



# Sheldon Bradshaw Road Intersection Construction Management





# Key Issues

- Project Schedule
- Public Notification / Outreach
- Traffic Control / Detour
- Environmental Constraints
- Utility Relocation (by others)
- Compaction Around Structures



# Project Stats

Award Date: 3.14.2018

Award Amount: \$4,500,269.00

Number of Working Days: 121 calendar days

First Working Day: 4.23.2018

Final Number Working Days: 121 calendar days

Final Contract Amount: \$4,683,347.59 (4% CCOs)

Full Closure Allowed: 05/29 – 08/07/2018

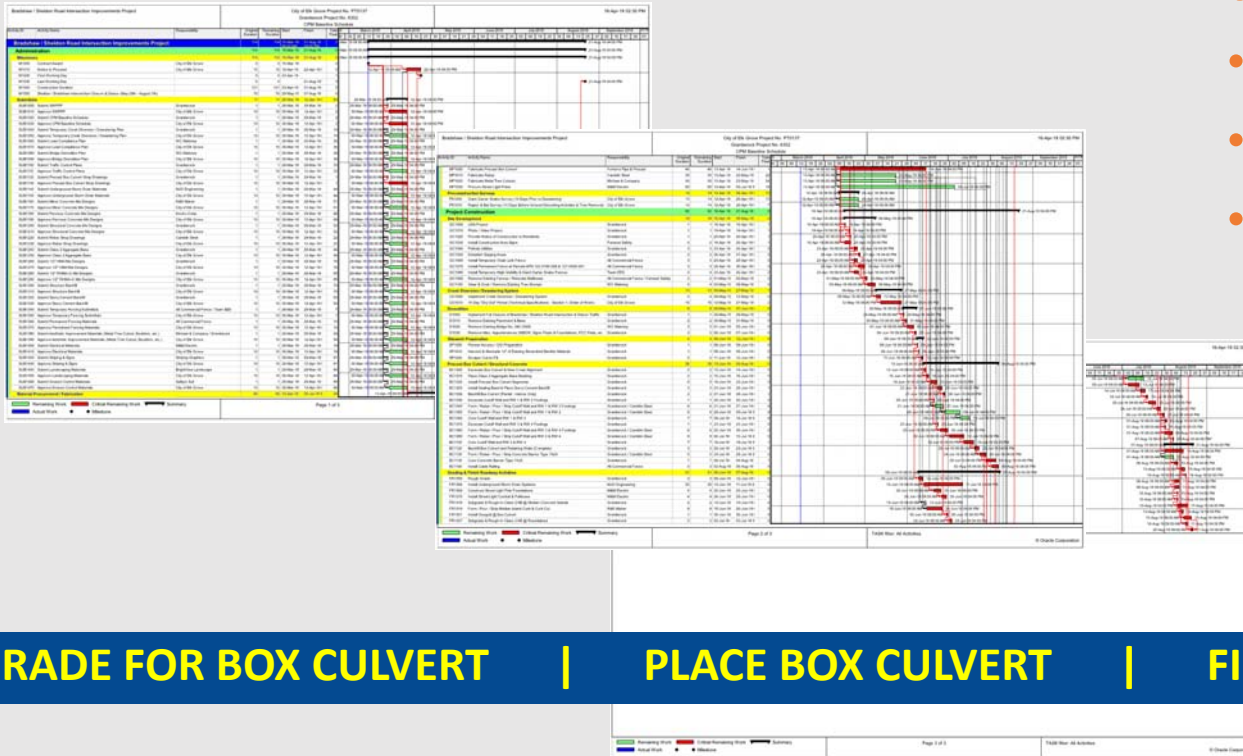
Date Opened to Traffic: 8/06/2018



# Project Schedule

## BOX CULVERT CONTROLLED THE PROJECT SCHEDULE

- Approval
- Fabrication
- Placement

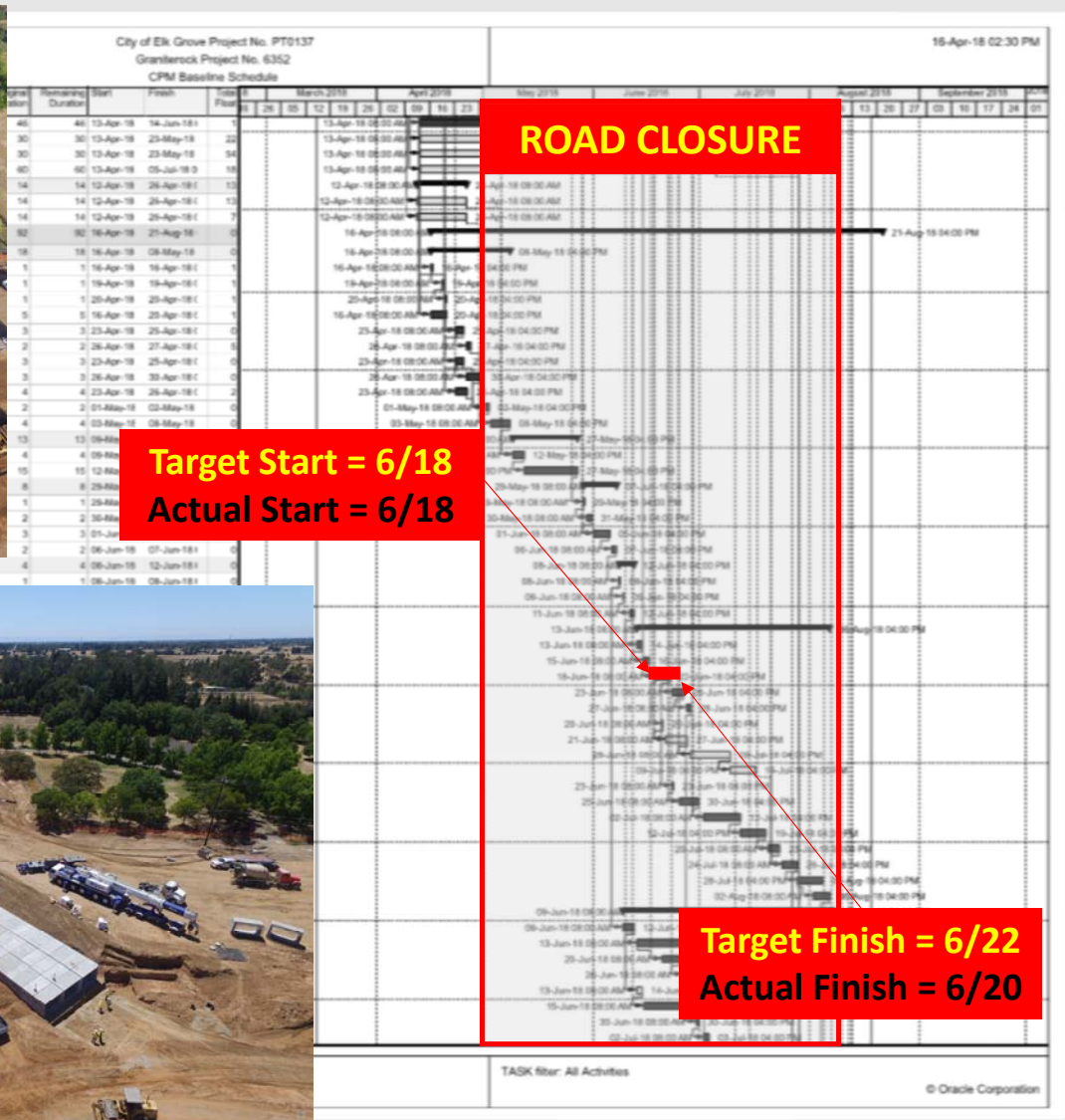


**GRADE FOR BOX CULVERT | PLACE BOX CULVERT | FINISH GRADE/PAVE OVER BOX CULVERT**





|  |                                |
|--|--------------------------------|
| SP1000   | Planer Access / OG Preparation |
| SP1010   | Harvest & Stockpile 12" of Ex  |
| SP1020   | Scraper Cut to F8              |
| <b>Precast Box Culvert / Structural Co</b>     |                                |
| BC1000   | Excavate Box Culvert & Nea     |
| BC1010   | Place Class 2 Aggregate Ba     |
| BC1020   | Install Precast Box Culvert S  |
| BC1025   | Install Sealing Band & Place   |
| BC1030   | Backfill Box Culvert (Partial  |
| BC1035   | Excavate Cutoff Wall and RW    |
| BC1040   | Form / Rebar / Pour / Strip C  |
| BC1050   | Form / Rebar / Pour / Strip C  |
| BC1060   | Cure Cutoff Wall and RW 1.4    |
| BC1070   | Excavate Cutoff Wall and RW    |
| BC1080   | Form / Rebar / Pour / Strip C  |
| BC1090   | Form / Rebar / Pour / Strip C  |
| BC1100   | Cure Cutoff Wall and RW 3.4    |
| BC1120   | Backfill Box Culvert and Ret   |
| BC1130   | Form / Rebar / Pour / Strip C  |
| BC1135   | Cure Concrete Barrier Type     |
| BC1140   | Install Cable Rating           |
| <b>Grading &amp; Finish Roadway Activities</b> |                                |
| FR1000   | Rough Grade                    |
| FR1005   | Install Underground Storm D    |
| FR1010   | Construct Street Light Pole F  |
| FR1015   | Install Street Light Conduit & |
| FR1018   | Subgrade & Rough-In Clean      |
| FR1019   | Form / Pour / Strip Median     |
| FR1021   | Install Geogrid @ Box Culvert  |
| FR1027   | Subgrade & Rough-In Class      |



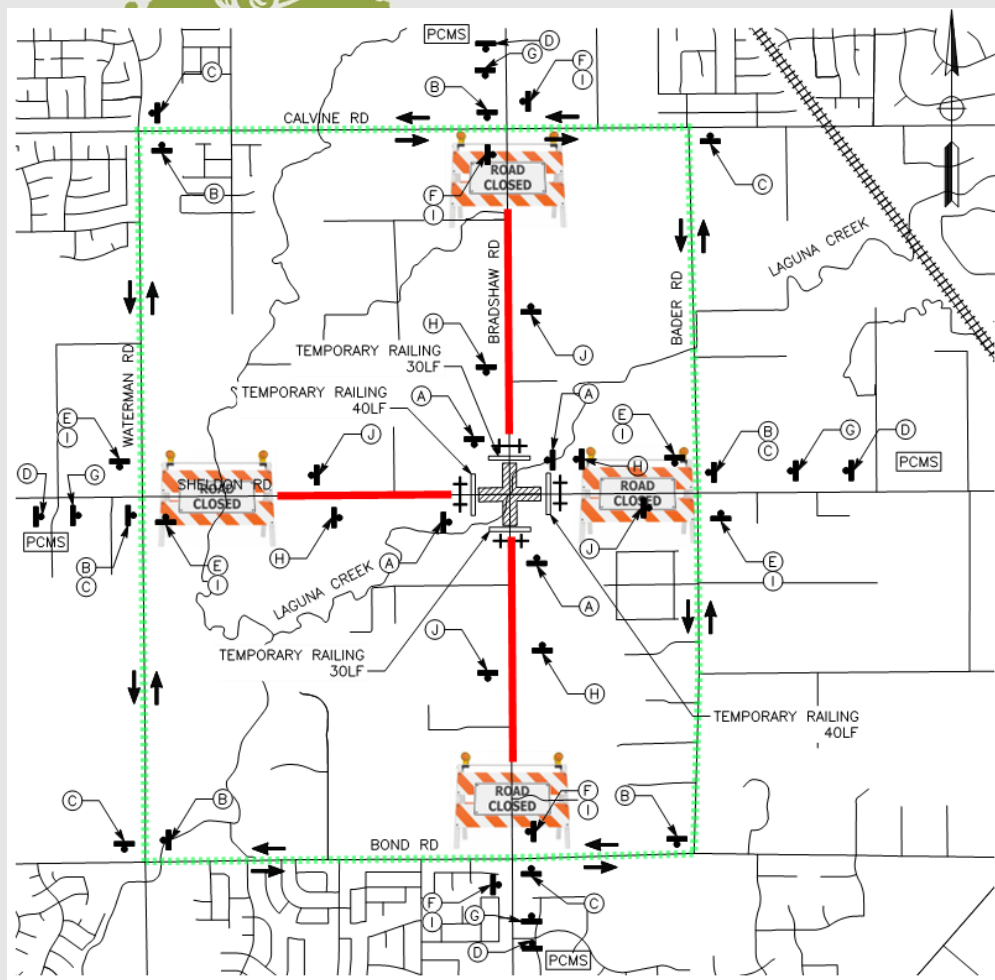


# Public Outreach





# Traffic Control / Detour



ADT = 20,000 +

3.5 Mile Detour

Near highschool



# Environmental Constraints

## Environmental Permits

- Slight realignment the East Branch of Laguna Creek resulted in higher scrutiny from CDFW, USACE, etc..
- Face to face meetings reduced the agency review

## Nesting Birds

- Many large eucalyptus trees in the area, therefore several months prior to the project during the non-nesting season, necessary trees were removed.

## Giant Garter Snake

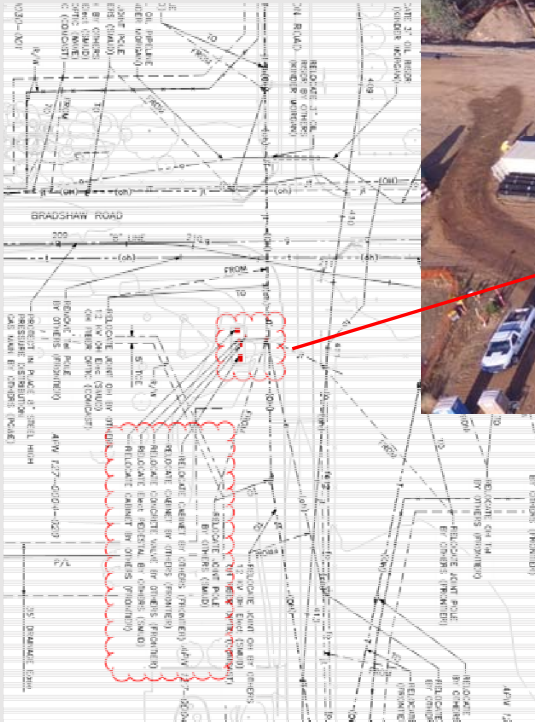
- Work occurred during the “active” season (which coincides with summer break) and eliminates a \$30,000+ incidental take permit.





CITY OF  
**ELK GROVE**

— PROUD HERITAGE. BRIGHT FUTURE. —



# Utility Relocation

Relocation by “OTHERS” – YIKES!!

- Kinder Morgan
- Frontier
- SMUD
- COMCAST

\*\*Issued CCO to work around utilities not moved on time



# Compaction Around Structures

- Similar to compacting around manhole structures
- Requires smaller equipment such as “whacker” compactor
- Subgrade stiffness:
  - Culvert V. Roadway

