

SCADA / Electrical Refurbishment Construction Contract

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Operations & Maintenance

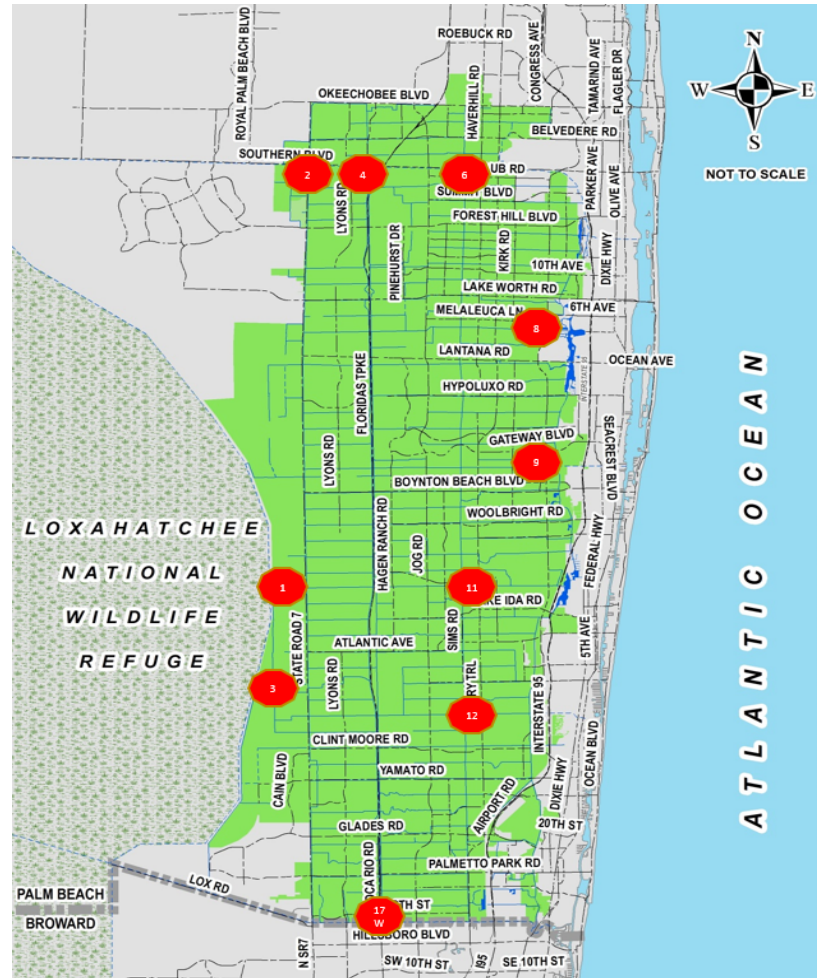


Telemetry (SCADA)

- Provides capability to automate water control operations
- Provide 'real time' data to make instant water supply and flood control decisions
- Enable staff to communicate in the field using software specifically designed for LWDD operations
- Provide security notification for control structures
- Provide backup power for emergency operations
- Improve communication with other flood control first responders including SFWMD and Palm Beach County to better coordinate efforts



Existing Major Control Structures



Structure Refurbishment Program

- Improvements to Aging Gates and Control Buildings
- New and/or Refurbished Water Control Gates
- New Gate Lifting Mechanisms (Actuators)
- New Electrical Systems
 - Power systems
 - Control Panels
- Site Lighting
- Fencing / Security



Independent Budgets

**Extraordinary
Account Funding**



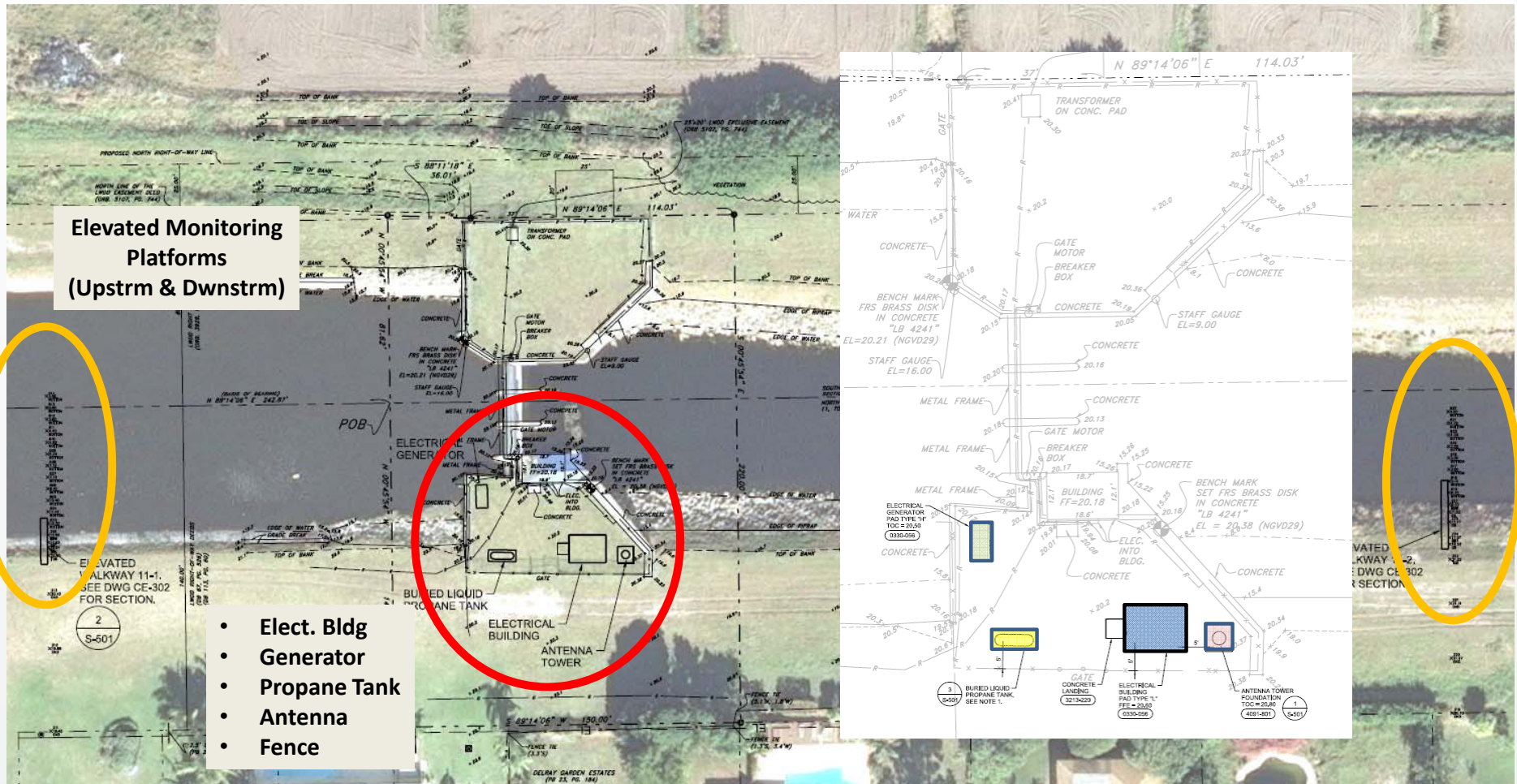
**SCADA
\$ 2.7 M**

**Capital
Refurbishment
Funding**



**Elect.
Refurb.
\$1 M/yr**

Example Site Plan (CS# 11)



Control Structure #8 – SCADA Visualization



Control Structure #8 – SCADA Visualization



SCADA Construction Elements



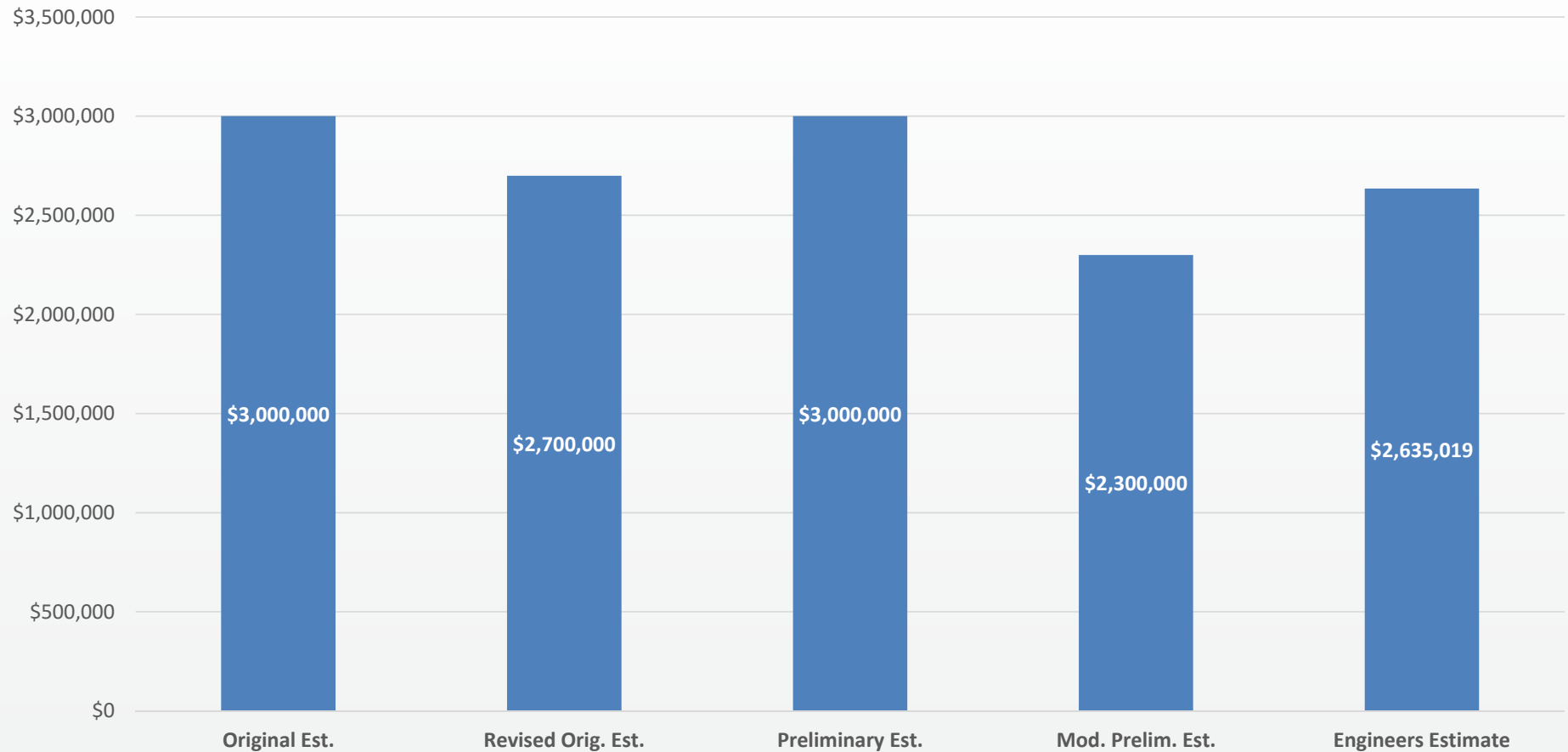
Site No.	New Building	Generator	Controllers	Monitoring Platforms	Antennas
CS#1		✓	✓	✓	✓
CS#2	✓	✓	✓	✓	✓
CS#3	✓	✓	✓	✓	✓
CS#4		✓	✓	✓	✓
CS#6		✓	✓	✓	✓
CS#8		✓	✓	✓	✓
CS#9		✓	✓	✓	✓
CS#11	✓	✓	✓	✓	✓
CS#12	✓	✓	✓	✓	✓
CS#17W		✓	✓	✓	✓
Headquarters					

Electrical Refurbishment Construction Elements

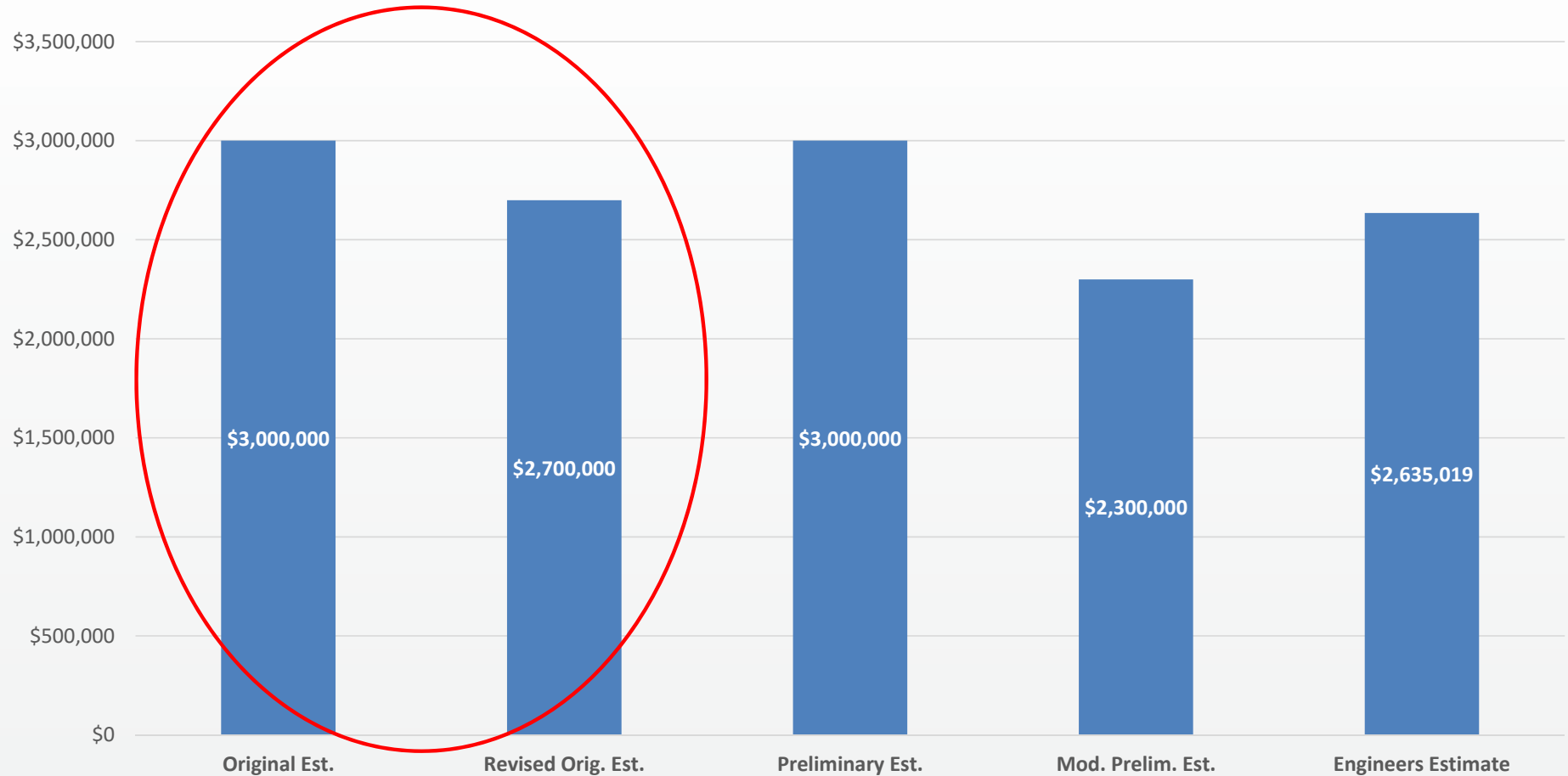


Site No.	Pump Control Panel	Motor Starters	Distb. Panel	Lighting
CS#1	✓	✓	✓	✓
CS#2		✓	✓	✓
CS#3				✓
CS#4				✓
CS#6			✓	✓
CS#8			✓	✓
CS#9			✓	✓
CS#11		✓	✓	✓
CS#12		✓	✓	✓
CS#17W		✓	✓	✓
Headquarters				

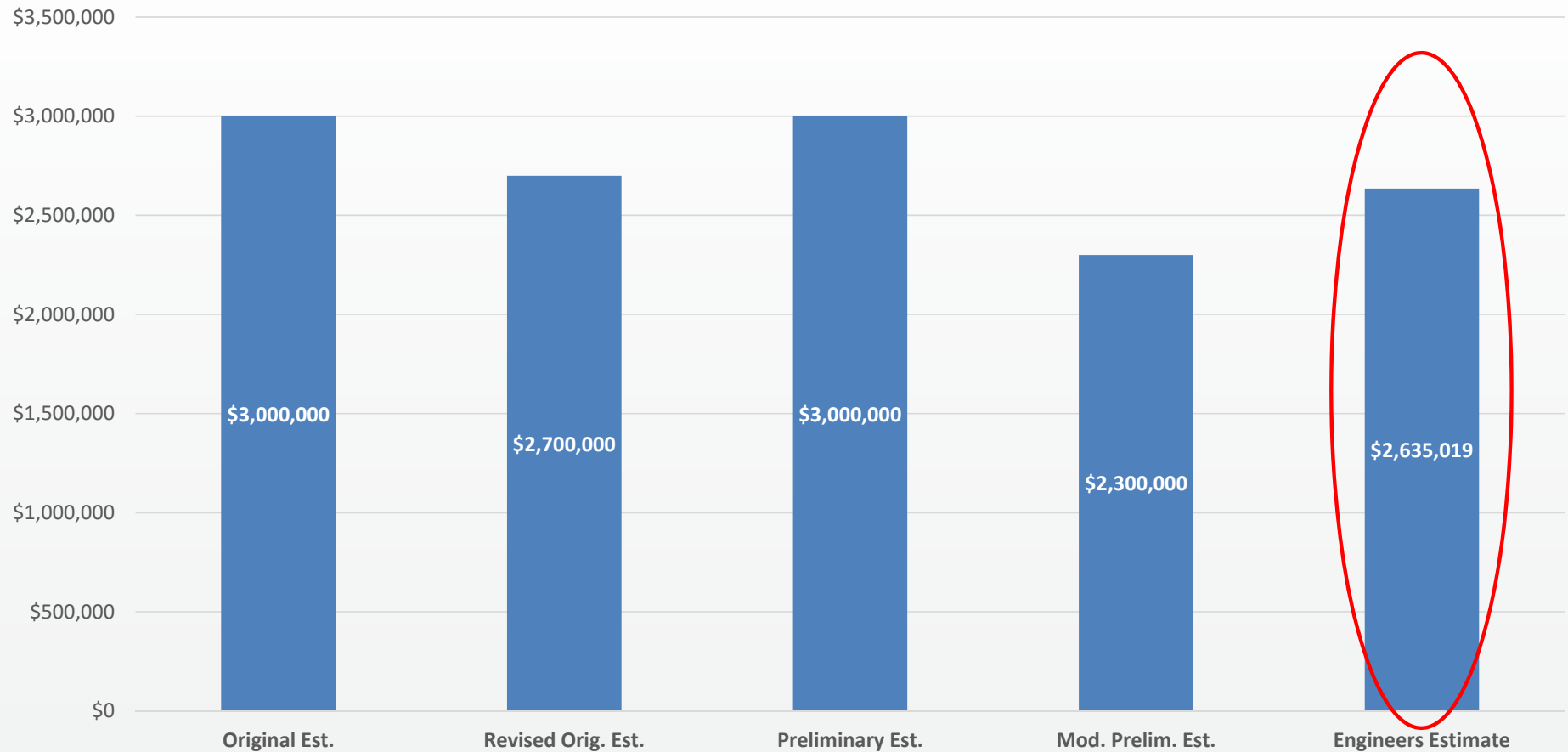
SCADA Construction Cost Estimate History



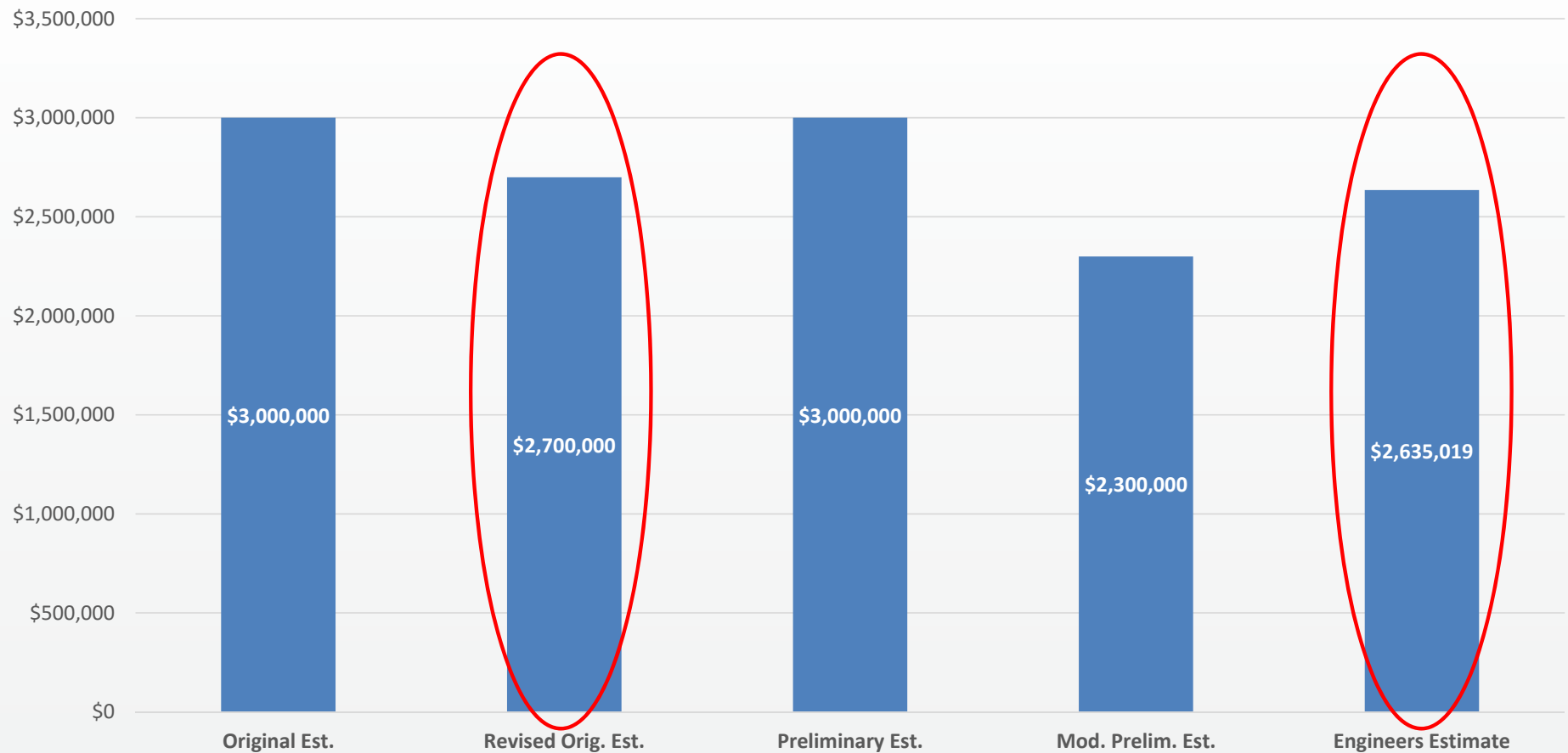
SCADA Construction Cost Estimate History



SCADA Construction Cost Estimate History



SCADA Construction Cost Estimate History



Engineers Estimate of Probable Const. Costs

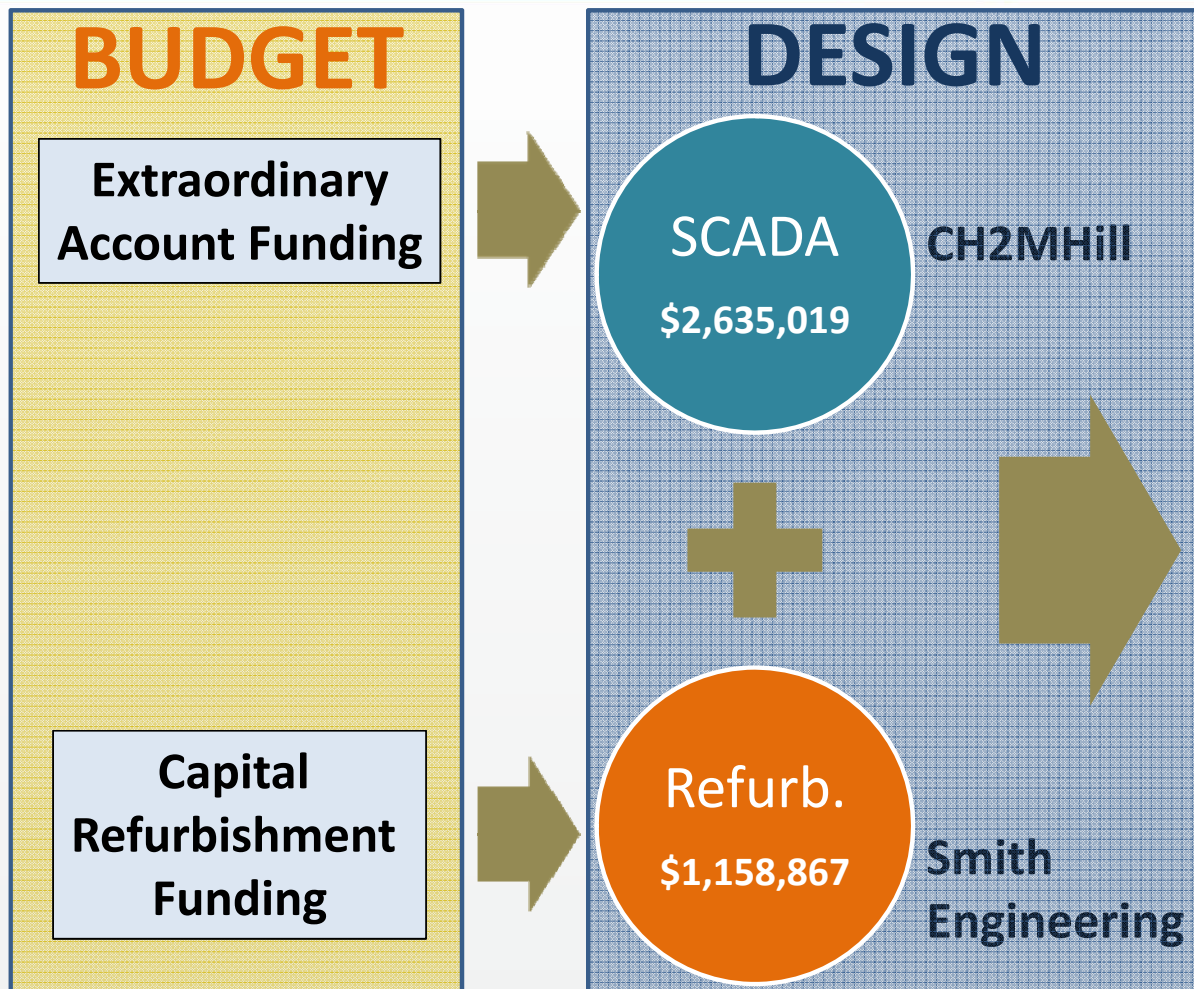


BUDGET

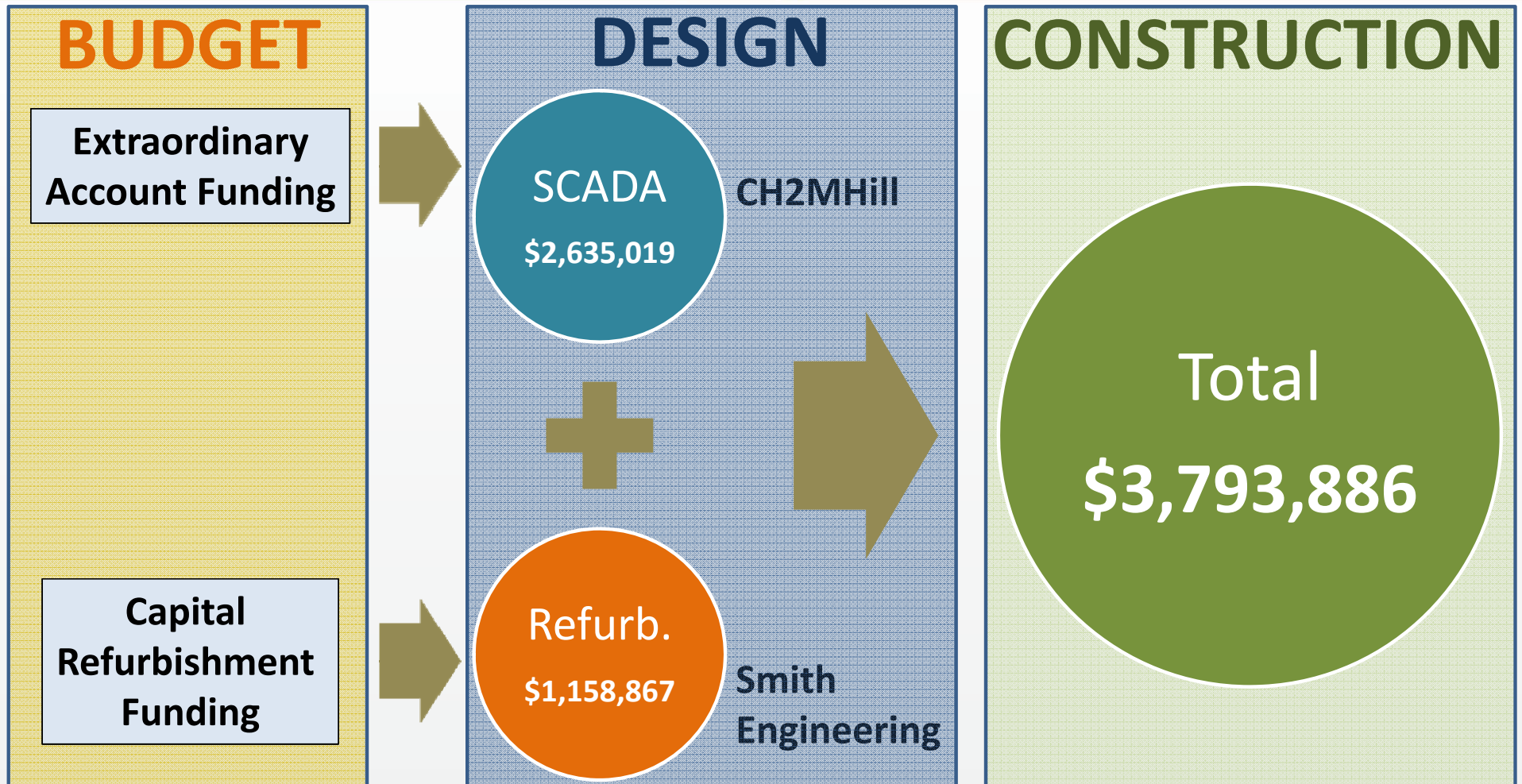
**Extraordinary
Account Funding**

**Capital
Refurbishment
Funding**

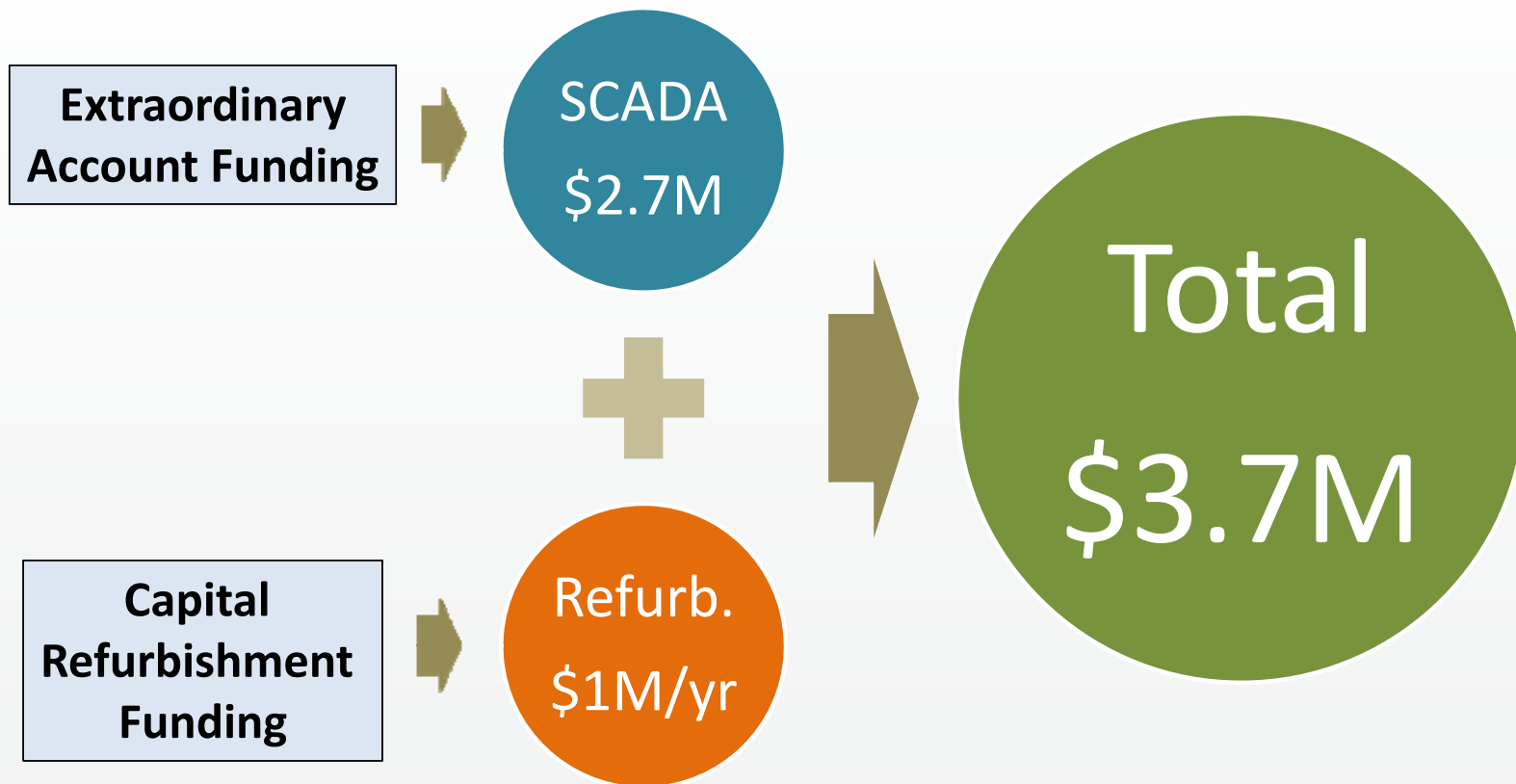
Engineers Estimate of Probable Const. Costs



Engineers Estimate of Probable Const. Costs



Original Budget



Bid Timeline



Date	Notice
Request for Authorization	August 17 th
1 st Advertisement	August 19 th
2 nd Advertisement	August 28 th
Pre-Bid Meeting	September 5 th
Site Access Available to Bidders	September 6 th
Bidder Request For Information (RFI)	September 8 th
RFI Response	September 18 th
Bid Opening	October 4 th
Bid Review	October 5 th
Contract Award	October 12 th
Notice To Proceed	November 9 th

Estimated Construction Schedule



Project Phase	2015		2016										2017														
	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	
<i>Engineering Design & Construction Documents</i>	█	█	█	█	█	█	█	█	█																		
<i>FCC Frequency License</i>	█	█	█	█																							
<i>Bids</i>										█	█	█															
<i>Construction</i>													█	█	█	█	█	█	█	█	█	█					
<i>Start-Up & Training</i>																					█	█	█	█			



Staff Recommendation



- Approval to advertise a Request for Bids for construction of the SCADA System and electrical improvements