

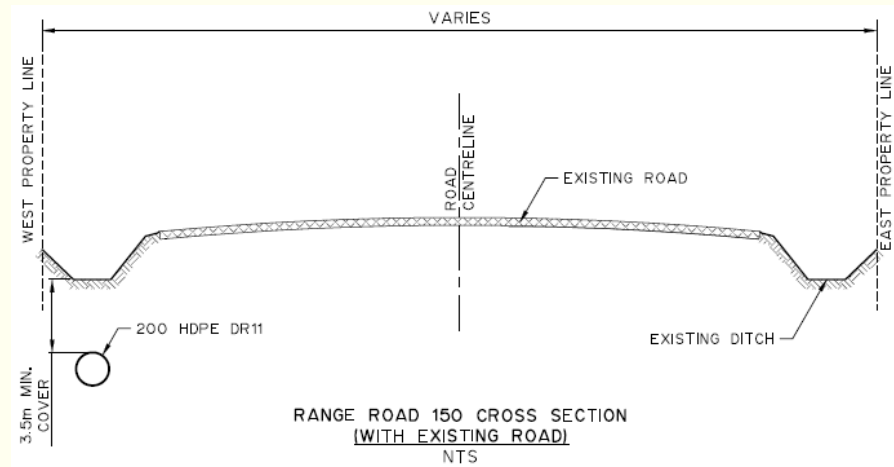
MACKENZIE COUNTY

A green combine harvester is shown in a field, with a long green auger extending from its rear to a white grain trailer. The harvester is positioned on the left, and the trailer is on the right. The background shows a line of trees under a cloudy sky.

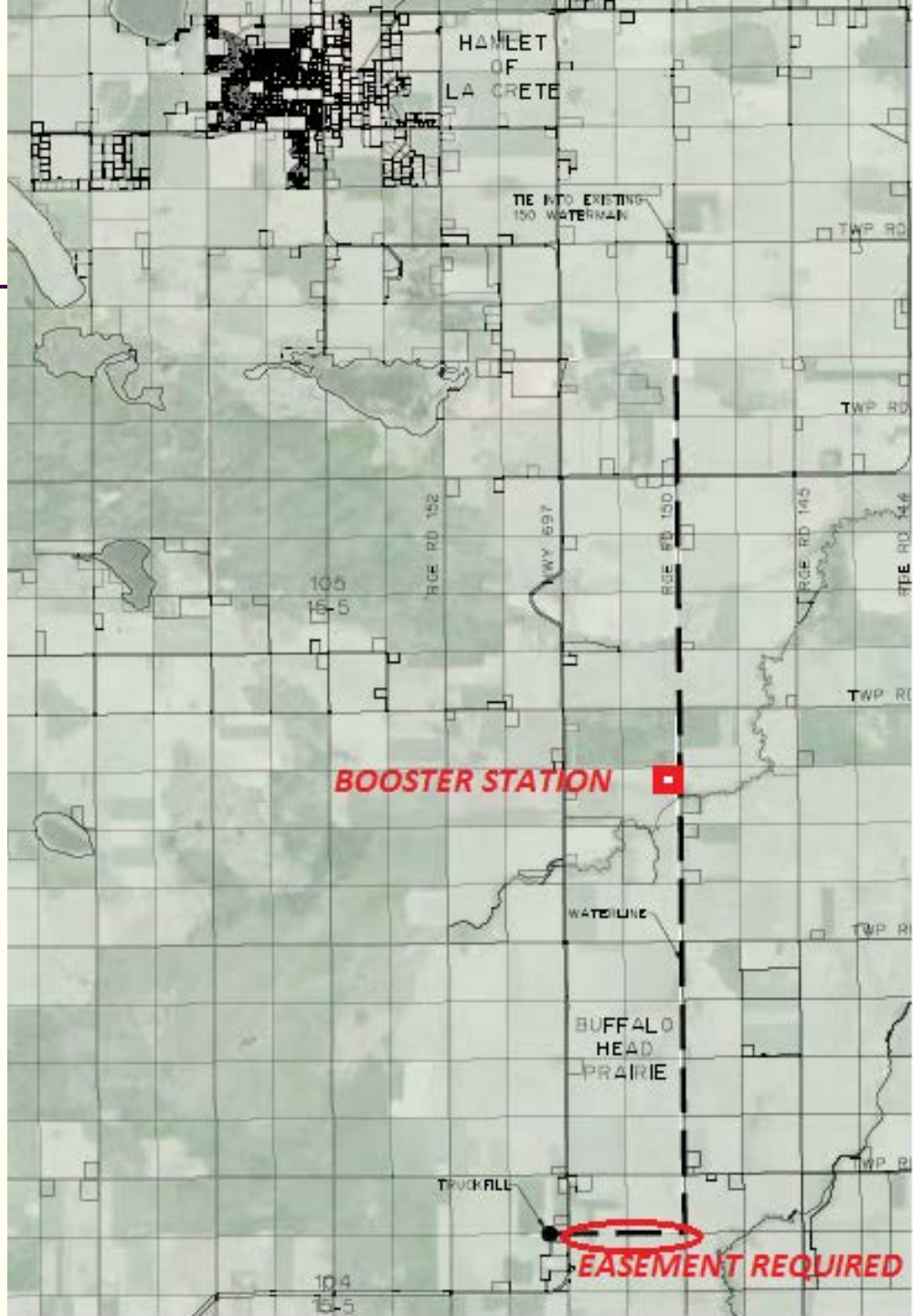
**RURAL POTABLE WATER
INFRASTRUCTURE
WATERLINE AND TRUCKFILLS**

Alignment Selection

- The general alignment is 3 metres east of the west boundary of Range Road 150.



- Minimize property acquisition and avoids power poles.
- Still require easement acquisition at south end and negotiations are ongoing.

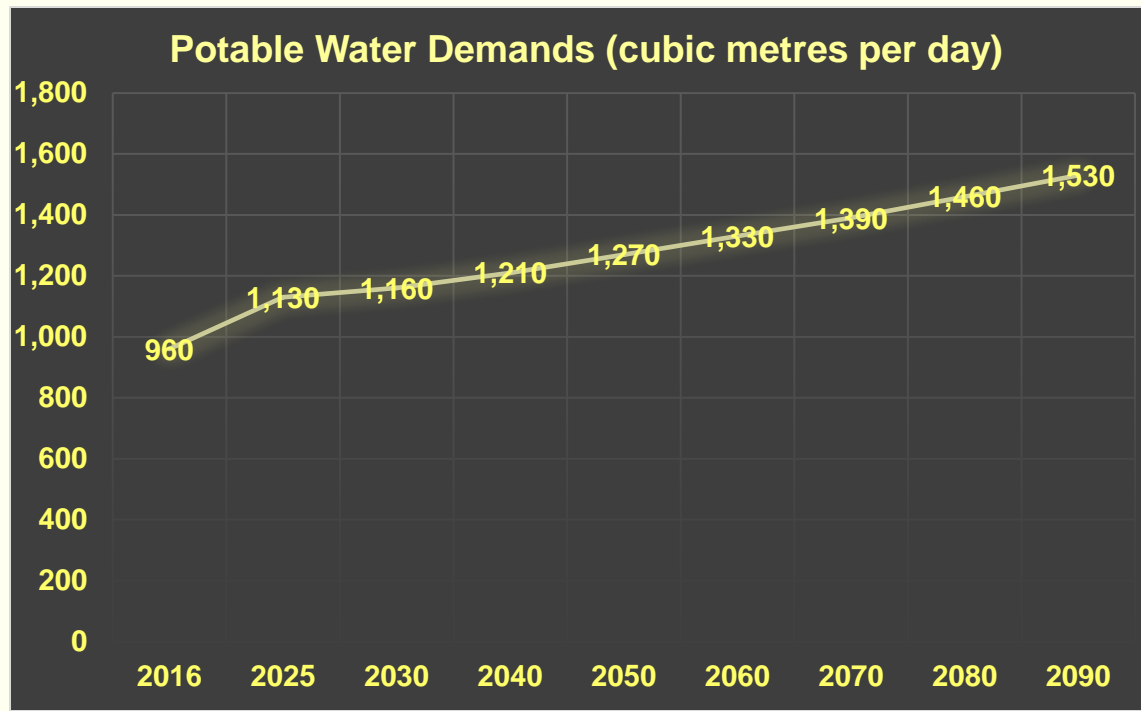


Environment

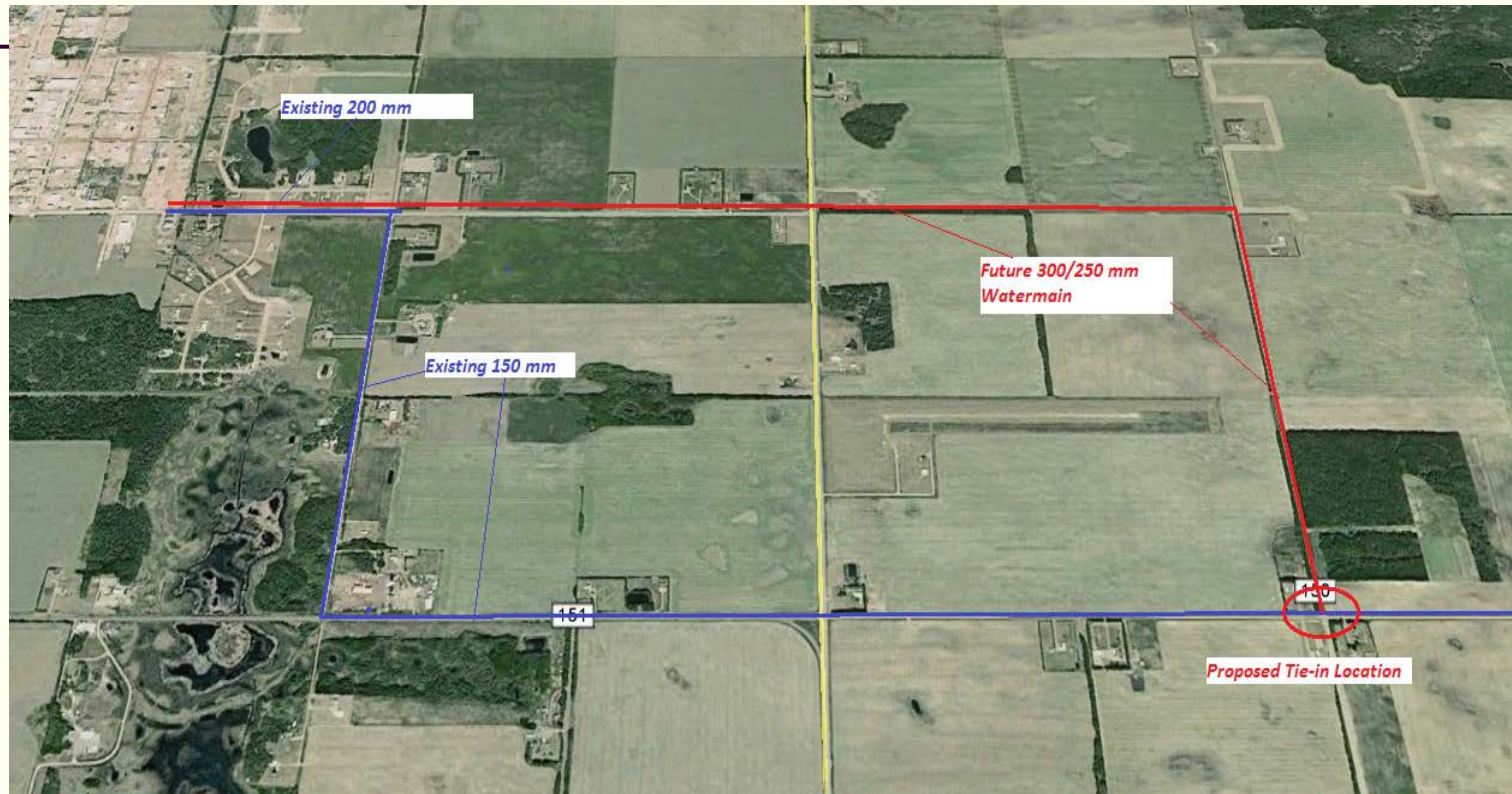
- Waterline alignment will cross two Class “C” creeks.
- Need to supply information required under the Code of Practice.
- Migratory Bird Act may be an issue.
- Have met with Alberta Environment and Parks on February 2 to clarify requirements.
- Restricted activity period between April 16 and July 15.
- Plans to be submitted 14 days before construction.

Water Modeling

- Waterline and truckfills will have limited impacted on water treatment plants.
- Demand growth projections to be 2% for first 10 years and 0.5% thereafter.



Water Modeling (cont'd)



- Existing waterline on north end will need to be upsized or looped within 5 to 10 years.
- Proposed looping contained in the Infrastructure Master Plans.

Water Modeling (cont'd)

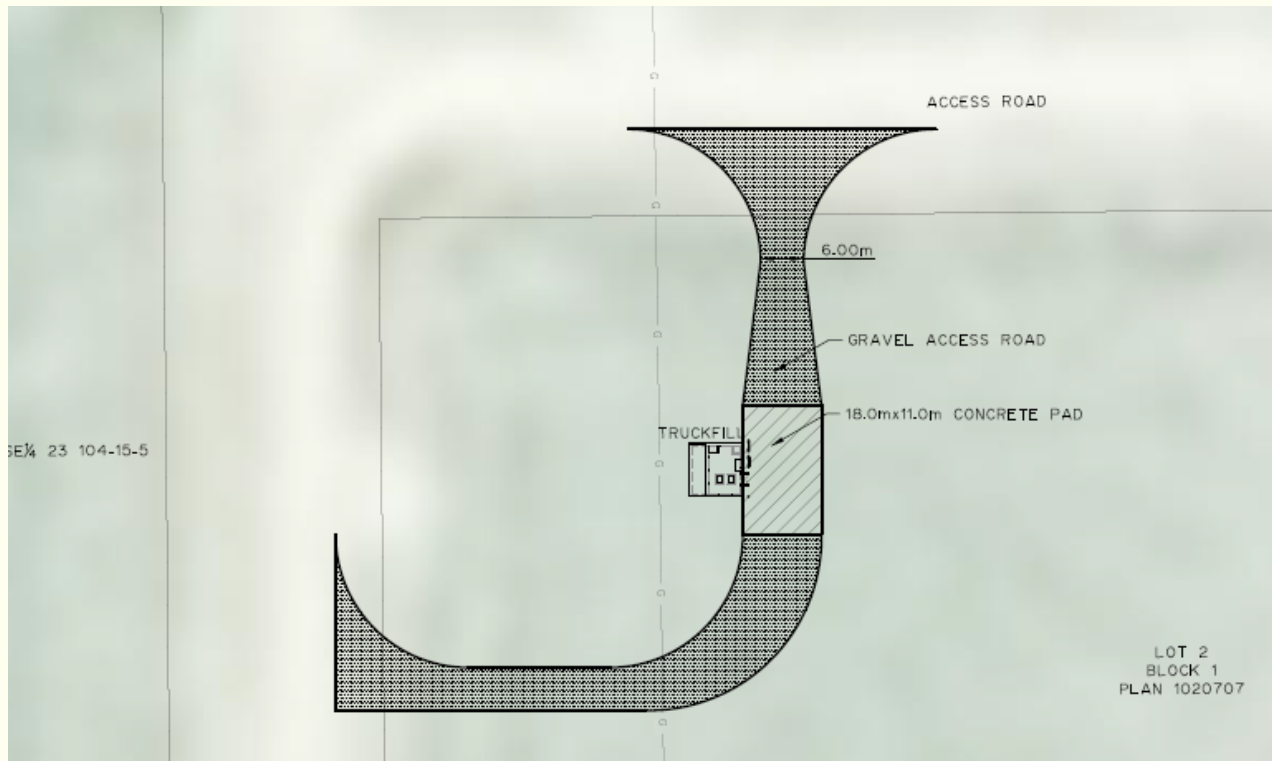
- Large increase in demand during the summer months.
- 100 cubic metres per day added to account for trickle fill systems (300 population).
- From 2016 to 2090 the water demand is projected to increase from 960 to 1,530 cubic metres per day.
- 200 mm pipe (8") is adequate.
- 250 mm pipe (10") would provide 2,500 m³/day.
- One booster station required.

Design Considerations

- Are recommending the use of HDPE pipe for leakage reduction and ease of installation.
- Standardizing the design of truckfills to reduce costs and streamline operations.
- Reservoir sizing to be based on average day demand to reduce initial size and will be easy to expand.
- Property has been secured for both truckfills and the booster station.

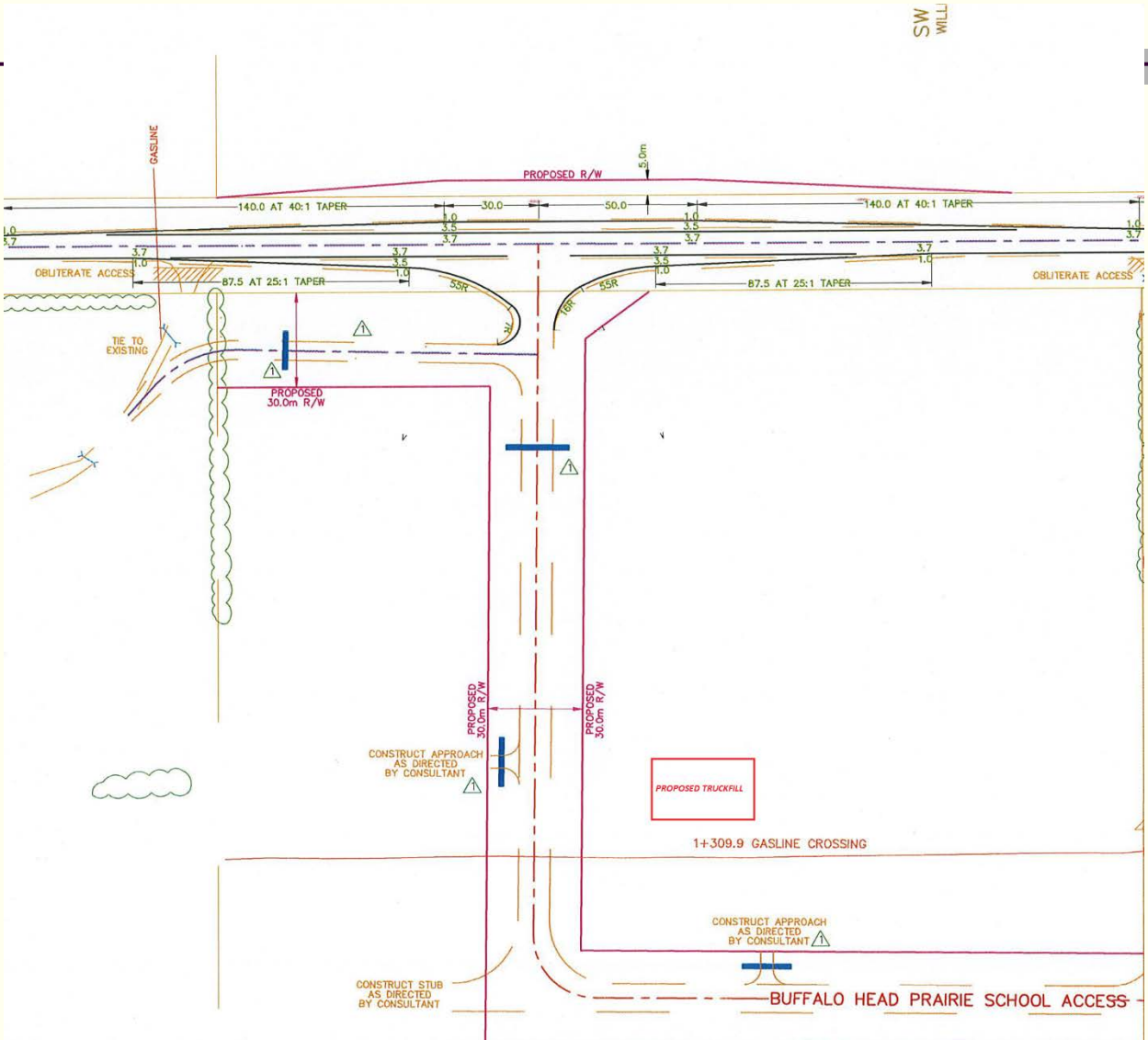
Buffalo Head Prairie

- Lot 2 has been acquired.



- Can provide service to school.

Highway 697



Highway 697 (cont'd)

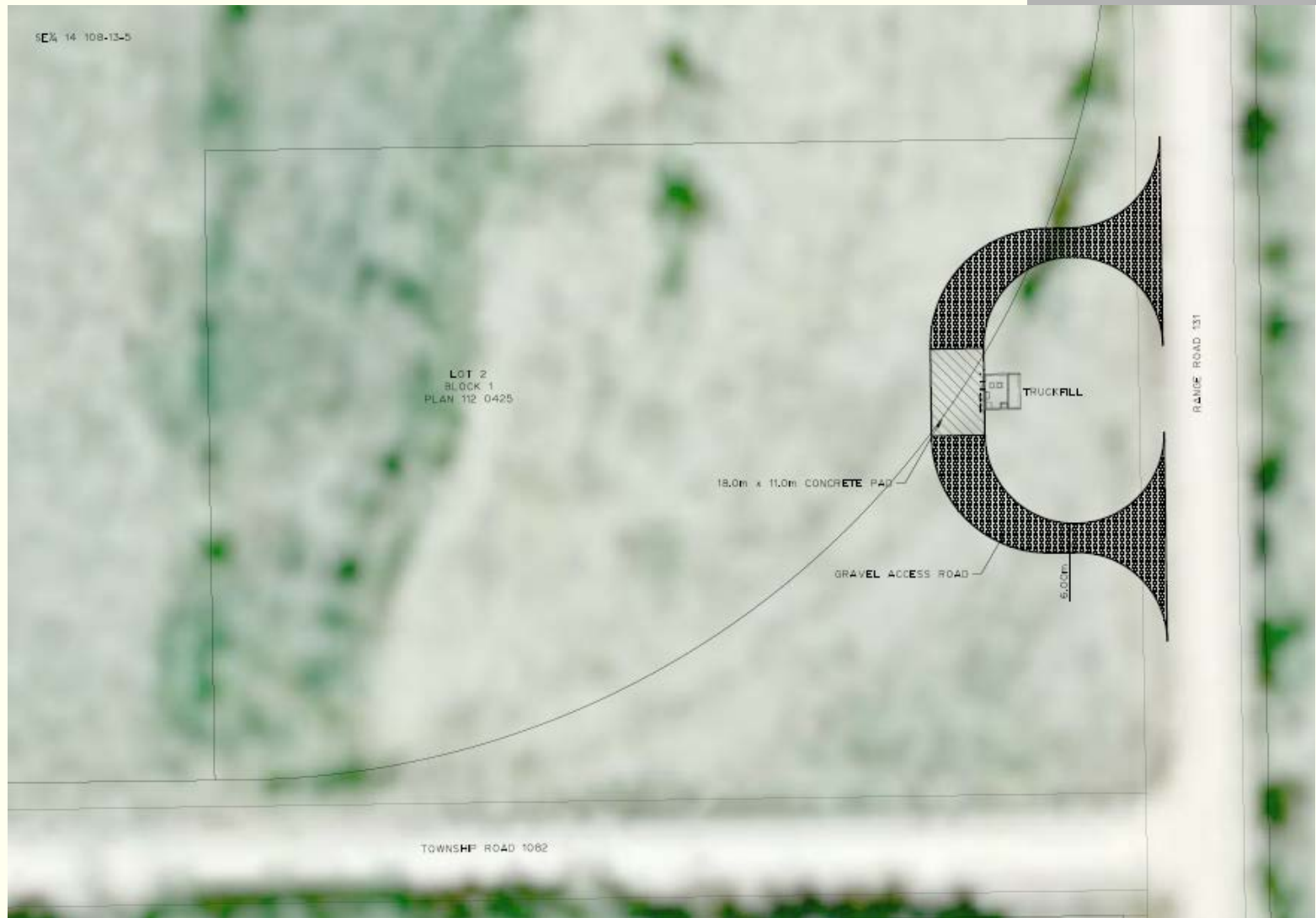
- Have sent a request to Alberta Transportation for approval to use the existing intersection and waive the requirement for a Traffic Impact Assessment.
- Have completed the waterline crossing plan and an approval request will be forwarded next week.
- Approval for the truckfill location will be required.

Fort Vermilion

- Located in SE ¼ 14-108-13 W5M, close to Fort Vermilion and Highway 88.



Fort Vermilion (cont'd)

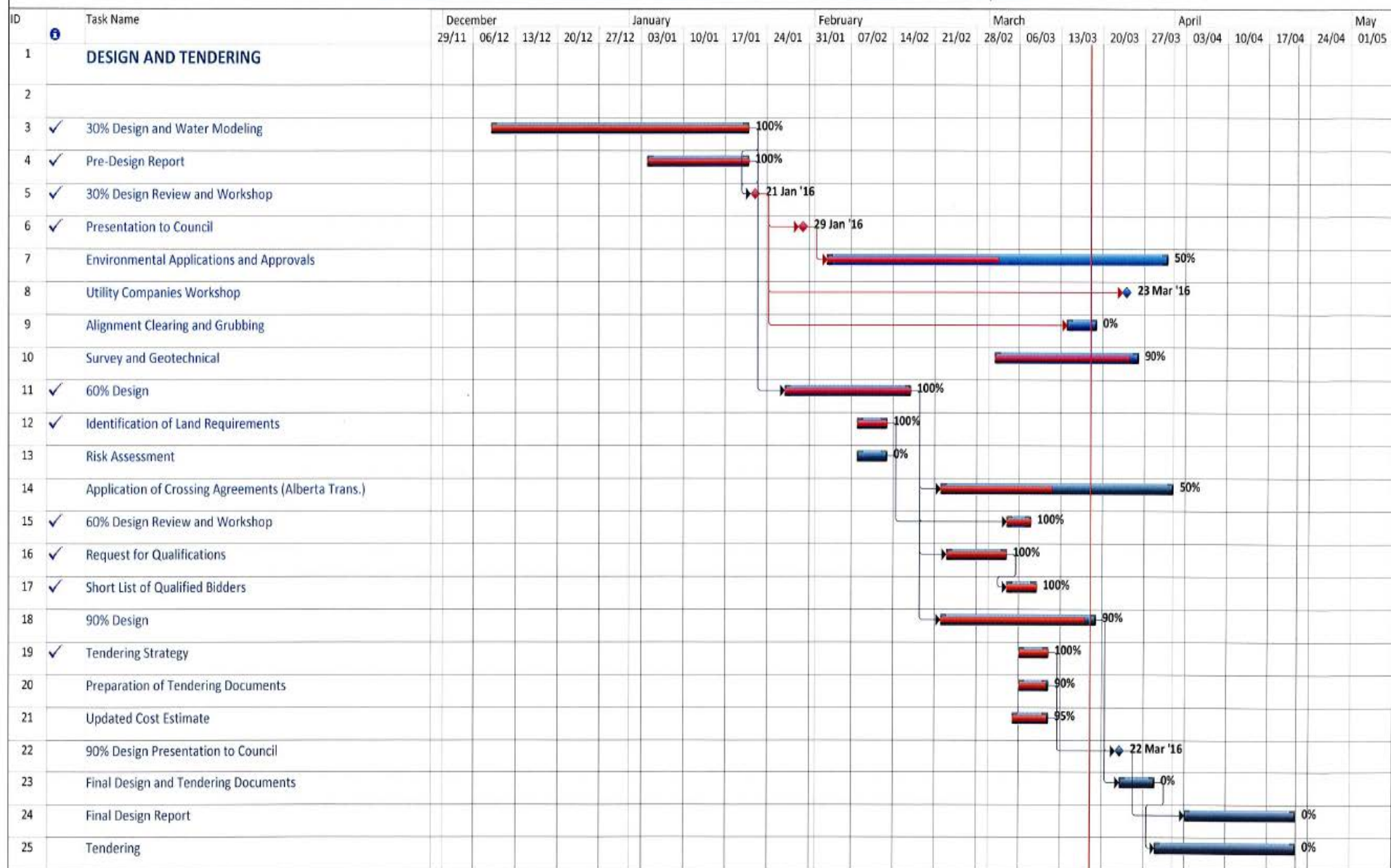


Tendering

- 3 separate tenders being considered due to different nature of work.
- 1. Clearing and Grubbing (awarded to Northern Road Builders)
- 2. Waterline (tender documents will be sent to short listed bidders on March 29)
- 3. Truckfills (anticipated tendering during May)
- Consider tendering by open method, as number of contractors doing this work is limited.

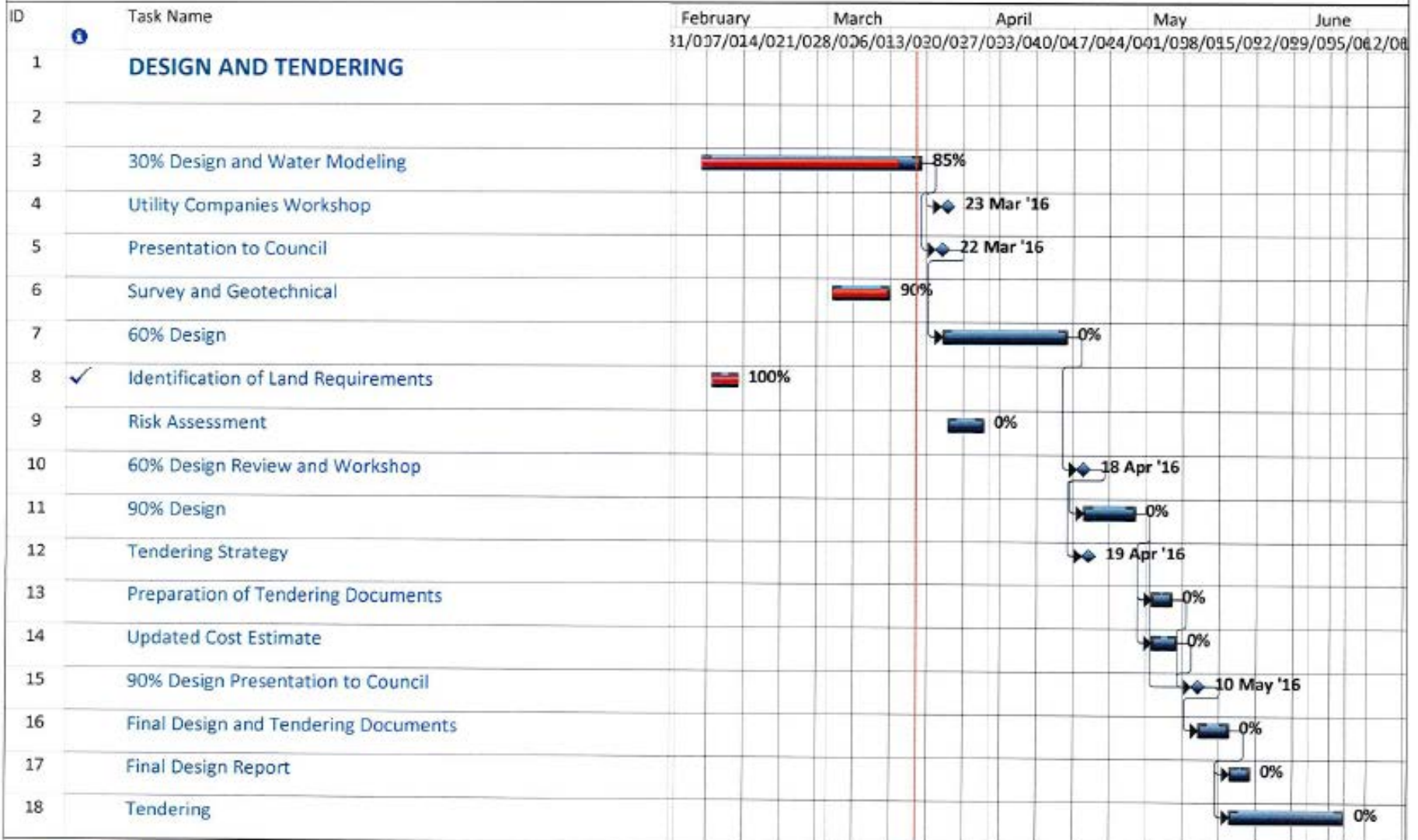
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WATERLINE - LA CRETE TO BUFFALO HEAD PRAIRIE - DESIGN AND TENDERING SCHEDULE - MARCH 17, 2016



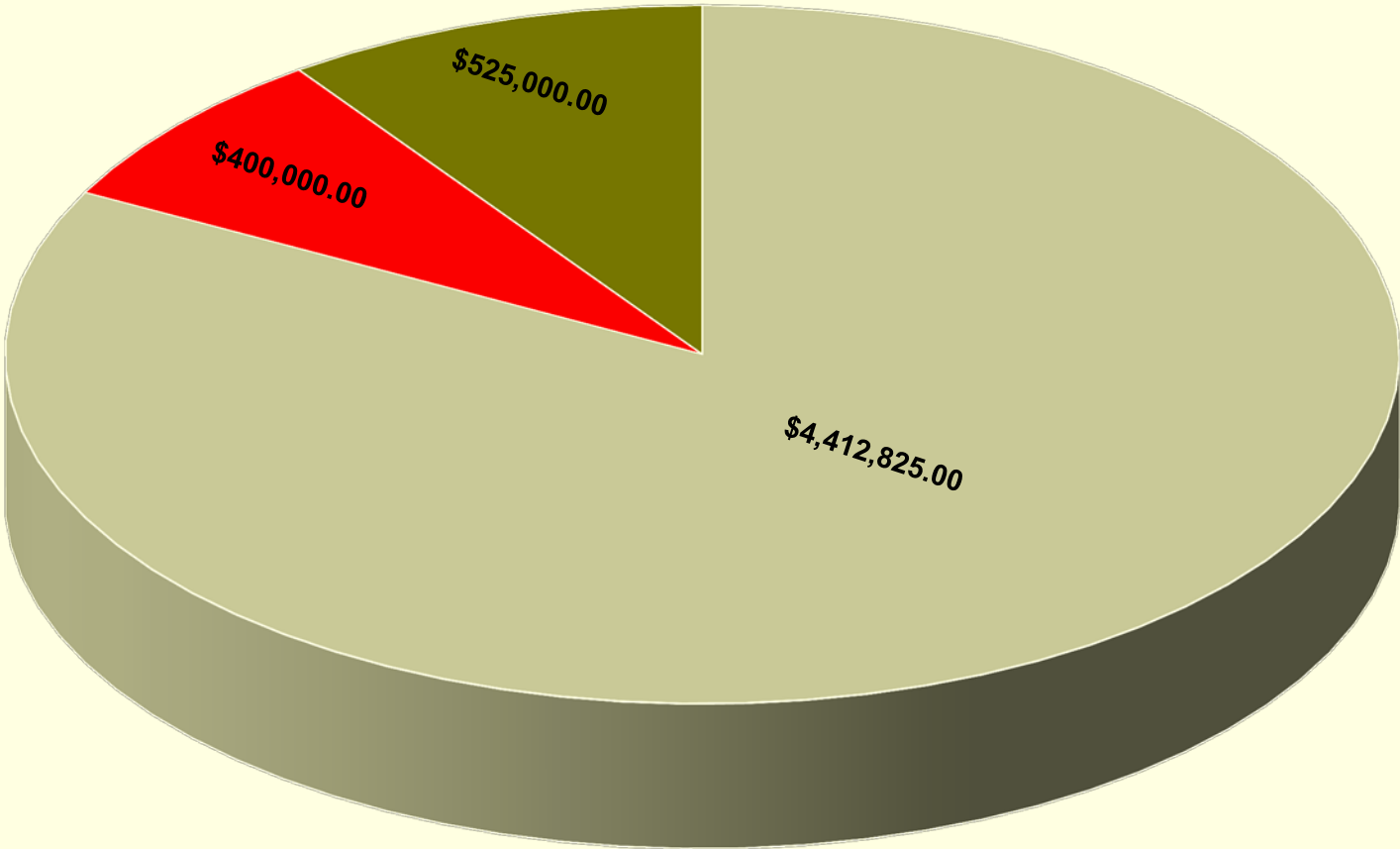
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TRUCKFILLS AND BOOSTER STATION - DESIGN AND TENDERING SCHEDULE - MARCH 17, 2016



Costs – 200 mm

200 mm Waterline - Total Cost = \$5,337,825.00



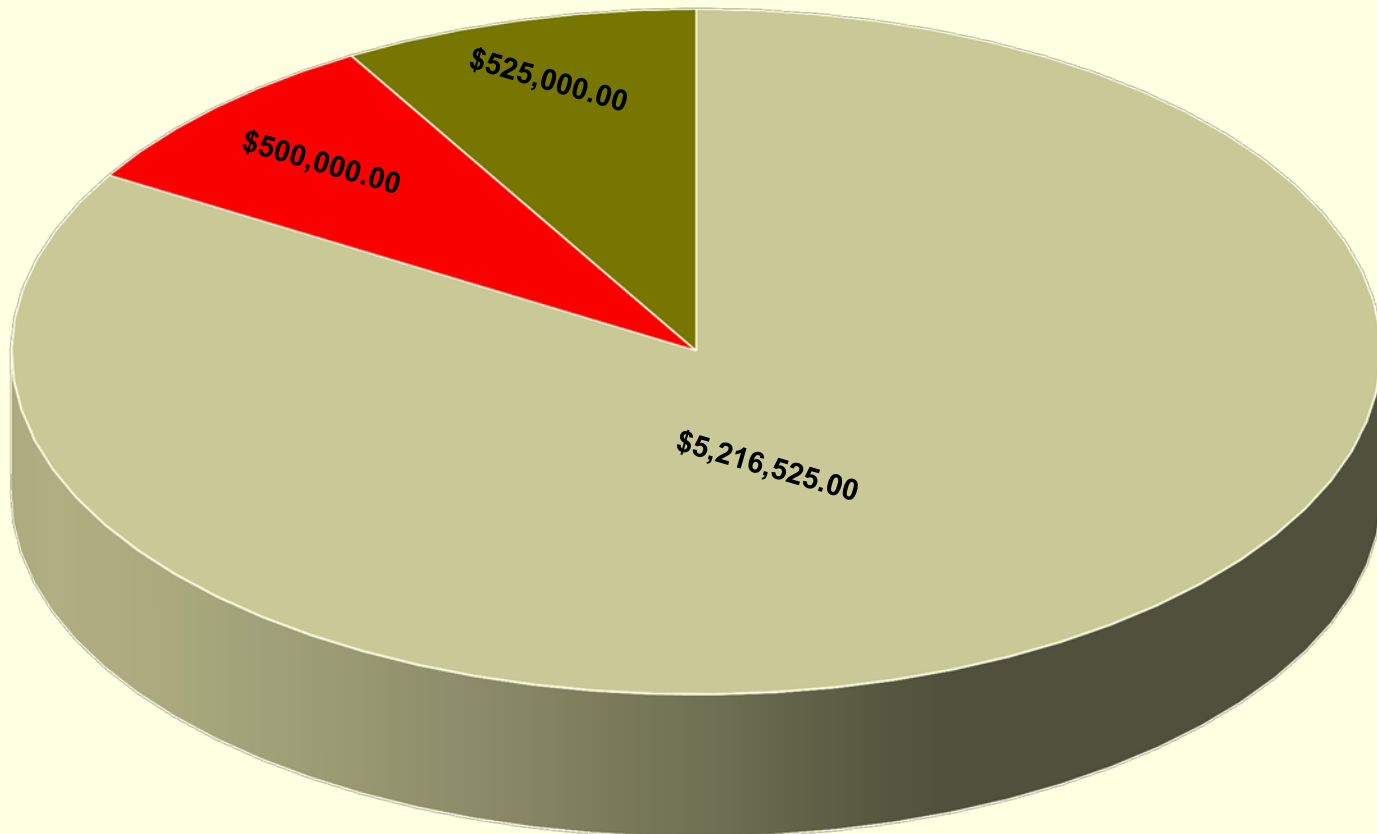
■ Construction

■ Contingency

■ Engineering

Costs – 250 mm

250 mm Waterline - Total Cost = \$6,241,525.00

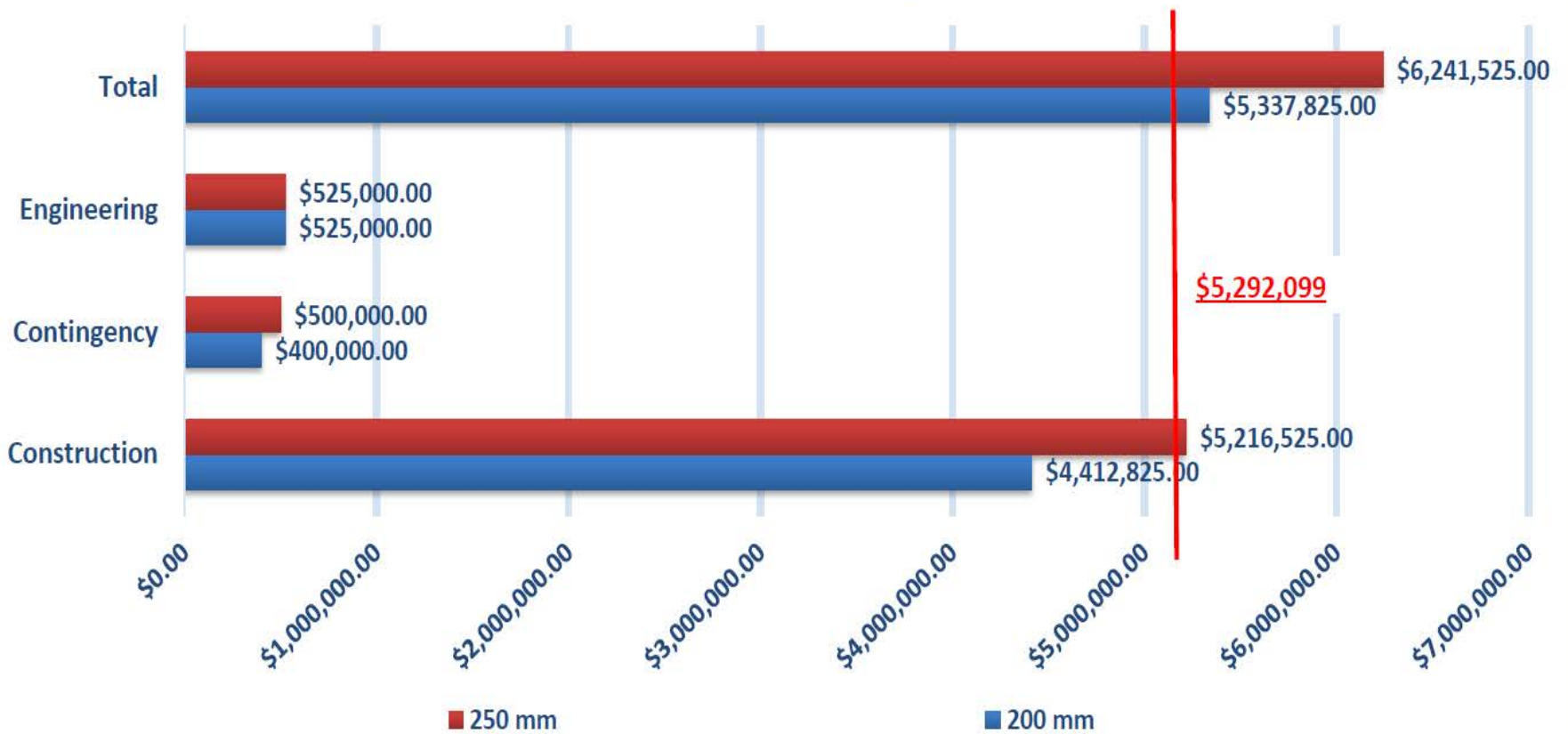


■ Construction

■ Contingency

■ Engineering

Costs vs. Funding



A group of white swans is gathered on a rocky shore at dusk. The sky is a mix of blue and pink, and the water is dark. The swans are in various poses, some looking towards the camera. The text "QUESTIONS AND COMMENTS" is overlaid in the center in a white, serif font. There is a yellow vertical bar on the left side of the image and a white horizontal bar at the top right.

QUESTIONS AND COMMENTS