Flat Rock Gully Resident Action Group submission Beaches Link and Gore Hill Freeway Connection EIS 1 March 2021

The Flat Rock Gully Resident Action Group (FRG RA Group) formed during the consultation period in 2018 where the community was asked as to which side of Flat Rock Gully (FRG) should be the location for the primary tunnelling dive site for the Beaches Link. Two options were given, Site A – the Baseball Diamond on the western side of Flat Rock Drive, or Site B the regenerated bushland east of Flat Rock Drive.

Despite many submissions and a petition with over 400 resident signatures that was hand delivered to our local member Gladys Berejiklian, the weight of the baseball, netball and sporting clubs meant that Site B was chosen and the regenerated bushland was to be sacrificed.

Unfortunately, the residents and the sporting clubs were pitted against each other when in hindsight we should have worked together to insist that the dive site not be in Flat Rock Gully at all as it is on an historical tip site operational from 1935 to 1980. The proposed dive site is contaminated and known contaminants will be exposed during the tunnel construction. Please see the full list of objections below.

The residents who form part of the FRG RA group live in the streets on the rim of FRG in Northbridge and include Calbina Road, Cliff Avenue, Pyalla, Nulgurra, Baroona and Baringa Roads.

We want it noted that there was insufficient time to adequately read and comment on over 12,000 pages of material over the summer holiday period, more time was needed to adequately comment and source professional advice.

We also want it noted that we object to the project on the grounds that no full business case has been released to the public and that there has not been a proper assessment of public transport alternatives. In addition, we suggest that the EIS be reissued to consider ecologically sustainable alternatives to the car tunnel and fully scope alternative public transport options. Data needs to be included post 2016 to take into consideration the introduction of the b-line buses and the impact of Covid19.

We also believe that there should be a reconsideration of the location of the dive site in Flat Rock Gully due to the contamination from the historical tip site, that it is a wildlife corridor supporting a number of ecosystems, it is in a water catchment area, the dust from spoil, noise, increased traffic and truck movements that put the health and safety of residents and the children who play on the adjacent playing fields at risk.

Urban bushland is fast disappearing. We believe, along with WEPA (The Willoughby Environmental Protection Association) submission that we can no longer afford to put construction sites, with all their impacts, in remaining urban biodiversity rich areas.

Our additional list of objections to having the primary tunnelling dive site in Flat Rock Gully:

- We object to the destruction of bushland that has no guarantee in the EIS that it will be reinstated.
 - Given the EIS states that temporary rather than permanent loss of bushland is required during the tunnel's construction phase, the permanent loss of bushland should not be considered as part of the EIS – i.e. that option should be removed from the EIS. Authority to determine whether a portion of bushland reserve is permanently lost

should not be delegated to local Council, as that decision impacts the broader community and future generations, not just Willoughby Council's current constituents. Given permanent loss of bushland is of State rather than Local significance, it should be considered on its merits alone and not form part of an infrastructure project that does not require permanent loss of bushland. All sheds and infrastructure from the dive site should be removed at the conclusion of the project.

- No old growth remnant forest should be destroyed in any way for the preparation and construction of the site. We also object to the bush being cleared 10m from the construction footprint. This is a lot of trees. These do not need to be cut down, there would be another method to protect the site to avoid the possibility of a bushfire
- Undertake full bush regeneration and provide three for one tree plantings as required by the local vegetation strategy. All trees to be replanted in the affected area and not offset.
- 390 trees are to be removed for the dive site. We need additional work done before construction to provide nest boxes and rock habitats for displaced wildlife.
- We object to the FRG dive site negatively disrupting a significant wildlife corridor. The biodiversity scoped in the EIS is very narrow and only comments on 23 threatened species. It fails to assess the impacts on the many 100s odd species that will lose their habitat due to construction activities such as noise and loss of habitat.
 - Council has designated this bushland as a wildlife protection area as it provides significant habitats that support a wide range of birds – particularly small birds – mammals, reptiles and frogs and therefore should not be destroyed.
 - \circ $\;$ That the revised EIS include a full study of biodiversity at FRG $\;$
- We object to the noise that will be generated from the dive site, particularly during the construction phase but also beyond particularly for the houses in our streets, with noise levels ranging from 75db to 60db during extended periods up to 5 years. This is unacceptable to human health with possible long term hearing implications for residents
 - acoustic barrier along the full length of Flat Rock Drive and around the full extent of the excavation site / including driveway from the shed to Flat Rock Drive. Provide double glazing, or some other form of acoustic treatment to homes on the rim overlooking the dive site (e.g. reimburse any costs associated with the installation of double glazed windows and doors facing Flat Rock Dive site, noise mitigation for rooves as well as windows)
 - o The gully is deeply sided which naturally amplifies noise in its vicinity
 - Actual monitoring is required for one house in Calbina Road West (p93) is >75 dB(A)
 - A key concern at Flat Rock is the noise generated from truck air brakes as they slow down the long hill leading to the excavation site entry point at the bottom, and then the exhaust and engine noise from those fully loaded trucks accelerating up the hill from the site. As the dive site is in a valley the noise travels further and is louder. Air brakes should not be used.
 - Marshalling areas will be needed for trucks across all sites but particularly at the Flat Rock site. Marshalling should not be permitted on local streets. Trucks should not be allowed to idle while marshalling and every load should be tested and inspected to ensure contaminants are fully contained.
- We object to the risk of downstream environments becoming contaminated. There was a Declaration of Remediation Site under the Contaminated Land Management Act in 2003 in relation to part of Tunks Park due to contaminated fill material, sediment and

groundwater posing a danger to human health and presumably originating upstream from the old tip site in Flat Rock

- The risk of contaminants moving down from the tip site as the capping is disturbed and pockets of leachate are released has not been assessed in terms of risks to Human Health and yet the EIS acknowledges the risk of run off to surrounding waterways and Middle Harbour. The EIS acknowledges the risk of workers coming into contact with contamination but does not assess the potential of bushwalkers, sporting groups, residents etc coming into contact with contaminants
- Contaminants have been found in groundwater and surface water around the tip site in Flat Rock Gully and there is a risk identified that these may move down the gully as work proceeds
- A Phase 2 contamination assessment be undertaken now and the results of all testing already complete, released and a full risk assessment completed prior to approval and sign off. Health risks associated with run off, spills and risk to Northbridge should be included i.e. worst case scenario not the best case health assessment as currently assessed.
- We object to the amount of wastewater that will be released down Flat Rock Creek 117,000 L per day of wastewater will be flushed down Flat Rock Creek each day from both construction and operational activities
 - Wastewater to be treated via a method other, or in addition to, sedimentation only to ensure that the full range of dangerous chemicals identified are properly removed.
- We object to 500m3 of spoil allowed to be stockpiled outside of the shed. Even the EIS states that dust is "difficult to contain" even with the best mitigation measures in place this is a considerable risk particularly to children's sport that is played adjacent to the Flat Rock dive site and to residents on the Northbridge side as usually the prevailing winds are southerly meaning that dust and contaminants can blow into houses
 - No spoil is to be stored outside of the sheds, but should immediately be transported from the site
- We object to the dust from the spoil and that can easily become airborne leading to a risk to human health
 - An alert style monitor at Calbina Road (West) and Pyalla Street to measure the pollution levels the potential for contaminated dust and heavy vehicle emissions to be high from the Flat Rock Gully construction zone
 - Houses on the rim to be fitted with air conditioning as windows would need to remain closed for up to 5 years
- We object to the landfill gas risk of encountering odorous waste material and gases from historical landfill in the in Flat Rock Gully
 - Detailed investigations have not been carried out to confirm the presence and extent of potentially odorous materials and landfill gases within the project site at this location
 - A landfill gas study in compliance with Hazardous Ground Gas Guidelines for construction and operation of tunnel (PDF page 78 Appendix M). It is noted the nominated guidelines have been superseded and the updated guidelines should be used
 - Ensure all landfill exposed by tunnelling is capped at the end of tunnelling and reinstate crushed sandstone as a contoured base for re-establishment of locally indigenous vegetation and habitat.

• We object to the amount of drawdown as a result of the tunnel construction and operation

- The EIS estimates that the drawdown in Flat Rock reserve 21m and at Willoughby Leisure Centre 22m, resulting in water stress/death for plants and trees and potential settlement issues
- Groundwater dependent ecosystems are located at the upper reaches of Flat Rock Creek
 & Quarry Creek such as the rare turpentine scrub and these will be impacted.
- The EIS states that "tunnelling works could potentially lower the groundwater table within poorly consolidated fill. FRG - at this location, the tunnelling works could drain the groundwater, currently 'ponded' within landfill in the former creek" (23.2.3 p 23-14)
- 39% reduction in creek flow in Flat Rock Gully impacts identified for fauna and flora ecosystem
- o The tunnel should be completely lined to mitigate drawdown
- Water monitoring station results to be made publicly available and placed downstream of the dive site, around the Baseball Diamond and in Long Bay to assess run off. Run off modelling should be completed once an expanded flood study is done.

• We object to the risk of settlement and subsidence

- Potential cracks in property due to settlement definition of slight is 50mm (building and structure settlement classification chapter 16 page 29). This definition in the EIS needs to change
- Settlement induced by groundwater drawdown (table 50-75mm is moderate, greater than 75cm is severe). Settlement at Flat Rock Reserve is considered category 5 and up to 85cm which is categorised as severe settlement (p29-32 Chpt 16). see table 16-9 page 30, lists all max total settlement predictions for identified sites

• We object that the flood study in the EIS as it does not take into account flooding east of the dive site

- The flood study fails to recognise that water and sediment may be from a contaminated source.
- "The Flat Rock Creek catchment drains in an easterly direction from the Pacific Highway in Artarmon and has a total catchment area of about 3.9 square kilometres (390 hectares) at Willoughby Road". The proposed dive site is within the Creek area where flooding occurs which then continues to downstream habitats. There appears to be little assessment of flooding impact on the Flat Rock dive site and downstream habitats, parks and waterways. The flood study limits the Flat Rock Creek assessment to the upper reaches around Gore Freeway. Given the size of the catchment, the location of the dive site in and around the diverted creek and in a flood zone it would be appropriate to continue the flood study around Flat Rock Gully and down into Tunks. This information should inform the health risk and waterways assessment.

 We object to light spill which impacts fauna and bushland and houses next to the construction site

- o ensure that lighting does not impact the full height of trees;
- that bright, artificial lighting is kept away from riparian areas, ponds and other core habitats and nesting sites; and
- that motion-activated lights are placed in parts of the site which do not require constant illumination.

In conclusion

As a resident action group, we request an ongoing resident review/consultation review forum -e.g. regular meetings, with key stakeholders, including residents to discuss results from monitoring and mitigation. There should be a portal where information can be accessed in real time

The FRG RA group fully supports the submission prepared by WEPA, the Willoughby Environmental Protection Association including all 48 recommendations outlined in their submission

We believe, in light of the objections outlined above, that the dive site should not be located in Flat Rock Gully. That any construction that does occur in FRG be remediated so that the bushland is better than before to compensate for pain and suffering during the 5 years of construction and that ecosystems are restored. No contaminated soil to remain onsite, site rehabilitated back to bushland in FRG, improved walking tracks and bicycle paths.

Neil Fraser