I am submitting my strong objection to the Beaches Link and Gore Hill Freeway Connection. This project will have significant impacts on the health and wellbeing of Northern Beaches and North Sydney residents and the area's cultural heritage, environment and biodiversity. It will lock in decades of car dependency and pollution and ignores public transport solutions. All this for what the Transport Minister describes as a 'multi-billion mega project', that residents will still have to pay for the privilege of through tolls. My key objections to the project are:

- Pollution from the ventilation stacks, particularly the impact to local schools and sporting areas. While Military Rd may see a reduction in pollution, this will be redirected over local schools and parks threatening the health of thousands of children.
- The dependence on private car use this project will create when we are facing a climate emergency, with a state led commitment to reach net-zero emissions by 2050.
- Noise and vibration impacts during constructions for surrounding communities.
- Health risks from the spoil, including from contaminated sites, being stored and moved around the site.
- Dredging of contaminated sediment, which will be moved to an unknown location. Dredging is likely to have significant long-term impacts to water quality at harbour beaches, impacting both aquatic biodiversity and community use of these areas for swimming, fishing and boating.
- The impact to the local community's wellbeing and the character of the area through the loss of local bushland.
- Impacts to ground water and the potential for significant indirect impacts to local ecosystems, particularly in a warming and drying climate.
- The loss of biodiversity, including threatened ecological communities and species. Concerns related to the assessment of impacts to the endangered Duffys Forest Ecological Community are detailed below.
- The impacts to significant aboriginal cultural heritage sites during construction, including the potential for vibrations to permanently damage engraving and shelter sites.

## Inadequacy of the assessment of the impact to Duffys Forest Ecological Community as a Serious and Irreversible Impact.

The Biodiversity Development Assessment Report provides an inadequate assessment of impacts to this geographically restricted and highly fragmented threatened ecological community (TEC) for the decision-maker to determine if this is a serious and irreversible impact (SAII).

- Avoidance and minimisation the Biodiversity Development Assessment Report states that impacts have been minimised through the 'design process' with a map showing different portal locations. There is no detail about how the design of the road where it intersects with the TEC will be adjusted to reduce impacts.
- The assessment notes significant water table drawdown beneath this TEC. The assessment states this TEC would draw opportunistically on this ground water during periods of low rainfall. There is no analysis of if this TEC would survive periods of low rainfall without being able to draw down on ground water. There is no consideration of climate change projections which demonstrate higher temperatures and longer periods of drought. There is no map of the TEC areas that will be impacted by water table drawdown across the project area to demonstrate the full potential impact to the TEC.
- There is reference to alterations to surface water patterns from Wakehurst Parkway
  impacting the TEC and the assessment states 'standard controls' to manage these. However,
  there is no analysis of the extent of the TEC that could be impacted by surface water

changes, what the standard controls are or how they will mitigate impacts to the adjacent TEC.

- There is also reference to the edge effects from widening Wakehurst Parkway on this TEC with 'management measures' to reduce risks. The assessment states approximately 1.36 ha of this TEC will be impacted by edge effects within 20m of Wakehurst Parkway (of a total of 8.43 ha) while these indirect impacts are considered for credit calculation, they have not been adequately considered in the SAII analysis. There is also no analysis in the SAII section of what these management measures are or how they will be monitored to ensure edge effects on the TEC are mitigated.
- The percentages of impact on the remaining TEC are confusing in how it considers the mapped area and the area impacted by the Northern Beaches Hospital. It states there is around 30.72 hectares mapped within 1,000 ha and 63.61 hectares within 10,000 ha (excluding the direct impact area). With 1.38 ha directly impacted and 1.36 ha indirectly impacted, 8.5% of the TEC in the immediate project area will be impacted. There is no analysis of the impact of this loss on the overall viability of the TEC.
- The SAII assessment should clearly state how much of the TEC was lost in the Northern Beaches Hospital work to understand the cumulative impacts and the impacts to connectivity to this TEC from recent impacts. This is critical to understanding the rate of decline for this TEC and the significance of a further loss.
- The report notes further fragmentation due to the widening of Wakehurst Parkway but gives no analysis of what impact this will have on the remaining TEC either side of Wakehurst Parkway. Will it impact seed distribution or isolate species? Will it mean isolated patches of the TEC will become unviable?

Determining if an impact constitutes a serious and irreversible impact to a threatened species or ecological community is a key element of the consent authority's decision. This decision is about protecting those entities most at risk of extinction from development. The consent authority must determine if an impact to a candidate species is serious and irreversible, with this decision supported by a thorough assessment. While serious and irreversible impacts can be approved for state significant infrastructure, the consent authority must take these impacts into account and determine if there are any additional and appropriate measures to minimise the impacts.

The principles for determining if something is a serious and irreversible impact are set out in clause 6.7 of the Biodiversity Conservation Regulation 2017. The analysis provided in this assessment is not sufficient for a consent authority to determine if the impact to Duffys Forest Ecological Community is a serious and irreversible impact.