 - MOBILIZATION AND SITE ESTABLISHMENT		
A.1.1	00.001, SP	Bonding & Insurance
A.1.2	00.010, SP	Mobilization and Demobilization
A.1.3	00.020, SP	Site Facilities and Temporary Utilities
A.1.4	00.030, SP	Site Supervision and Administration
A.1.5	00.040, SP	Construction Progress Camera
PART A2 - SITE OCCUPANCY AND LANE RENTAL		
A.2.1	00.052 SP	Site Occupancy #1 (First Bridge Structure)
A.2.2	00.052 SP	Site Occupancy #2 (Second Bridge Structure)
A.2.3	00.054 SP	Lane Rental (50 Street)
PART A3 - CP RAIL REQUIREMENTS		
A.3.1	SP	CP Signals/Bungalow Grading and Pad
A.3.2	SP	CP Track Monitoring
A.3.3	SP	CP Flagging
PART A4 - TRAFFIC ITEMS		
A.4.1	SP	Traffic Accommodation Maintenance
A.4.2	SP	Load, Haul, and Install City F-Shape Barriers
A.4.3	SP	Contractor Supply and Install F-Shape Barriers
A.4.4	SP	Temporary Traffic Barrier - Relocate On Site
A.4.5	SP	F-Shape to Single Slope Transition Barriers (Custom)
PART A5 - ENVIRONMENT PROTECTION AND MANAGEMENT		
A.5.1	00.080 SP	Environmental Construction Operations (ECO) Plan
PART A6 - UTILITY PROTECTION AND COORDINATION		
A.6.1	SP	Hydrovac Daylighting of Utilities
A.6.2	SP	Coordinating Utilities
PART A7 - PUBLIC COMMUNICATIONS		
A.7.1	SP	Construction Bulletins
A.7.2	SP	Project Signs
PART A8 - GENERAL CONTINGENCY ALLOWANCE		
A.8.1	99.999 SP	General Contingency Allowance

City of Edmonton CCGC Projects

Jasper New Vision - Transportation



City of Edmonton CCGC Projects

Jasper New Vision - Transportation



City of Edmonton CCGC Projects

Terwillegar Stage 2 - Transportation



City of Edmonton CCGC Projects

Terwillegar Stage 2 - Transportation



City of Edmonton CCGC Projects

Strathcona Footbridge - Transportation



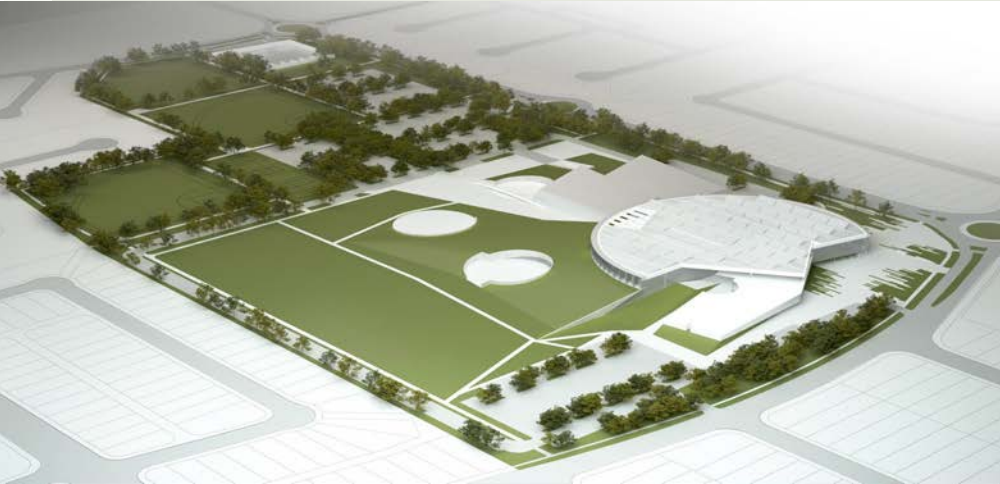
City of Edmonton CCGC Projects

Strathcona Footbridge - Transportation



City of Edmonton CCGC Projects

Lewis Farms Rec Center - Facilities



City of Edmonton CCGC Projects

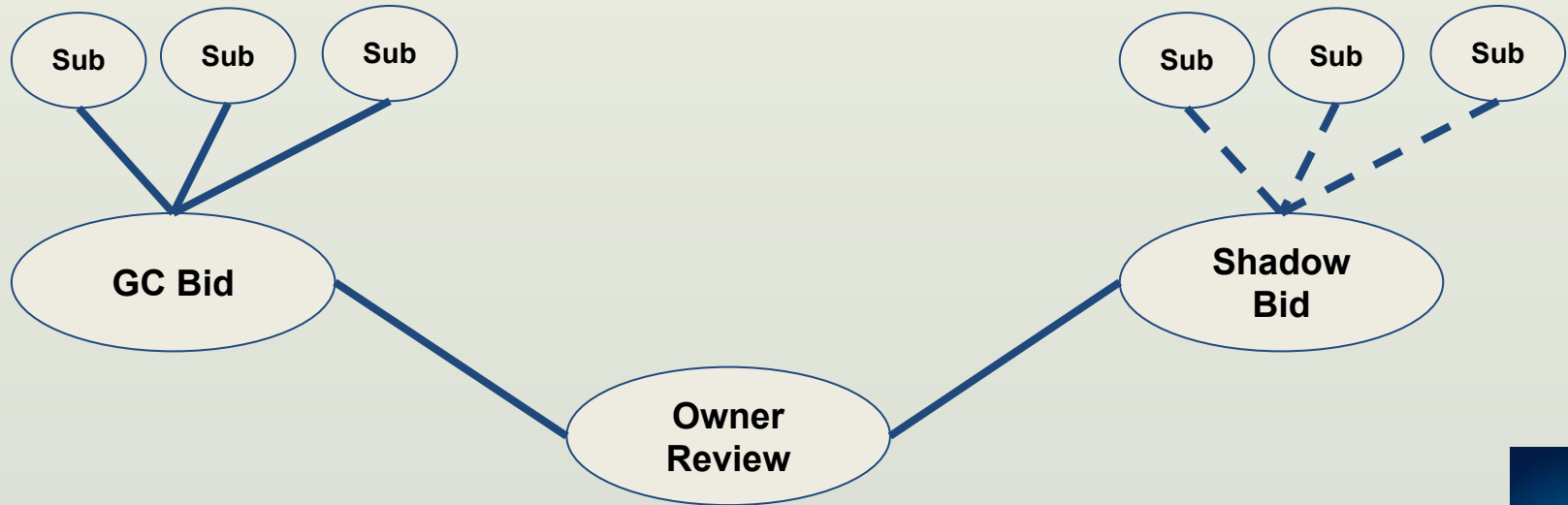
Coronation Rec Center - Facilities



Potential Improvements

Cost Consultant - Shadow Bid Process

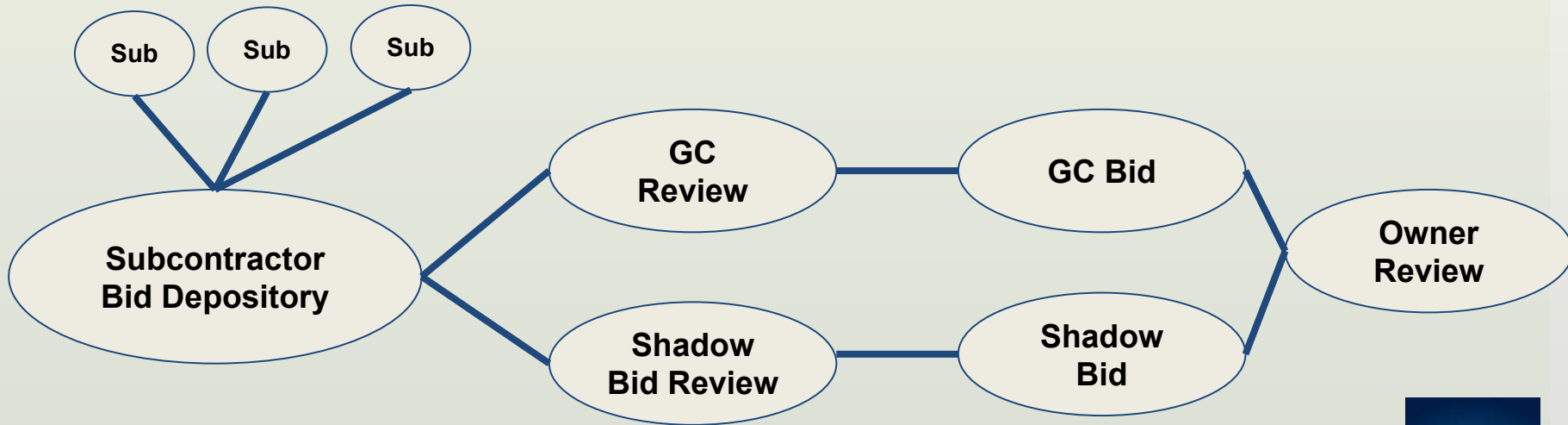
Current Process



Potential Improvements

Cost Consultant - Shadow Bid Process

Potential Improvement



Planned Improvements

Cost Consultant - Shadow Bid Report Template

Construction Consultant
General Contractor
Project Delivery Model
(CCGC)

Cost Consultant Shadow Bid

[Project Name]

ESTIMATE BASIS

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CCGC Questions?



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