# Santa Margarita Treatment Facility Bid Results

Board of Directors Meeting

21 October 2019

# Design and Cost History

| Event | Date | Team | Estimate |
|---|---|---|---|
| Basis of Design | 12/21/2018 | MPWMD Operations<br>MPWMD Engineering<br>MPWMD Designer<br>Cal Am Operations<br>Cal Am Maintenance<br>Cal Am Engineering<br>Cal Am Design Consultants | $1.2M to $1.4M<br>Class 5<br>(-50% to +100%) |
| Budget | April, 2019 | Insufficient schedule and project budget for interim engineers estimate | $2M<br>Staff increased to allow for potential scope changes |
| 60% Design Review | 5/30/2019 | Basis of Design Team<br>+ Cal Am Corrosion Inhibitor Consultant | |
| 95% Design Review | 7/23/2019 | 60% Design Review Team<br>+ MPWMD Constructability Review Consultant, Civil<br>+ MPWMD Constructability Review Consultant, Electrical | |
| Bid Design | 8/6/2019 | | $3.64M<br>Class 3<br>(-20% to +30%) |

# Bid Results

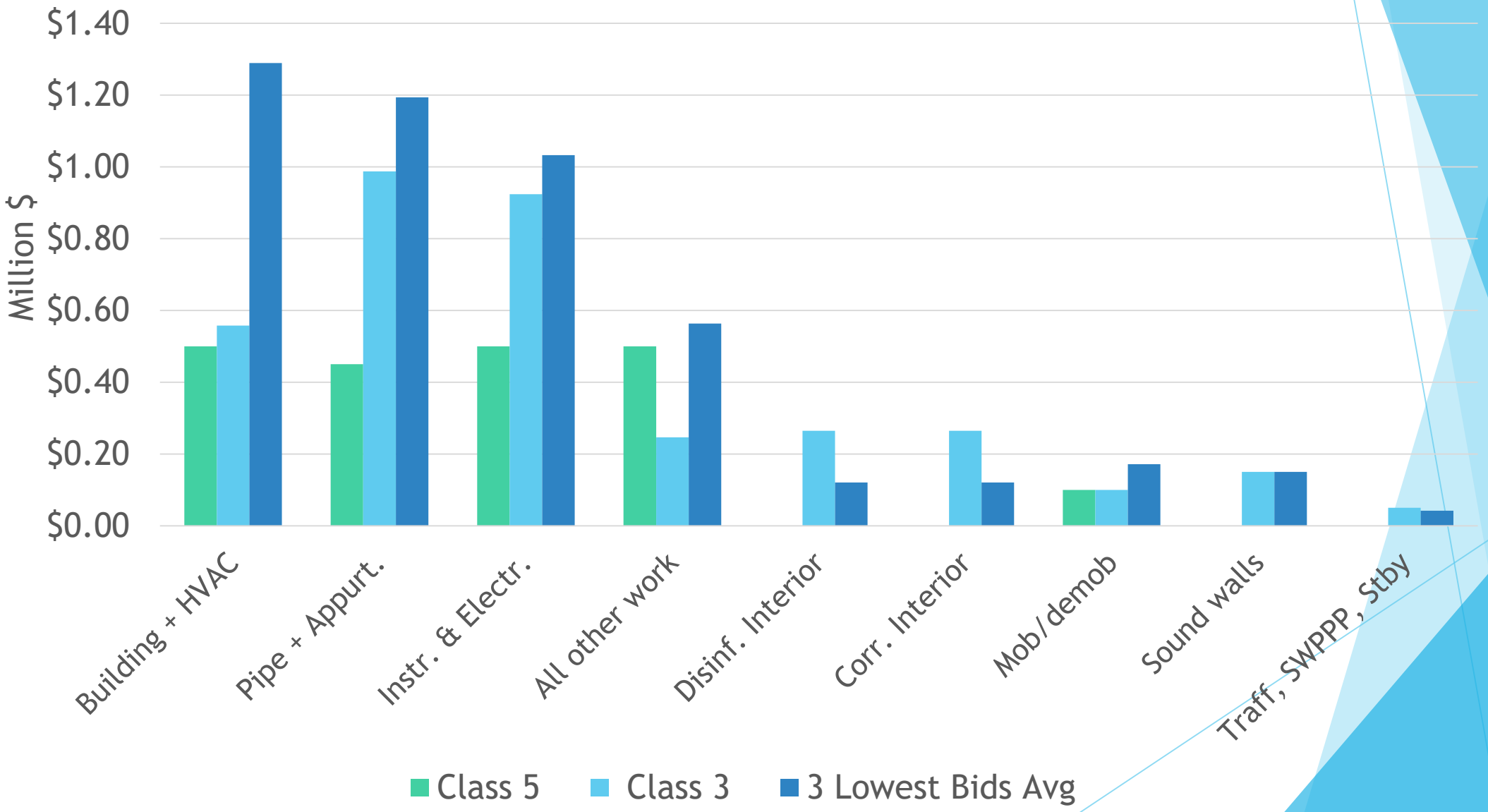
| Bidder | Total |
|---|---|
| Specialty Construction | $4,649,400 |
| MPE | $4,678,000 |
| Anderson Pacific | $4,724,400 |
| Mercer-Fraser | $5,558,600 |

3 lowest bids within 1% of their mean
Fitch Park Design-Bid proposals were $6M and $6.6M

# Budget Information

| Item | Budget |
|---|---|
| FY 2019-2020 Budget for the project | $2,450,000 |
| Total project cost including contingencies | $5,592,635 |
| Unbudgeted portion of the project | $3,142,635 |
| District's fund balance current estimate | $12,324,065 |
| Reserve balance after funding of this project | $9,181,430 |

# Bid Results and Estimates Analysis



# Major Costs (1)

- Construction cost increase since recession
  - Existing, land constrained, operating facility on a former munitions range
- Useful life
  - Centrally located @ new storage as we transition off Carmel River
  - Ductile iron transmission and distribution pipe - 100 years
  - Concrete masonry buildings - 40 years (re-grout)
  - Treatment plants with concrete structures – 60 to 70 years (ASCE 2011)
- Capacity
  - Recover Pure Water Monterey water
  - Consistent with transmission capacity
  - Future production wells, Fitch Park treatment under review

# Major Costs (2)

- Building Materials
  - Design standard in existing buildings, pledged to jurisdictions in 2011
    - Standard for PWM and Desal in Seaside
  - Fire authority approved
  - First development in land slated for residential development
  - Cellar
    - double containment of spills and leaks,
    - consistent with Ord Grove treatment facility,
    - reduces building height - esthetics and seismic response,
    - maintainability,
    - safety

# Major Costs (3)

- Dechlorination (building space)
  - Lose 2 months of capacity waiting for disinfection byproducts decay.
    - Production of least expensive replacement waters vs. stop ASR injection early (wet/late year).
  - Dechlorination reduces wait time, increases production capacity up to 900 af/year.
    - This option was found to be the cheapest additional production capacity from the Seaside well field.
- Corrosion Inhibitor
  - Required in advance of new water introduction (Flint, New Jersey).
  - Will be a DDW permit condition for ASR production.

# Scope Control (1)

- Deletions
  - SCADA (Cal Am) ($250k+)
  - Operations manual (Cal Am) ($50k)
  - Road paving for upper site ($150k)
  - Mixer/stabilizer for injection mode ($140k)
  - Cal Am hired liaison, former Construction Mgr for previous Santa Margarita projects
- Revisions
  - Asphalt in place of cement for lower site ($48k)
  - Electrical on existing PG&E service in place of new PG&E service
  - Telemetry shed and foundation ($52k)
  - Compressor housing and foundation ($52k)
  - Abandon replaced underground pipes in place of removal

# Scope Control (2)

- Delayed
  - Landscaping on 20-21 contract, City approved
  - Dechlorination, future
- Future
  - Administrative approval for more cost effective gates and doors
  - Less expensive LID per City
- Formal value engineering

⇒ There is no magic bullet without deleting functionality (capacity, treatment capability)

  ⇒ Cost to retrofit is higher

# Rationale

- Require works now for new water supply
  - Need production capacity for Pure Water Monterey water
    - Region's main storage
  - Corrosion inhibitor will be a permit condition for ASR wells production
    - Experience in other locations introducing and mixing new waters in old pipes
- Dechlorination space – ensure maximum production capacity of the least expensive replacement waters
- Lowest bidder positive experience at PWM, same builder that constructed the existing buildings

Vs.

Can we afford it?

# Budget Information

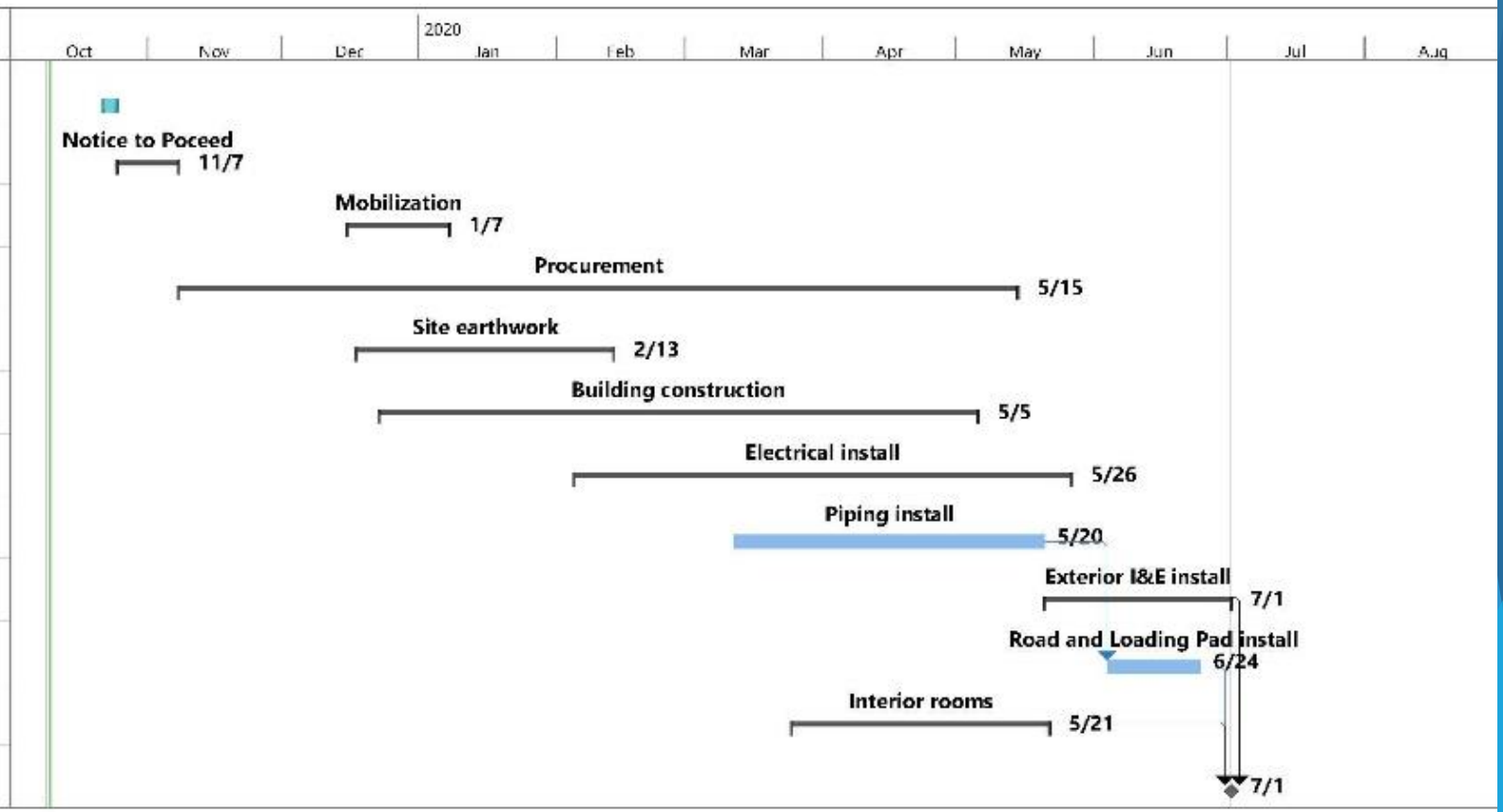
| Item | Budget |
|---|---|
| FY 2019-2020 Budget for the project | $2,450,000 |
| Total project cost including contingencies | $5,592,635 |
| Unbudgeted portion of the project | $3,142,635 |
| District's fund balance current estimate | $12,324,065 |
| Reserve balance after funding of this project | $9,181,430 |

# Request

- Authorization for the General Manager to enter into a contract agreement with Specialty Construction Inc. for the amount of $4,649,400.
- Authorization for the General Manager to enter into a contract agreement with Pueblo Water Resources for Engineering Services During Construction for the amount of $148,100.
- Authorization for the General Manager to authorize general contingency for unforeseeable circumstances for the amount $479,750.
- Budget adjustment for $3,142,635.

# Engineers Schedule

| ) | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 1 | Contract Award | 3 days | Tue 10/22/19 | Thu 10/24/19 |
| 2 | **Notice to Poceed** | **10 days** | **Fri 10/25/19** | **Thu 11/7/19** |
| 5 | **Mobilization** | **15 days** | **Mon 12/16/19** | **Tue 1/7/20** |
| 11 | **Procurement** | **132 days** | **Fri 11/8/19** | **Fri 5/15/20** |
| 55 | **Site earthwork** | **40 days** | **Wed 12/18/19** | **Thu 2/13/20** |
| 58 | **Building construction** | **95 days** | **Mon 12/23/19** | **Tue 5/5/20** |
| 73 | **Electrical install** | **80 days** | **Wed 2/5/20** | **Tue 5/26/20** |
| 78 | Piping install | 10 wks | Thu 3/12/20 | Wed 5/20/20 |
| 79 | **Exterior I&E install** | **30 days** | **Thu 5/21/20** | **Wed 7/1/20** |
| 84 | Road and Loading Pad install | 3 wks | Thu 6/4/20 | Wed 6/24/20 |
| 85 | **Interior rooms** | **42 days** | **Wed 3/25/20** | **Thu 5/21/20** |
| 88 | Substantial Completion | 0 days | Wed 7/1/20 | Wed 7/1/20 |



# Questions