

Sports Complex Design Case Study of Griffin Sports Complex

Presentation at IPWEA Hobart Conference 2019



- Multiple Lots
- Large site 90.7ha
- Bounded North and West by Elizabeth Rd and Henry Rd
- Bounded on the South by Pine River
- Steep embankment to the North





• View from the North-West corner





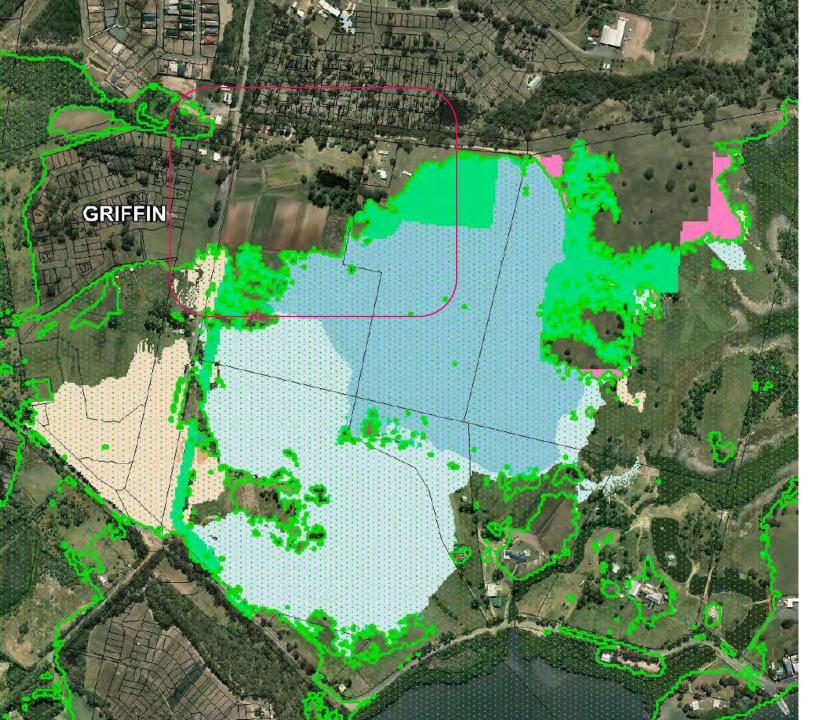
- Original intention for the project
- Western Precinct –
 Stage 1



Flood and tidal restrictions

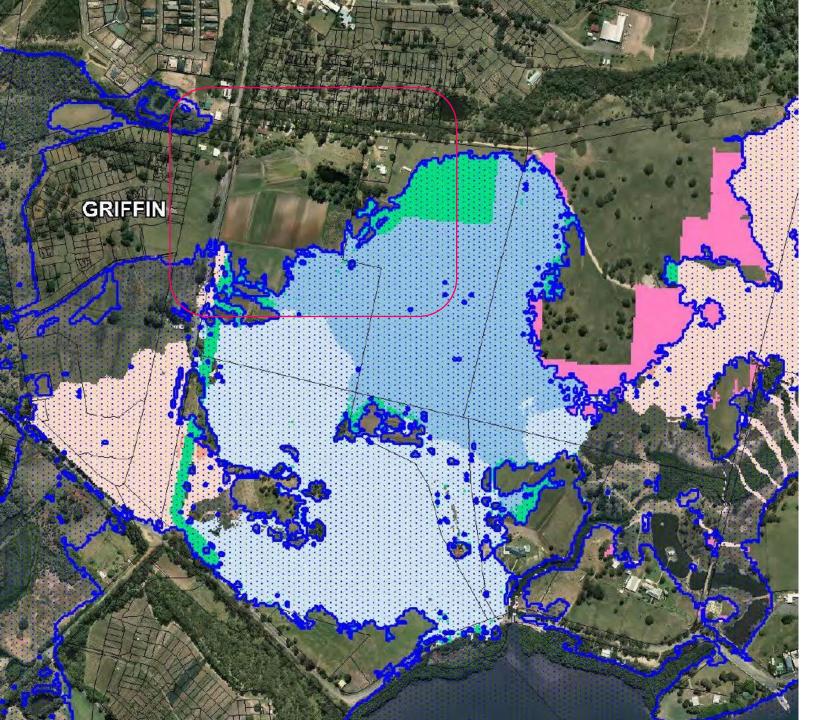
• Council informed tenderers of the change of complex footprint due to flood and tidal zones to the south.





Storm water – Peak flood level impact



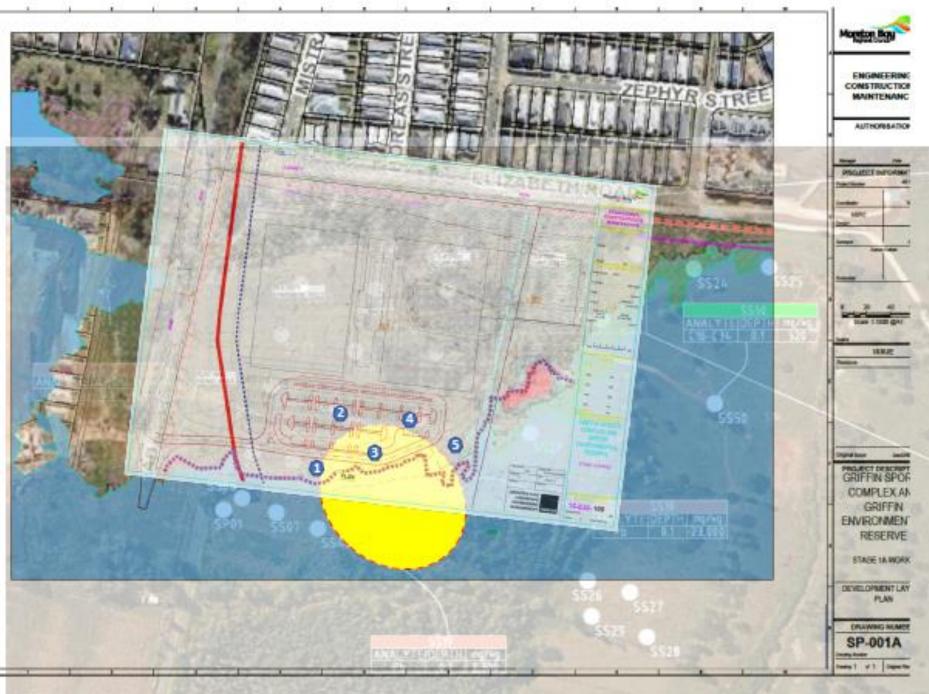


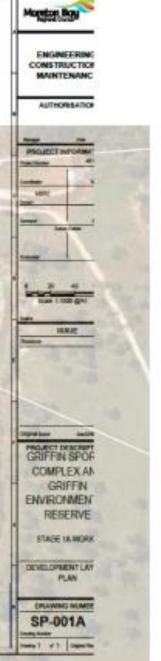
Tidal inundation level impact





- Restrictions on the Southern side due to flood and tidal levels
- No filling in this area
- Planting permitted





Lead hot spot

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Capping required as per Environmental Consultants spec.





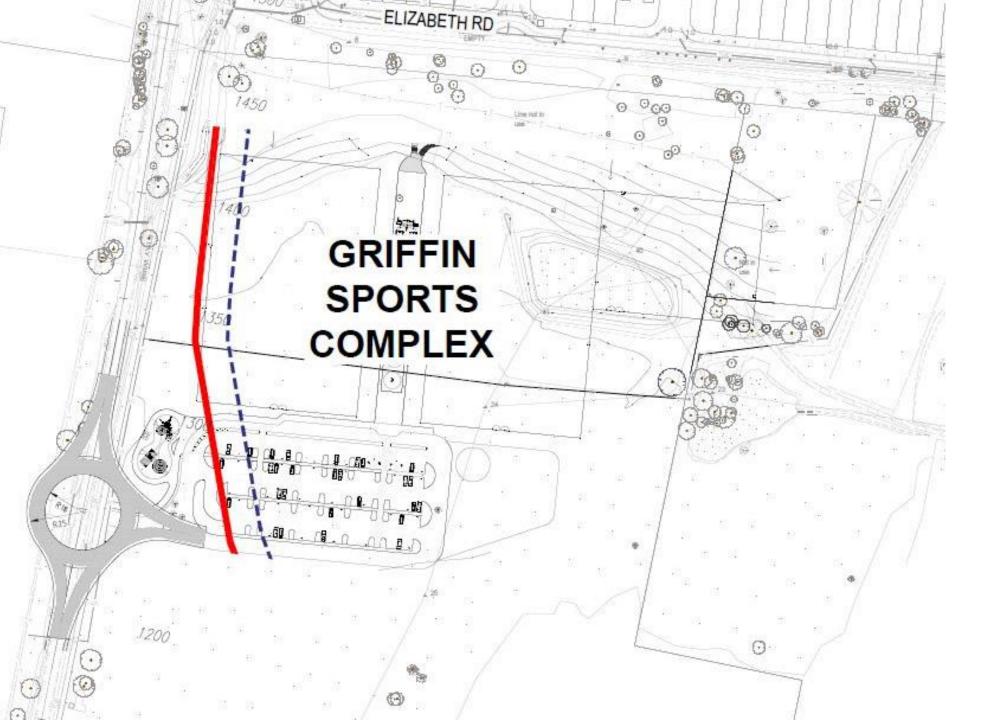
- Round 1 solution
- Push everything North to avoid flood/tidal zone



TMR Zone

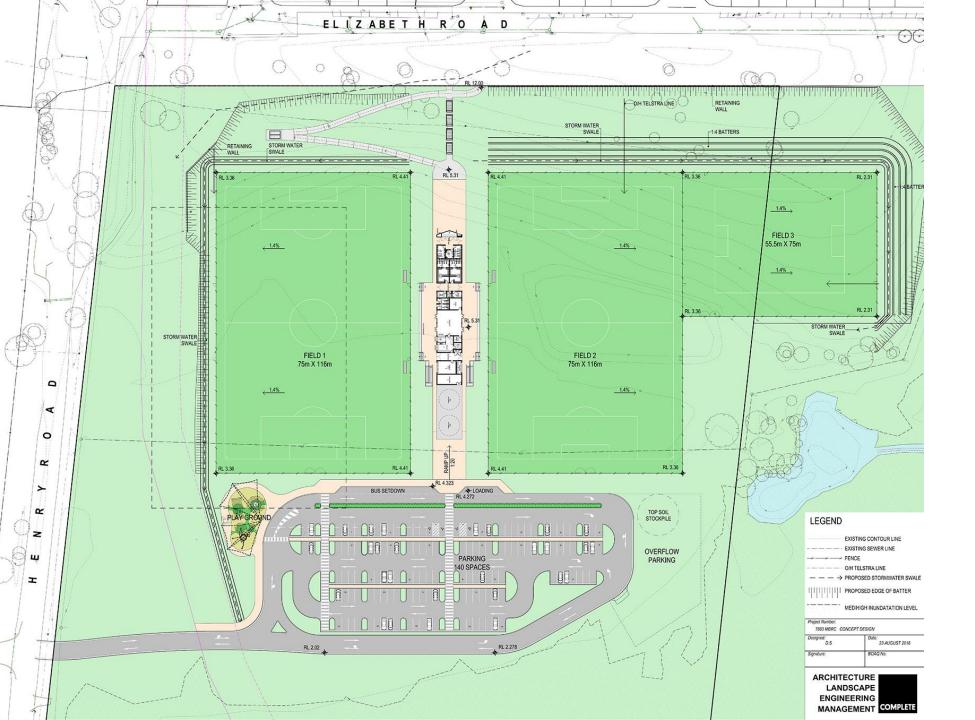
• The Department of Transport and Main Roads informed Council of the proposed Henry Road upgrade on the western side of the site.

- New arterial road running north-south.
- Allow 15m buffer from proposed site boundary.



- DTMR restrictions on the Western side
- 15m buffer zone





- Round 2 solution
- Push everything East to avoid TMR corridor





Indigenous Cultural Heritage

- Council informed Complete Urban of a change of traditional ownership from the Gubbi Gubbi mob to the Kabi Kabi mob.
- Kabi Kabi mob requested a review of the site.





Figure 5: Undertaking the survey (Converge 2018).



Figure 6: Looking south from ridge (Converge 2018).

- Walk the Site
- Archaeologist
- Kabi Kabi representative



Figure 7: Thick grass cover in lower section (Converge



Figure 8: Looking north towards ridge (Converge 2018).





Figure 12: G02 (Converge 2018).



Figure 13: G02 (Converge 2018).



Figure 9: G01 (Converge 2018).



Figure 10: G01 (Converge 2018).



Figure 14: Ridgeline where artefacts found (Converge 2018).



Figure 15: Ridgeline where artefacts found (Converge 2018).



Figure 11: G01 Shell (Converge 2018).

Evidence of Cultural Heritage • significance on surface





- Kabi Kabi mob and the Archaeologist identified locations for the test pits.
- 20 total
- Cluster on the ridge line and embankment
- Around the pond
- Minor activity on the flat



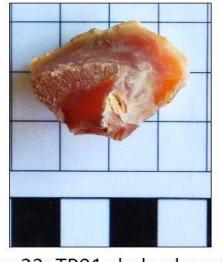


Figure 23: TP01 chalcedony flake (Converge 2018).

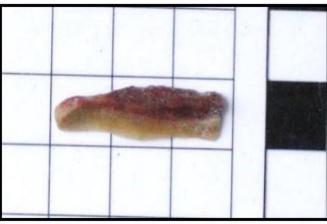


Figure 24: TP09 chert flake - bladelet (Converge 2018).

Significatent items found

- Evidence of Cultural Heritage recovered from the test pits
- Evidence of an encampment for migrating mobs
- Tool making

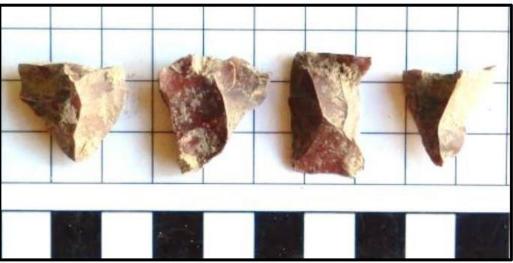


Figure 25: TP03 chert flakes (Converge 2018).

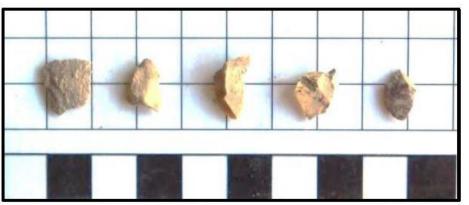


Figure 26: TP03 debitage (Converge 2018).





Figure 27: TP06 chert core (Converge 2018).



Figure 28: TP20 chert core (Converge 2018).

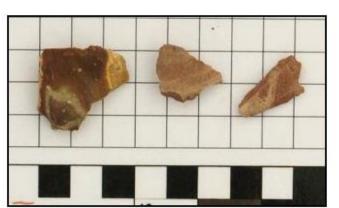


Figure 32: G05 chert flakes (Converge 2018).

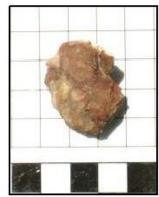


Figure 33: G07 chert flake (Converge 2018).



Figure 29: TP20 flaked cobble (Converge 2018).



Figure 36: G11 chert flake (Converge 2018).

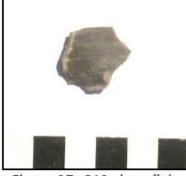


Figure 37: G12 chert flake (Converge 2018).



Figure 34: G04 cockle and mud whelk shells (Converge 2018).



Figure 35: G08 silcrete core (Converge 2018).



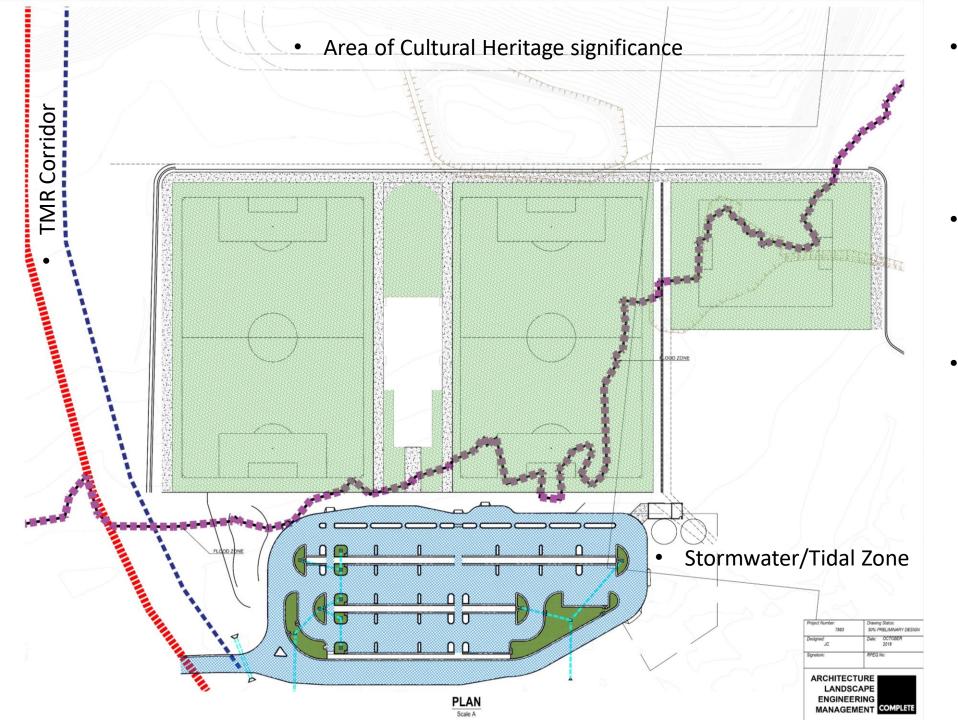
Cultural Heritage

- The findings of the cultural heritage dig identified that the site was of high significates.
- One of the last remaining sites with evidence of clustered activity in north Brisbane.
- The Kabi Kabi mob, Council and COMPLETE Urban worked together to find a way forward for all parties.

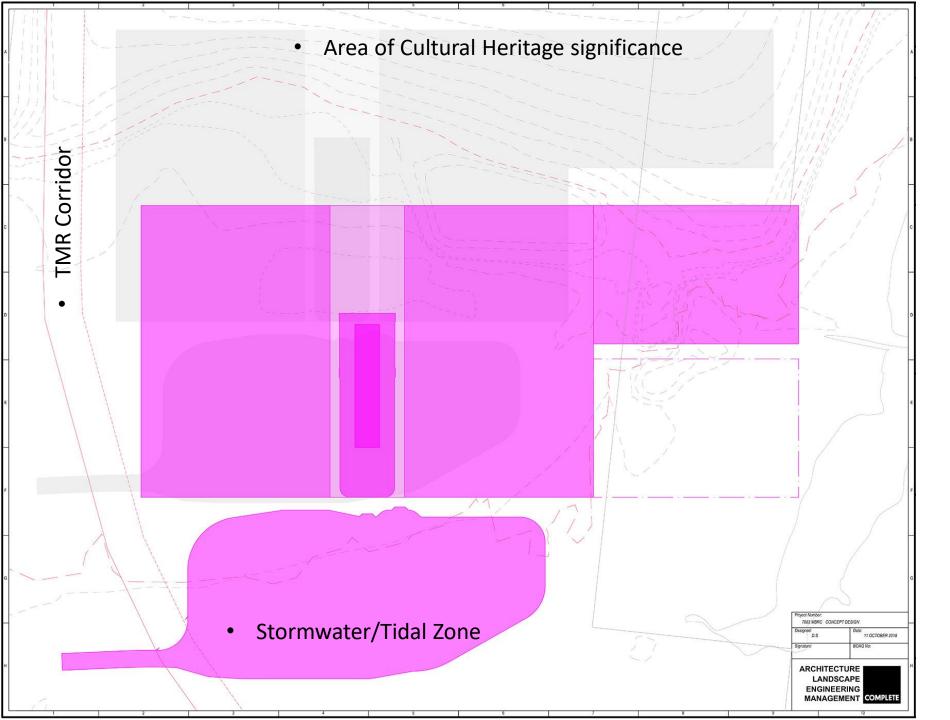
Options for sports complex reconfiguration

 COMPLETE Urban tabled a number of site options to preserve the cultural heritage findings to the north, avoid the TMR zone to the west and the flood and tidal zone to the south.



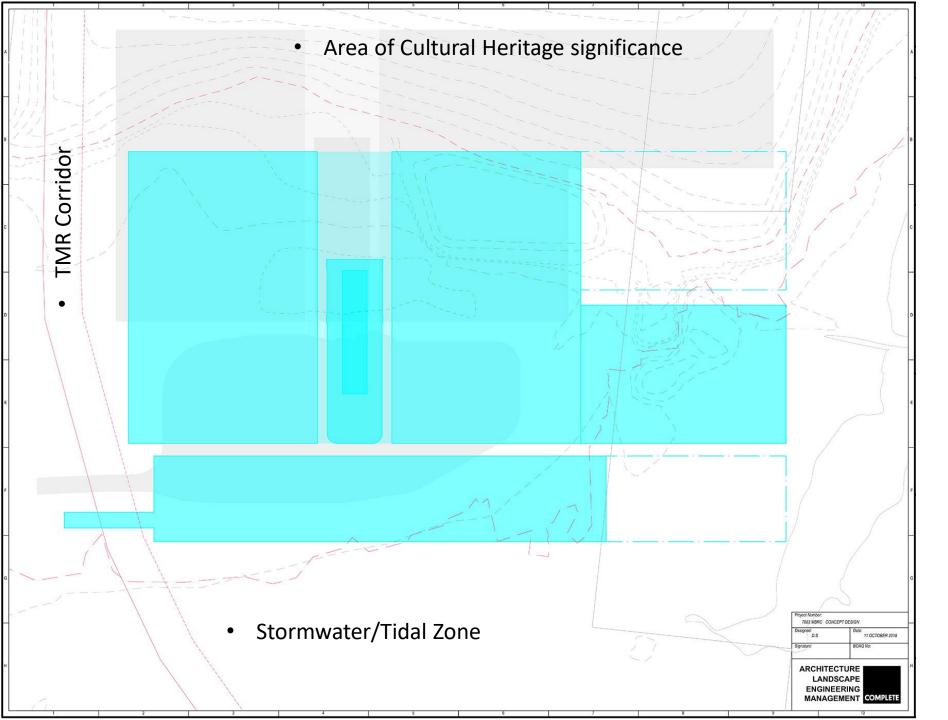


- Option 1 Keep the same configuration but move south to avoid the Cultural Heritage area and the TMR Corridor.
- Accept that the carpark will encroach the Stormwater/Tidal area on the south.
- This option was not supported due to the filling requirements to the south.



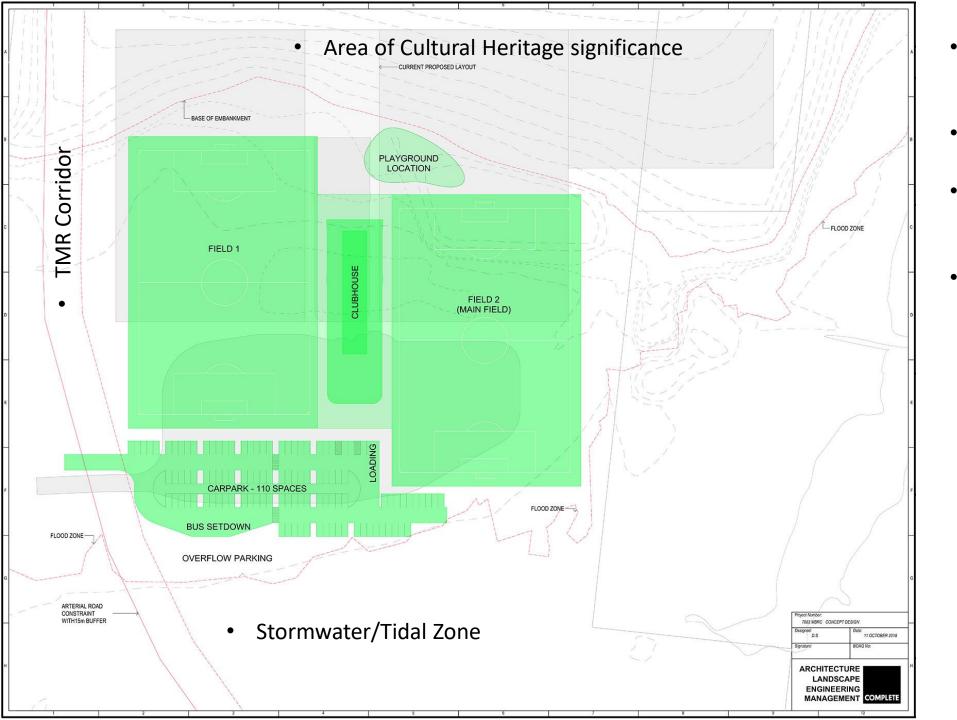
- Option 2 Keep the same field configuration
- Accept that the carpark will encroach the Stormwater/Tidal area on the south
- Move the carpark West to minimise the encroachment
- This option was not supported due to the filling requirements to the south.





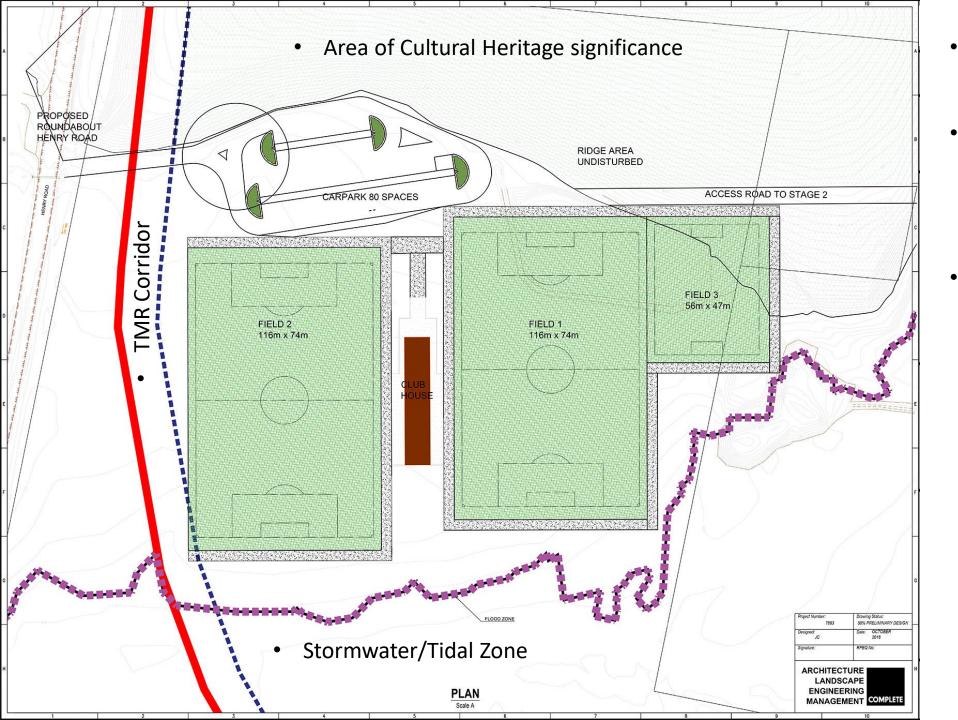
- Option 3 Minimal reconfiguration of the fields
- Reconfigure the carpark to minimise the Stormwater area
- Accept that Field 3 will encroach the Stormwater area
- This option was not supported due to the filling requirements to the south.





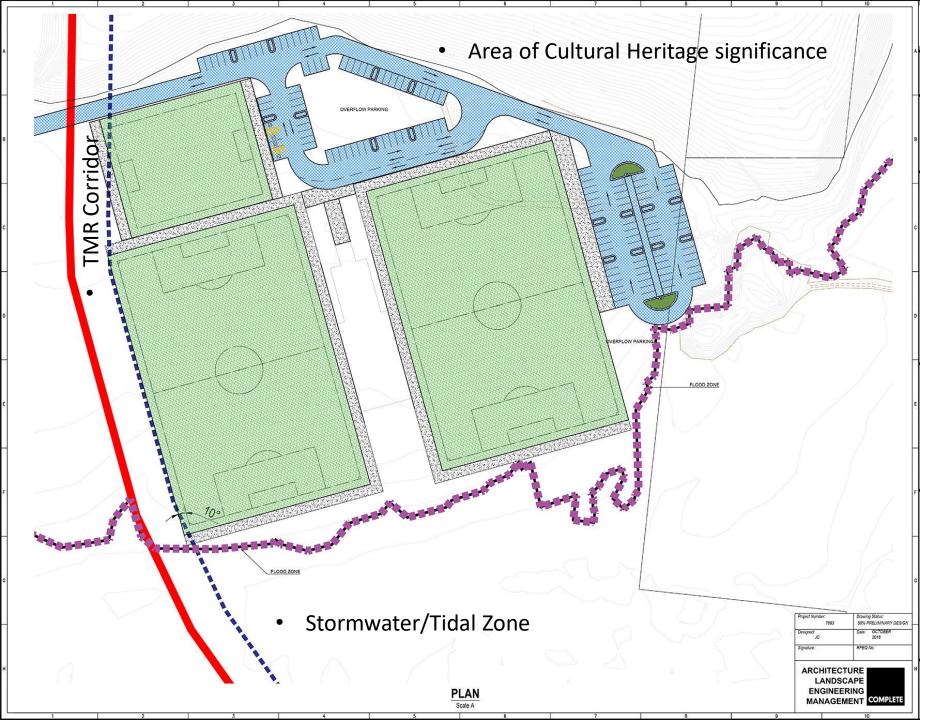
- Option 4 Stagger the fields
- Abandon field 3
- Reduce the carparking to avoid the Stormwater area
 - MBRC was not supportive of this option due to the staggered layout and the loss of future connection to Stage 2 to the east.





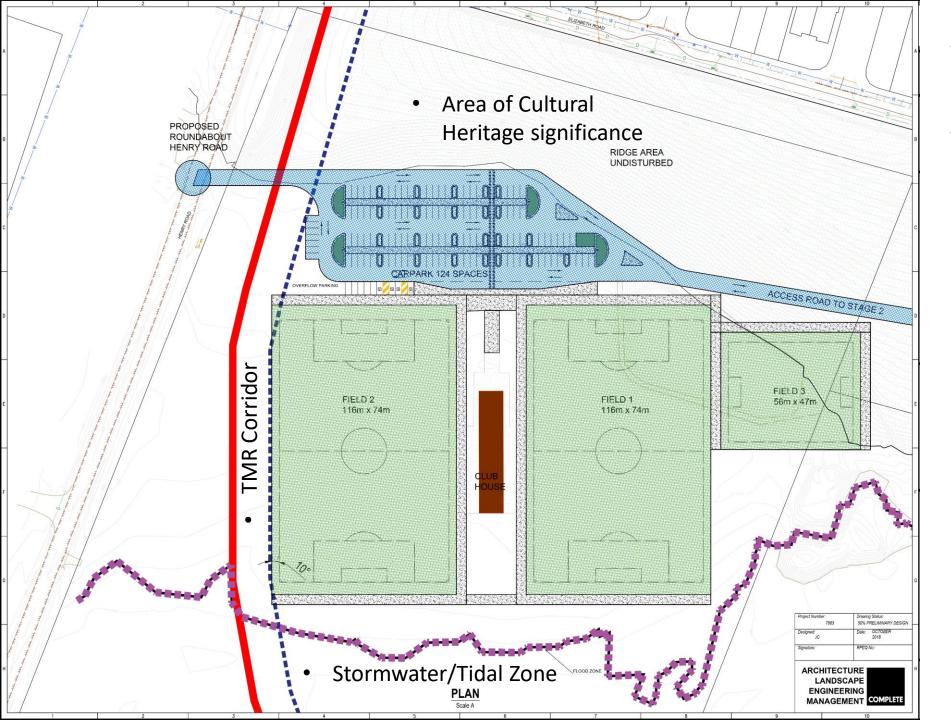
- Option 5 Flip the fields and carpark
- Carpark to follow the contour of the embankment to minimise the amount of cut required
- Accept that field 3 will encroach the Cultural Heritage area





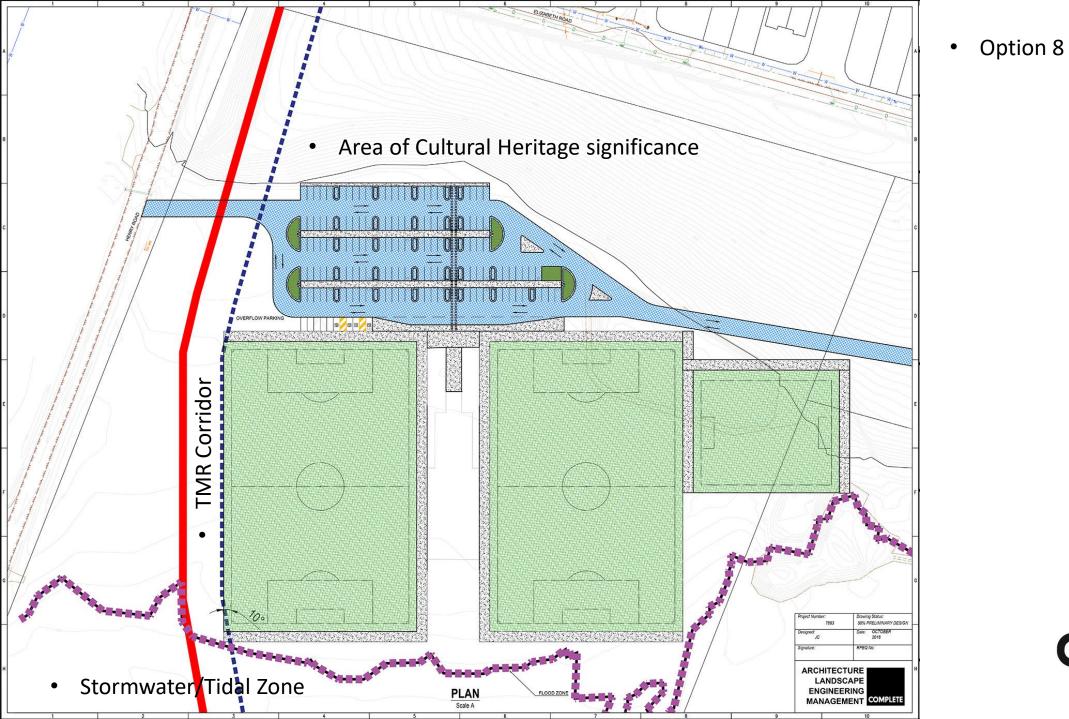
- Option 6 Flip the fields and carpark
- Split the carpark and follow the contour of the embankment to minimise the amount of cut required
- Rotate the fields to align with the TMR corridor

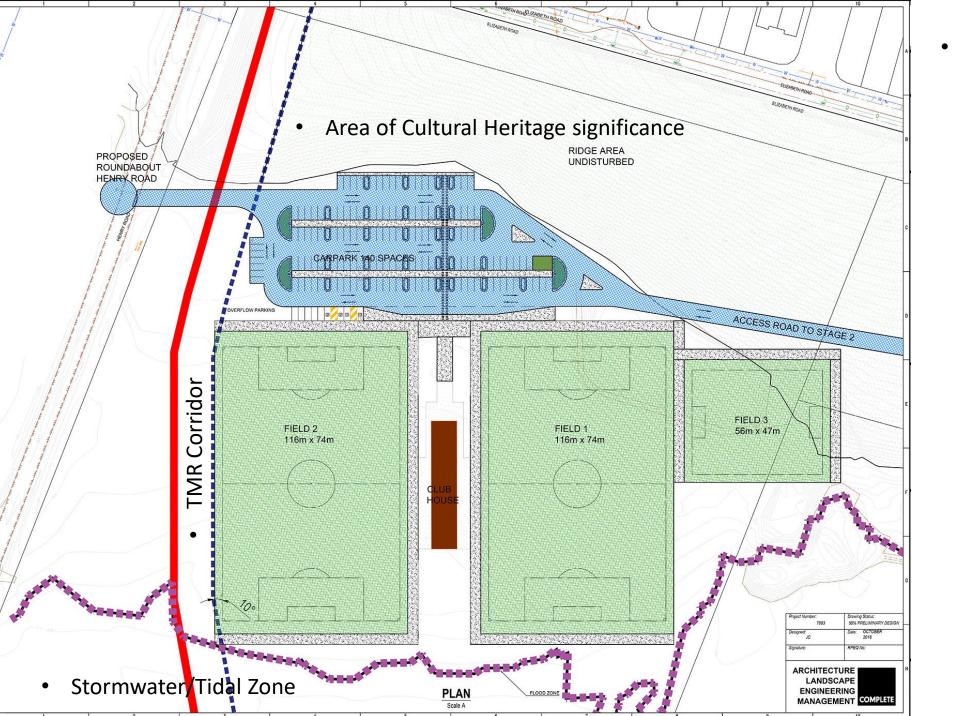




- Option 7 Stagger the fields
- Consolidate the carpark to reduce circulation paths

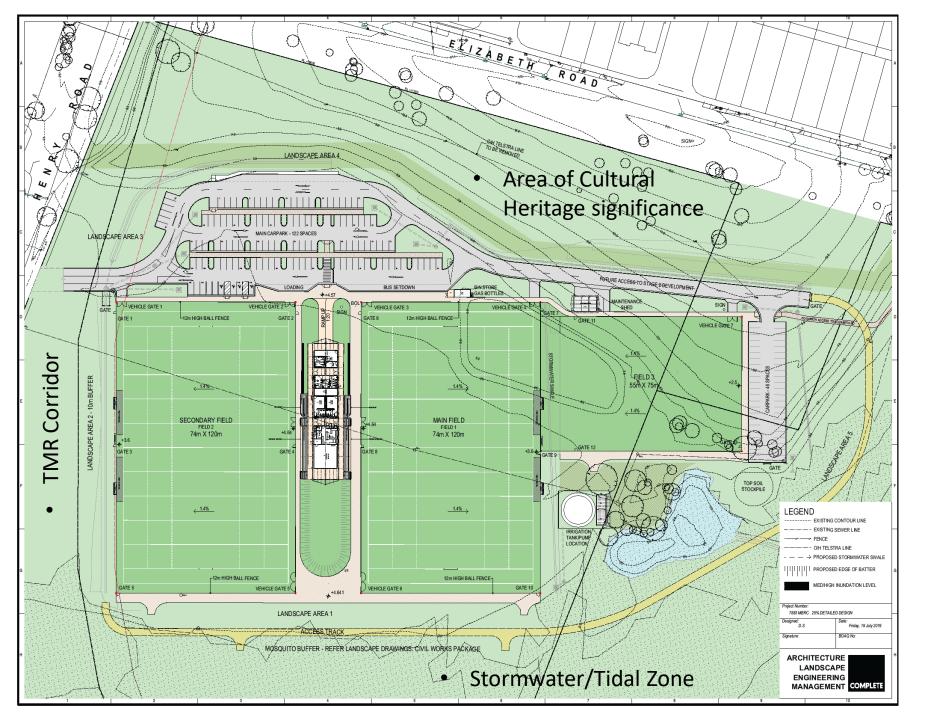






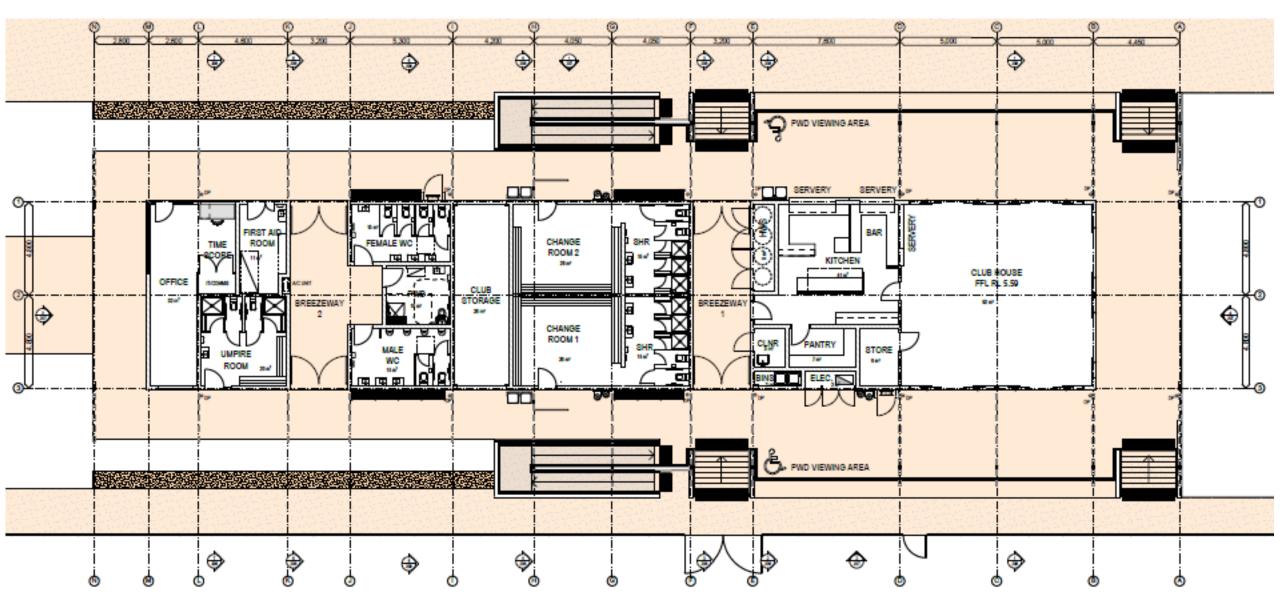
Option 9

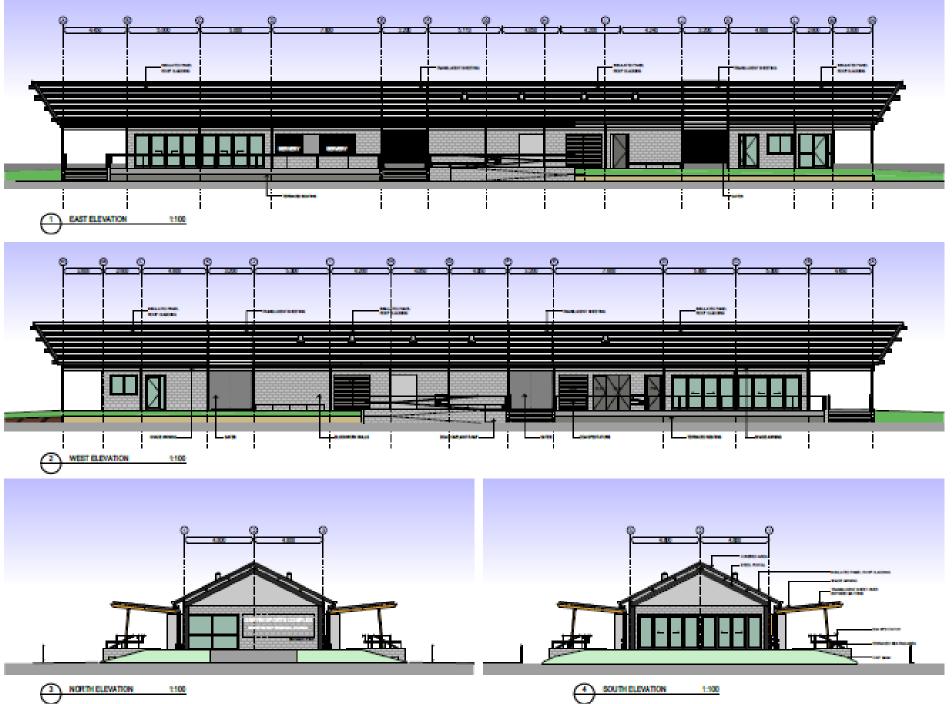




- Option 10 Final Site Plan
- Agreed by Council
- Agreed by Kabi Kabi Representatives
- WSUD principles
- Stormwater harvesting from fields 1 + 3 for irrigation
- Pond Dewatering
- Mosquito Management









Where to from here?

- Currently at 50% Detailed Design
- Projected to complete tender documentation November 2019

Thank you

