

SUBMISSION FROM INNER WEST COUNCIL TO THE NSW PARLIAMENTARY INQUIRY INTO THE IMPACT OF THE WESTERN HARBOUR TUNNEL & BEACHES LINK

18 JUNE 2021

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INTRODUCTION

Council appreciates the opportunity to make a submission to the NSW Parliamentary Inquiry into the proposed Western Harbour Tunnel (WHT) and Beaches Link. Only the WHT component of this project is within the Inner West Council area, so this submission refers only to the WHT, not the Beaches Link or Warringah Freeway Upgrade.

As the project is essentially the same as that presented in the 2018 *WHT Reference Design* and 2020 *WHT Environmental Impact Statement (EIS)*, the discussion of issues in this submission is essentially the same as the discussion in Council's submissions to the Reference Design & EIS. It is acknowledged that the WHT *Response to Submissions Report* has addressed most of the issues raised in Council's EIS submission. Notwithstanding, all of Council's EIS issues are included in this submission as they have not necessarily been *resolved* by the *Response to Submissions Report*.

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In raising the issues below it should be noted that WHT construction activities have yet to begin at any significant scale within the Inner West Council area. Council is nonetheless able to predict the nature and extent of these impacts due to its experience over several years with WestConnex and other major infrastructure projects under construction.

A draft of this submission was circulated to Inner West Councillors with a request for comments prior to the submission deadline, to be integrated into the final version. The draft submission was also posted on Council's public website with a call for comments from the community, with community comments also to be integrated into the final submission. Two community comments were received, and these have been included as an appendix to this submission. Any comments received after the submission deadline will be forwarded to the Inquiry secretariat as a late addendum to this submission.

SUMMARY OF ISSUES

Following is a summary of the main issues raised in this submission:

- As only the WHT component of this project affects the Inner West Council area, Council's submission focuses on the WHT only
- Most of the issues in this submission were raised in Council's submissions to the WHT Reference Design and WHT EIS
- Council has a long-standing position of opposing inner-urban motorways, including WestConnex & WHT
- Council prefers traffic-reduction options to address congestion, including public and active transport, travel demand management and transit-oriented development, with some modest/targeted improvements to the existing road network
- Though the WHT EIS is comprehensive in its coverage of issues, Council does not agree with some of its key findings, and is of the view that benefits of the project are exaggerated and the negative impacts downplayed
- Council has serious concerns about WHT construction impacts based on its experience with WestConnex, and continues to argue that work on inner-Sydney motorways should cease until the NSW Government completes an infrastructure construction health impact study
- For all four WHT construction sites within the Council area, concerns are raised about noise, vibration, dust, odour, property damage, heavy vehicle movements, and worker parking demand
- At Yurulbin Point, concerns are also raised about impacts on Yurulbin Park, marine flora/fauna, marine water quality, barge movements and the risks involved in the construction of cofferdams
- Council opposes use of the former Balmain Leagues Club site as a WHT construction site because of construction impacts on adjacent homes, shops and schools, and the delay in the redevelopment of the site that includes a leagues club
- Council seeks assurance that operation of the former Balmain Leagues Club site will not delay implementation traffic calming and other improvements on Victoria Road made possible by reduced surface traffic from the Iron Cove Link
- Council seeks assurance that WHT construction would not delay delivery of the WestConnex Rozelle Rail Yards (RRY) recreation area

- Council is concerned about cumulative road safety and traffic congestion impacts on Victoria Road, City West Link and adjoining roads from construction traffic associated with WHT, WestConnex and other projects planned for the Rozelle area
- Council is also concerned about the full range of cumulative impacts from WestConnex, WHT, Sydney Metro West and other major projects and activities in the White Bay / Rozelle area
- Safety and congestion concerns are raised about operational traffic in particular, increased traffic along Johnston Street and nearby local roads, noting that these roads include residential and school uses
- Council does not believe the operational traffic benefits of the project are sufficient to justify the project
- Based on experience from WestConnex, Council is keen to ensure that WHT construction does not sever walk/cycle access or create unacceptable diversions
- Council is concerned about the project's air pollution impacts (particularly on sensitive uses such as schools), including construction dust and growing vehicle emissions from surface traffic growth
- Filtration of WHT vent stacks is sought, consistent with a recommendation from the 2018 WestConnex Parliamentary Inquiry
- The project would create multiple biodiversity impacts, and risks associated with harbour pollution from dredged material are considered by Council to be unacceptable.

INQUIRY TERMS OF REFERENCE

Most of the issues raised in this submission have relevance to the inquiry's terms of reference. Following is a brief account of how the issues relate to the terms:

(a) the adequacy of the business case for the project, including the cost benefits ratio,

In the *Strategic justification* section below reference is made to Council's submission to the 2018 WestConnex Parliamentary Inquiry, available from the inquiry's website. Appended to the WestConnex inquiry submission is a detailed review by SGS Economics & Planning of the project's business case. The review was commissioned by former Leichhardt Council in 2016. It concludes that the project's business case is poor and WestConnex is not justified. As WHT is a motorway extension of WestConnex, the same conclusions can be applied to WHT.

(b) the adequacy of the consideration of alternative options

In the *Strategic justification* section below it is pointed out that for both WestConnex and WHT, it appears an early decision was made by the NSW Government to proceed with a motorway option, with other transport options not given serious consideration. Council's preference would be a mix of options that includes public transport, active transport and travel demand management. This would be supported by transit-oriented development and some modest improvements of the existing road network.

(c) the cost of the project, including the reasons for overruns

Whilst Council is not in a position to make detailed comments about project costs, it has always maintained that motorway options are not cost-effective compared to Council's preferred alternative transport options (mentioned above).

(d) the consideration of the governance and structure of the project including the use of a 'development partner' model

Again, Council is not in a position to make detailed comment on this aspect of the project. It should however be noted that for WestConnex, Council experienced many issues from overreliance on corporations and contractors in dealings with Council and the community. Accordingly Council seeks greater involvement by NSW Government agencies in managing all major State Significant infrastructure projects.

(e) the extent to which the project is meeting the original goals of the project

Council is of the view that that alternative transport options mentioned above would be more effective in achieving the transport/access goals that are sought to be achieved by WHT.

(f) the consultation methods and effectiveness, both with affected communities and stakeholders

From experience with WestConnex, consultation methods and effectiveness fell well short of adequate in the earlier stages of the project. There have however been lessons learned by the State agencies, contractors and all involved that has led to noticeable improvements. This is not to say that all consultation processes for WHT will be adequate. It also does not alter the fact that some residents will suffer considerable impacts even where consultation is adequate and compliance is achieved.

(g) the extent to which changes in population growth, work and travel patterns due to the Covid-19 pandemic have impacted on the original cost benefit ratio

These impacts are potentially significant, but more information is needed to answer the questions posed. Council requests a NSW Government study on Covid-19 traffic/transport impacts be assessed as part of this inquiry.

(*h*) whether the NSW Government should publish the base-case financial model and benefit cost ratio for the for the project and its component parts

Council has previously stated in relation to WestConnex that all financial assessment information for major infrastructure projects should be made publicly available, and Council has not altered its position. Full disclosure would allow for an adequate assessment of all transport options available.

(i) whether the project is subject to the appropriate levels of transparency and accountability that would be expected of a project delivered by a public sector body

In relation to WestConnex, Council has on numerous occasions raised concerns about the NSW Government's use of corporation structures and contractors to limit accountability and prevent disclosure of information. Accordingly Council seeks greater involvement by NSW Government agencies in managing major infrastructure projects.

(j) the impact on the environment, including marine ecosystems

In this submission, and in prior submissions on the WHT Reference Design and EIS, Council expressed concerns about the significant impact WHT would have on the harbour floor and the potential for contaminated dredged material to pollute harbour waters. Even with compliance with environmental controls, there is always the potential for a spill or other unforeseen event that could lead to pollution, with serious results. The WHT would also affect terrestrial flora and fauna.

(*k*) the adequacy of processes for accessing and responding to noise, vibration and other impacts on residents, during construction and operationally

Council's experience of more than five years with WestConnex construction has proved that noise, vibration and other construction impacts on residents has been significant. Night works and long-duration impacts have been particular issues, leading to impact fatigue. More recently, *operational* impacts from WestConnex have been felt by residents in the form of increased traffic on some residential streets. For WHT, Council is particularly concerned that residents around Yurulbin Point and the former Balmain Leagues Club site will suffer

similar impacts from construction. Cumulative impacts from other major project works in the White Bay and Rozelle areas are also a concern. It is acknowledged that the NSW Government has recognised the importance of cumulative impacts and is developing processes ensure they are minimised.

(*I*) the impact of the project on nearby public sites, including Yurulbin Point and Dawn Fraser Baths

In raising concerns about the potential for contaminated dredged material to pollute the harbour, Council has recently noted that this could affect the Dawn Fraser Baths, with implications for human health. As the impact on this Council facility was not assessed in the Reference Design or EIS, it should be assessed as part of this inquiry. Yurulbin Point will be profoundly affected by becoming a WHT construction site, and will not be available to the public during the construction phase. It is however acknowledged the park will be upgraded and re-opened to the public after construction.

(m) any other related matter

Most of the issues discussed in this submission are covered by the above terms of reference, although some 'other related matters' may be raised in this submission.

STRATEGIC JUSTIFICATION

Council has a long-standing position of opposing inner-Sydney motorways, including WestConnex and WHT. Council believes motorways create problems (not benefits) for the Inner West and Sydney region in the long-term. In particular, induced traffic erodes Sydney's liveability, air quality, transport affordability and economic productivity. Council is also concerned about more immediate construction impact issues, and its experience with WestConnex shows that these impacts can be significant and widespread.

Instead of motorways, Council supports transport infrastructure and behaviour change options that include public transport, active transport, travel demand management and transit-oriented development. Modest/targeted improvements to the existing road network would also be appropriate. With this mix of options, traffic congestion can be more effectively addressed through traffic reduction rather than increasing road capacity, and conditions for sustainable development can be created.

As was the case for WestConnex, Council believes there is lack of strategic justification for this project. It appears an early decision was made to proceed with a motorway and other transport options have not been seriously considered. It also appears the WHT EIS traffic forecasts don't support the EIS's own argument that the project will solve congestion in the long-term.

In October 2017 Council resolved that *"Inner West Council formally adopts a position of continued opposition in the strongest terms to the WestConnex project, both approved and future stages including Stage 3, consistent with the opposition of the former councils of Ashfield, Leichhardt and Marrickville."* In December 2017 Council had resolved to *"Write to the Minister for Roads expressing its opposition to the Western Harbour Tunnel and Beaches Link project as part of its overall position of opposing inner-Sydney motorways and preference for public transport options."*

Notwithstanding this opposition, Council continues to work with NSW Government agencies, project contractors and the community to ensure that impacts from these projects are minimised and benefits are gained wherever possible. In doing so, Council has raised countless issues about local impacts from WestConnex - environmental, health, traffic, transport, construction and economic impacts, as well as lack of adherence to good planning

and management practice. Council is concerned that these kinds of impacts will be extended in duration and spatial extent by the WHT should it proceed.

A more detailed discussion of Council's strategic arguments against inner-Sydney motorways is included in its August 2018 submission to the NSW Legislative Council's Inquiry into WestConnex, available from the inquiry's <u>website</u> (Submission No. 379). Appended to the Council's submission to this inquiry is a review of the project's business case by SGS Economics and Planning. The review concludes that the project's business case is poor and WestConnex is not justified. As WHT is an inner-urban motorway that joins WestConnex, the strategic issues raised in these documents also apply to WHT.

In responding to earlier stages of WestConnex, Council had raised issues about WestConnex adding to congestion at the intersection of the City West Link and the ANZAC Bridge. Though the NSW Government had at that time responded by stating that this would not be the case, WHT is now being justified on the basis of relieving congestion at those points in the network. Council is concerned that the NSW Government will use congestion created by WHT to justify another motorway project and so on, leading to further induced traffic and its negative consequences.

The premise that the project will result in significantly reduced travel times does not appear to be reflected in the WHT traffic data, as the time savings indicated are likely to be of the order of two minutes per vehicle trip. Rather than focusing on reduced travel times for private vehicles, the NSW Government should focus reducing travel times for public transport. *Reducing* traffic by encouraging a mode shift to public transport would be the most effective means of improving the consistency and reliability of private vehicle travel.

Council requests clarification on the WHT EIS assumptions input into the traffic model, particularly in relation to:

- opportunities for public transport enhancements in combination with demand management, changes to regional strategic land use patterns (reduced travel demand, particularly in relation to harbour crossing demand), or at the very least conversion of existing cross-harbour trips from private vehicles to public transport
- mode shifting from public transport to private vehicles
- the environmental and social implications of the project's induced traffic demand
- the likely conversion of trips across the harbour to public transport if there was increased frequency/capacity of public transport and a higher-priced tolling regime, particularly in peak periods.

The need for the project appears to be based on the additional traffic volumes created from the completion of WestConnex and the conclusion that unless this traffic is reduced, the resulting congestion would divert traffic from the State to local roads. This is not supported by data in Table 8-1 of the EIS's *Traffic & Transport Technical Paper*. This data indicates an average vehicle travel time difference through the network in 2027 of 1.8 minutes per vehicle. For 2037 the EIS predicts a difference of 2.3 minutes per vehicle.

Council questions the ability of these time savings to create noticeable improvements across the road network or to prevent rat-runs developing on local streets. Council also questions the validity of spending substantial funding to achieve relatively small travel time savings, when consistency and predictability of travel times would be a more valid priority. Council requests that the NSW Government examines alternative approaches to reducing congestion that focus on traffic reduction and travel time consistency, not increased road capacity and vehicle speed.

CONSTRUCTION SITE IMPACTS

Yurulbin Point (WHT 4 & WHT 5)

Council reiterates its concerns in its submissions on the 2018 Reference Design and 2020 EIS about the significant impacts on marine life from dredging the harbour floor and laying the immersed tube. Added to this is the risk that this activity and construction of the cofferdam will lead to contaminated sediments polluting harbour waters and imposing odour and other health impacts on residents near this worksite and at White Bay. More recently, Council and residents have expressed concern about pollution from contaminated sediment affecting Council's Dawn Fraser Baths, with negative health impacts.

Other concerns previously expressed by Council relate to:

- significant noise, vibration, health and other impacts on nearby residents for several years, particularly those at the end of Louisa Road and in Numa Street, Birchgrove
- the potential for damage to houses and other buildings where wherever tunnels are at shallow depth, as would be the case near Yurulbin Point
- inherent construction risks involved in constructing and decommissioning the cofferdam and joining the driven tunnel to the immersed tube
- impacts on trees and other valued features of Yurulbin Park and denial of public access to this park during the construction period
- potential negative impacts from the relocation of the Birchgrove Ferry Wharf.

Council acknowledges that Yurulbin Park is owned by the NSW Government (not Council) but continues to oppose removal of any publicly-accessible open space for motorway construction. Although in this case the park will ultimately be restored and upgraded, loss of public access of over several years will nonetheless have a negative impact on the local community and park users.

Although the construction site would be within an acoustic shed, the shed will not (and cannot) fully shield residents from all noise, dust, vibration and possible odour impacts. This particularly as the sheds are within close proximity to residents. These impacts would arise from a range of activities within and around the park, including noise from machinery and barge movements. Council is relieved that all spoil movements from the Yurulbin Point sites will be by barge, noting that it would be difficult (if not impossible) for larger trucks to access this site through local narrow streets and the traffic impacts in residents would be intolerable.

Council is also relieved that worker access to these sites would be by boat from White Bay, but doubts the contractor will in practice be able to prevent all workers attempting to gain access to these sites by car. Even a moderate level of light vehicle congestion and increased parking demand along Louisa Road and around Birchgrove Oval would have a major impact, as all streets in the area are narrow and already subject to strong parking demand. Strict measures are therefore needed to prevent any worker parking in this area, and these measures should be implemented prior to the start of construction.

As is explained in the EIS, Yurulbin Park was designed by Bruce Mackenzie and Associates (landscape architects), and landscaping was implemented between 1972 and 1977. Bruce Mackenzie also designed the park at nearby Illoura Point in 1970. Both parks were seminal works that demonstrated two main philosophies that would become dominant in Australian landscape architecture during the period. One was a design that focused on creating an environment in sympathy with its natural origins using Australian native plants, the other a desire to create an escape from the stresses of urban life.

The park incorporates a sequence of spaces using natural stone elements and outcrops. The hand-hewn sandstone path, the slipway, concrete walls and heavy timber elements incorporated into the design of the park remain as a reminder of its former commercial use. The design received a merit award in 1982 from the Royal Australian Institute of Architects. In 1994 the name of the point (and park) was changed to from Longnose Point to Yurulbin Point to reflect the Aboriginal heritage of the area. Council is working with the NSW Government toward an agreement-in-principal to engage Bruce McKenzie to complete a new restoration plan for Yurulbin Reserve. This would be part of a commitment by the NSW Government to a \$10M park upgrade.

In addition to concerns about loss of open space, Council has had a long-standing concern about the number of trees that have been lost to WestConnex projects in recent years. It is noted from the arboricultural impact assessment in the WHT EIS that 55 trees are to be directly affected in Yurulbin Park. Council believes these trees are significant in the local context. Accordingly there is a need for State agency and project staff to consult with Council's Urban Forest and Ecology team to identify trees with the highest retention value. Trees should be replaced with mature plants in a 2:1 ratio. Offsets should include the introduction of ecological restoration features such as the development of a saltmarsh area adjacent to the park.

Council has asked that options to relocate the existing ferry wharf be based on a strategic review of transport services to/from this area that includes ferry patronage data. Consideration should be given a more suitable and/or supplementary ferry wharf site at the Miklouho-Maclay Park at the end of Grove Street in Birchgrove. This location may be appropriate as DDA compliant access could be readily achieved and it is serviced by the 441 bus.

Four aboriginal cultural sites at Yurulbin Point have been identified and described the WHT EIS, with protection measures outlined. These sites are:

- Long Nose Point 1 45-6-1901 LEP item A7 Shelter with midden and art
- Yurulbin Cave 45-6-2287 LEP item A6 Shelter with midden and art
- Shed Cave 45-6-2672 LEP item A4 Shelter with midden and art
- Five Hands Shelter 45-6-2967 LEP item A8 Shelter with midden and art.

A Council report identifies the following three sites, but not Five Hands Shelter, i.e. Long Nose Point, Yurulbin Cave and Shed Cave. The Council report also identifies a further site recorded as Birchgrove 45-6-1809, which was not mentioned in the EIS. The EIS does not include condition assessment data or cultural significance data for any of these sites. Council had asked that relevant information from the abovementioned Council report be disseminated to the public ahead of construction commencing. More detailed information from the Council report was included in Council's submission to the WHT EIS.

Former Balmain Leagues Club site (WHT 2)

In 2018 when the NSW Government first announced that the former Balmain Leagues Club site would be used for the WHT, Council formally expressed its opposition. This opposition was based on the significant construction impacts and the resulting lengthy delay of the redevelopment of this site. This delay would likely mean a leagues club would not be established in the new development as had been planned.

As part of Council's efforts to facilitate redevelopment of the site, Council adopted an amendment to the site-specific Development Control Plan (DCP) provisions (Part D of Leichhardt DCP 2000) in June 2019. The amendments aimed to facilitate the redevelopment

accordance with the provisions of Leichhardt Local Environmental Plan LEP 2000 (LLEP 2000) while achieving improved urban design outcomes. Council considered an amendment of the DCP as the most appropriate way to achieve the desired outcomes for the precinct.

Chapter 20 of the WHT EIS states that "a private residential property on Victoria Road would be permanently acquired for use as a construction support site (WHT2). The land acquired for the project would not impact on the long term viability of the site to continue to be used for private residential purposes". It also states that "the Victoria Road construction support site (WHT2) would also include a privately owned residential property on Victoria Road to the north of the former Balmain Leagues Club site. The site would be acquired or leased and temporarily converted to a construction support site for the duration of construction". Council had sought clarity is required with regard to the NSW Government's intentions for this property.

Chapter 20 of the EIS identifies the current land use zoning of 138-172 Victoria Road as a 'Deferred Matter'. This is not correct - the site is zoned Business under Leichhardt LEP 2000. Council has sought confirmation that the property will be leased or purchased, and the period that it will be required. This would provide Council and the community more certainty about is future use.

Appendix J of the EIS discusses impacts on The Valley Heritage Conservation Area (HCA) and identifies three properties within the Victoria Road construction site (WHT2) to be demolished – Lots 101 and 102 DP 629133 and Lot 104 DP733658 (No. 1 Waterloo Street and 697 Darling Street). Appendix J states that *"the buildings to be demolished, while previously included within the heritage conservation area, have been excluded from the current heritage boundary, therefore suggesting their limited contribution to the overall significance of the conservation area. Direct impact on the heritage conservation area is considered to be negligible".*

This is statement is not correct, as the buildings have not been specifically excluded from the current HCA. The entire Balmain Leagues Club Precinct has been deferred from Leichhardt LEP 2013 and as such Leichhardt LEP 2000 applies to this site. The DCP figure confirms that the subject properties are within a HCA under Leichhardt LEP 2000.

The amended Part D of Leichhardt DCP 2000 strives to achieve a balance between improving the precinct's accessibility from Darling Street while retaining as much of the continuous shop-frontage as possible, minimising impacts on the HCA. The DCP achieves this by requiring retention of the street frontage of No. 697 Darling Street (Lot 104 DP733658) and allowing demolition of No.1 Waterloo Street (Lots 101 and 102 DP 629133). There is no evidence that No. 697 Darling Street and No.1 Waterloo Street do not contribute to the HCA and streetscape. Demolition of these properties to facilitate the WHT construction site is therefore not supported.

Appendix J of the EIS notes that as the demolition would occur on the periphery of the HCA, *"the impact is considered to be minor"*. However, given the prominent location of the properties on Darling Street, the impact of their demolition would in Council's view be significant. Chapter 22 of the EIS states that *"due to the level of dilapidation at 138–172 Victoria Road (the site of former Balmain Leagues club), the proposed temporary noise wall around the Victoria Road construction support site (WHT2) is not expected to cause significant degradation to the existing visual amenity at Waterloo Street. A moderate visual impact is expected for residential receivers at Waterloo Street (viewpoint 1) and low visual impact for receivers within the Waterloo Street road corridor (viewpoint 2)"*.

The EIS lacks detail on the design of the temporary structures on the site, hence the visual and amenity impact, including overshadowing, can't be verified. Detail should be provided on

the materials and dimensions of these structures - in particular, the height and setbacks of the acoustic shed, the workshop and the noise barrier. This is critical given the site's prominent location and proximity to houses, a HCA, heritage items and the Darling Street commercial precinct.

Council is relieved that spoil trucks would only use main roads to access this site - entering from and exiting to Victoria Road - and loading operations would occur within an acoustic shed. However there would still be noise, vibration, dust, road safety and congestion impacts from the significant number of truck movements and 24/7 underground works. As mentioned above in relation to Yurulbin Point, acoustic sheds do not (and cannot) fully prevent noise, dust and vibration impacts.

Given the high number of daily movements (420 heavy vehicle and 230 light vehicle movements to/from this site per day), Council is concerned that trucks awaiting their entry slot on Victoria Road and/or narrow residential streets surrounding this site will create noise and traffic safety impacts. Careful co-ordination using radio communication and GIS tracking will be needed to avoid queuing. Council is also concerned that queuing will negatively affect the viability of the numerous bus services in operation along Victoria Road.

Residents at the rear of the site on Moodie, Waterloo and Darling Streets are within very close proximity, so would be most vulnerable to impacts. Local businesses would also be affected, likely experiencing a downturn in trading as customers avoid the area because of the negative visual impact of the Victoria Road site and the traffic congestion created by the spoil trucks.

Impacts from this site will be in addition to impacts from the nearby WestConnex Stage 3B (Rozelle Interchange) Iron Cove construction site on Victoria Road. Residents and remaining businesses on or near Victoria Road from Darling Street to the Iron Cove Bridge would endure noise, vibration, dust, truck traffic impacts and worker parking pressures from both projects. Parking demand pressures would arise not only from workers accessing the site, but from the removal of the existing car park on the site.

Local residents have been concerned for some time about traffic congestion on main roads around this site, including Victoria Road, Darling Street and Balmain Road. The proposed partial closure of Moodie Street as part of WestConnex Stage 3B would exacerbate traffic impacts, as traffic would not be able to avoid the Darling Street / Victoria Road intersection. This build-up of traffic would create traffic safety issues for all road users, including pedestrians and cyclists.

Trucks accessing the site would create an unacceptable road safety risk for the numerous students and their parents who are walking, cycling and travelling in cars to access local schools. The schools most affected would be Rozelle Primary School and the Balmain Campus of Sydney Secondary College. The highest risk areas would be at the Victoria Road frontage of the site and at the signalised crossings of Victoria Road at Darling and Wellington Streets. Local residents point to a high degree of risk-taking by drivers on Victoria Road and surrounding streets during congested periods, as drivers seek to avoid delays. With the addition of heavy vehicles from WHT, WestConnex and other projects in the area, risk-taking is likely to increase, increasing conflict hazards for pedestrians, cyclists and all road users.

Parents associated with Rozelle Primary School are concerned about air quality impacts on their children from the WestConnex Stage 3B vent stack on Victoria Road. The range of air quality impacts from WHT activities at the former Balmain Leagues Club site would be from truck diesel emissions and dust emitted from spoil handling combined with existing surface traffic emissions from Victoria Road and future emissions from the nearby WestConnex

stack. Air pollution at any level can have a negative impact on health, with a potentially greater impact on children. The noise impact on children's learning at these schools from the operation of the Victoria Road site is also a concern to parents.

A final concern for Council about the WHT2 construction site is that operations at this site may delay implementation of streetscape improvements along Victoria Road that are possible when the Iron Cove Link tunnel becomes operational. As the Iron Cove Link would remove a substantial proportion of the existing Victoria Road traffic between City West Link and the Iron Cove Bridge, an opportunity will be created to convert traffic lanes to widened footways, bicycle lanes and landscaping. Council therefore seeks assurance from the NSW that it will work with Council to prepare a masterplan for this section of Victoria Road with a view to implementing traffic calming, active transport and landscaping improvements as soon as the Iron Cove Link becomes operational. It is essential to that road capacity is removed at that time before it can again grow to fill the space. Assurance is also sought that the operation of the WHT2 construction site will not delay this action.

White Bay & Glebe Island (WHT 3)

Council acknowledges the WHT EIS is comprehensive in identifying risks, impacts and proposed mitigation measures associated with handling contaminated material from the harbour floor at the Yurulbin Point and White Bay sites. Nonetheless concerns remain based on Council's experience with WestConnex. Even with adequate regulation and best intentions there is always a chance of an unforeseen pollution 'event' which could take time to rectify. The unforeseen leachate odour impacts that arose from the WestConnex St Peters Interchange site (a former landfill) illustrates this point.

Council and the community have been expressing concerns about cumulative impacts from WHT and other major projects at or around White Bay and Glebe Island for some time. These other projects include WestConnex Stage 3B under construction, proposed concrete batching plant, proposed port multi-user facility, the existing White Bay passenger cruise ship terminal, proposed Sydney Metro West and future redevelopment of the White Bay Power Station. Given the size and nature of these projects, cumulative impacts are expected to affect a wide area over many years.

Council has been reassured by inclusion of a chapter in the WHT EIS on the assessment of cumulative impacts. Notwithstanding, proximity of the WHT White Bay construction site to these other activities has the potential to impose significant noise and other impacts on Balmain and Pyrmont residential areas.

Beyond assessing cumulative impacts, Council would like the NSW Government to develop an integrated master plan for the White Bay / Glebe Island site that considers opportunities to develop social and recreational opportunities, drawing on the bay's rich and diverse history. This master plan should align with the future Sydney Metro West and facilitate accessible active transport links around the foreshore to/from the Balmain Peninsula.

In prior submissions, Council had raised issues about traffic congestion and road safety impacts from increased heavy vehicle traffic serving White Bay and Glebe Island via James Craig Road and City West Link. Existing congestion at major intersections in the area would be exacerbated, including The Crescent / City West Link intersection. Even if the phasing of lights at these intersections was altered in an attempt to improve traffic flows, congestion would remain due to the sheer number of movements. The altered phasing would also likely increase congestion at other intersections. Added to this would be periods of reduced capacity when intersections of City West Link with The Crescent and Victoria Road are reconfigured as part of WestConnex Stage 3B.

It is appropriate that WestConnex and WHT approvals have ruled out use of Robert Street. Council continues to argue that trucks servicing the other construction uses at White Bay not be allowed to use Robert Street, and all heavy vehicle movements be restricted to James Craig Road. Robert Street is already heavily congested, and due to the number of small businesses fronting that road it is not suitable for significant heavy vehicle traffic.

Although construction trucks would use main roads (not local residential streets), Council remains concerned about congestion and road safety impacts, along with ambient heavy vehicle noise, affecting residential areas in Rozelle, Balmain, Lilyfield and suburbs along the main trucking routes to the west.

Former Rozelle Rail Yards (WHT 1)

Given spoil removal from the WHT Rozelle Rail Yards (RRY) site would be minimal compared to the Victoria Road site, Council expects that that most surface construction activities at this site would be carried out during standard daytime construction hours. It is therefore not expected noise, vibration, dust and other impacts from this site would be as significant as impacts from the other WHT construction sites. Notwithstanding, it is appropriate that all impacts from this site are minimised. This is needed to account for the impacts that will have been generated by WestConnex Stage 3B in this location in preceding years.

In its submission on the WHT Reference Design, Council was concerned that use of the RRY site for WHT would delay completion of the RRY recreation area. It appears from the EIS that this would not be the case, but Council would like this to be re-confirmed as WHT proceeds.

CONSTRUCTION TRAFFIC IMPACTS

The WHT EIS recognised that is not realistic to consider WHT construction activity in isolation from the numerous other projects in the area. Council supports the NSW Government's establishment of a Cumulative Traffic Working Group to oversee and coordinate the cumulative growth of construction traffic in the area. To ensure the interests of the Inner West community are served, and to assist with coordination of construction activity, it is requested that Council be represented on the working group.

In considering cumulative impacts, concern is expressed for the 2022/23 period when three major transport projects will be in their construction phases, the Cruise Passenger Terminal function facility would be fully operational (subject to Covid-19 impacts), and the Bays Precinct redevelopment would be proceeding. Council is concerned that WHT EIS traffic modelling didn't include a detailed analysis of Metro West or the increased capacity of the cruise passenger function facility.

From the WHT EIS it is anticipated that the construction activity will add a total of 2,350 vehicles to the area's existing traffic (1,285 heavy vehicles and 1065 light vehicles). This would be distributed as follows: Rozelle Rail Yards (City West Link) - 165 heavy vehicles and 305 light vehicles; Balmain Leagues Club (Victoria Road) - 420 heavy vehicles and 230 light vehicles; and White Bay (James Craig Road and Port Access Road) - 700 heavy vehicles and 530 light vehicles.

This additional traffic would result in increased traffic delays, which has the potential to encourage diversion of traffic to local roads ('rat-running'). This doesn't appear to have been addressed in any detail in the WHT EIS. The EIS does however summarise the traffic impacts in relation to increased delays and reduced levels of service at key intersections.

The analysis of the major intersections indicates that cumulative construction activities have the potential to increase traffic demand by up to 3%, create up to 3 additional stops per trip, reduce average trip speeds by 5% (AM) and 14% (PM), slow AM travel times on City West Link westbound by up to 5 minutes/vehicle, slow PM travel times on City West Link and Victoria Road by up to 2 minutes/vehicle, slow AM travel times on Victoria Road northbound by up to 3.5 minutes/vehicle and create delays for northbound buses on the ANZAC Bridge - Victoria Road corridor of between 1.5 and 2.5 minutes per vehicle.

The analysis of the intersections also indicates a deterioration in intersection Level of Service (LoS) at the following intersections with Victoria Road: Evans Street (PM) – LoS E becomes F; Gordon Street (PM) – LoS E becomes F; Robert Street (AM) – LoS E becomes F; and The Crescent (AM) – LoS D becomes E. At the intersection of The Crescent and City West Link (PM), LoS E becomes F.

At the City West Link intersection with Balmain Road (PM), LoS E becomes F. It is noted that that there are already long delays along the City West link between Balmain Road and James Street, partly the result of result of WestConnex Stage 1 (M4 East) opening. During the AM peak, the intersection of The Crescent with the City West Link will experience a 10% increase in delay, and the intersection of The Crescent with James Craig Road will experience a 27% increase in delay during the PM peak period.

Council is concerned that as a result of increased congestion, there will be rat-running along local residential streets and it will be difficult for local residents to access their local services and homes. This is a particular concern for residents of the Rozelle and Lilyfield areas, who will have been subjected to a multitude of impacts from WestConnex for up to four years and will already be suffering from construction fatigue.

Based on experience from construction of WestConnex, Melbourne's Westgate Tunnel and similar infrastructure projects overseas, the following initiatives are considered essential in relation to the operation of construction vehicles and their drivers:

- all drivers should be certified specifically for the project and its designated construction traffic routes
- the driver certification process should include safety awareness in relation to all road users and a requirement to walk and ride around the construction site and any key locations identified as having high levels of conflict to gain an understanding of the needs of vulnerable road users
- all vehicles should be clearly identified as WHT vehicles with a unit number clearly displayed
- all vehicles should include a clearly visible contact number for complaints
- penalty systems should be introduced for drivers who breach specific safety, environmental or amenity provisions
- all vehicles should be fitted with GPS tracking, which can be monitored from a central control point
- construction management plans should compare single trucks with truck-and-dog combinations to assess the safety and construction time/cost implications of different truck types.

Council is concerned about vehicle movements to and from WHT construction sites that will use Johnston and Booth Streets, Annandale, as this would have a negative impact on the community and the business environment of the Annandale village. Use of these roads would also create traffic safety issues for all - particularly pedestrians, including the elderly and children from the schools on or near those streets.

Impacts on the Annandale village would be from truck diesel emissions and dust – making the village not suitable for outdoor dining, fruit and vegetable street stalls, florists and other businesses who display goods on footpaths. This would result in reduced foot traffic and visitation to the area, affecting business sustainability. While phasing of lights at intersections can be used to mitigate traffic flows, the congestion and negative impacts would still be an issue due to the number of trucks involved, i.e. 700 heavy vehicle movements and 530 light vehicle movements per day.

Council has stated in prior submissions that it expected worker parking to be provided at White Bay / Glebe Island for *all* WHT workers, and expects there would be procedures in place to ensure that workers have no option but to use the parking provided. It is critical that workers not park on streets near WHT construction sites, as all surrounding streets are narrow and already subject to heavy parking demand.

Council was disappointed that the WHT EIS did not include detail on worker parking arrangements other than to say that there will be limited worker parking at White Bay. The EIS stated that where on-site parking was not provided or where on-site parking could not accommodate the full construction workforce, the workforce would be required to park on the surrounding road network. Though the EIS states that parking details will be provided later at the construction management plan stage, Council believes this issue to be important enough to be assessed in detail at an earlier stage.

Council does not agree with the WHT EIS that the workforce be *"required"* to park on surrounding streets, nor does it want to be put in a position (as has been the case for WestConnex Stage 3B), where it is compelled to investigate resident parking schemes as a way of dealing with worker parking demand. Council would prefer a package of parking demand-reduction measures that are incentivised and enforced.

All WHT construction sites have limited availability of parking, but in the case of the Yurulbin Point, availability is almost zero. It is noted that the project will result in the loss of about ten parking spaces at Yurulbin Point. Council does not agree with the WHT EIS statement that *"the surrounding local road network, including Louisa Road, could accommodate these lost parking spaces and therefore parking impacts would be minor and manageable."* Council would like *all* workers at the Yurulbin Point site to travel by public transport (bus or ferry) or by boat from White Bay.

OPERATIONAL TRAFFIC IMPACTS

The WHT EIS forecast project-related operational traffic increases around Rozelle as follows: 2027 AM peak - 5,800 vehicles; 2037 AM peak - 8,200 vehicles; 2027 PM peak - 4,100 vehicles; and 2037 PM peak - 6,000 vehicles. At the Balmain Road / City West Link PM peak congestion is forecast to the worse than without the project.

Almost all of the EIS's assessment of operational traffic is limited to the efficiency of intersections or links on the State road network. With the exception of a simple set of maps, appended to the EIS's *Traffic & Transport Technical Working Paper*, there is no detailed assessment of traffic increases on local streets. The maps indicate increased traffic on numerous streets in the Rozelle, Lilyfield and Leichhardt areas, i.e. Johnston Street, The Crescent, City West Link, Balmain Road, Darley Road, Norton Street, Marion/Styles Streets, Moore/Booth Streets, Pyrmont Bridge Road, Parramatta Road, Allen Street and William Street. No traffic volume figures are however shown in the EIS.

Whilst increased traffic on any street is a concern for Council, the street that appears to be the most adversely affected is Johnston Street. Although Johnston Street is a State Road, it is flanked by residential uses and includes the Annandale neighbourhood shops, three childcare centres, two schools and two churches. It follows that Council is opposed to any increase in traffic on Johnston Street.

Also of concern are forecast increased traffic volumes on Parramatta Road and City West Link. This conflicts with State and local government plans for Parramatta Road that would increase population and employment densities and improve public transport infrastructure. The City West Link could not absorb additional traffic as it is now beyond capacity and is experiencing increased congestion from the opening of WestConnex Stage 1 (M4 East).

Potential exists for the current difference in toll regimes between WestConnex and WHT to encourage drivers to cross the harbour in the tunnel, then divert onto the toll-free surface road network. This would result in increased traffic on the City West Link, The Crescent, Johnston Street and several local roads. Consideration should be given to incentivising drivers to continue in the tunnels to the south and west using WestConnex as this would reduce volumes on the surface road network and minimise the likelihood of rat-running on local streets.

Council's experience with WestConnex Stage 1 is increased congestion at all key intersections around the Haberfield Interchange, although it is acknowledged that traffic levels had temporarily fallen in 2020 due Covid-19 and will likely fall again when WestConnex Stage 3A is operational. It is essential that congestion issues at key intersections affected by WHT traffic be addressed now rather than taking action 'after the event'. This is the case with WestConnex, where TfNSW is now addressing congestion at the intersections of Parramatta Road with Dalhousie Street; Wattle Street with Waratah Street; Wattle Street with Timbrell Drive; and City West Link with Norton and James Streets.

IMPACTS ON ACTIVE TRANSPORT

At a strategic level, because motorways increase traffic and create the need for widening of surrounding roads and intersections, they inevitably inhibit the movement of pedestrians and cyclists. This has been an ongoing issue for Council in relation to WestConnex – for example, a WestConnex Stage 3B Modification for the 'upgrading' of the intersection at The Crescent and City West Link affected walk/cycle connectivity between North Annandale and the parklands at Rozelle Bay. Fortunately the WHT EIS doesn't propose any specific roadway or intersection changes that would permanently affect active transport connections, but the additional traffic it creates would nonetheless have a negative impact.

It is noted that WHT would not create any substantial new active transport infrastructure in the Inner West Council area. All new active transport infrastructure would be created within council areas north of the harbour in relation to the Warringah Freeway Upgrade. Council supports all efforts from the northside councils to ensure that construction does not unduly affect existing active transport routes and that new and/or upgraded infrastructure is provided upon completion of the project.

Within the Inner West Council area, the main WHT issue in relation to active transport is to ensure that construction traffic doesn't compromise safety for pedestrians and cyclists, and walk/cycle routes are not severed or unduly diverted. Council's concerns here are based on its experience with all three stages of WestConnex.

Walk/cycle safety should be addressed in detail in WHT construction management plans. For example, measures to avoid queuing of vehicles into construction sites and provide traffic controllers wherever vehicles entering/exiting construction sites cross footpaths or shared walk/cycle paths should be implemented. Contractors should be encouraged use heavy vehicles with cabin designs that allow a high degree of visibility of the surrounding road environment. The main location-specific concern is with the Victoria Road construction site - due to the sheer number of heavy vehicles (mostly spoil haulage trucks) crossing the Victoria Road shared path as they enter and exit at two driveways. It is essential that traffic controllers are permanently located at both driveways during all periods of operation of this site.

Impacts like this from WHT are in addition to the already significant impacts on walk/cycle routes along Victoria Road resulting from WestConnex Stage 3B construction. Because of these two projects, the entire shared path along the western side of Victoria Road between Darling Street and the Iron Cove Bridge would be dominated by motorway construction sites. Council notes that since the second Iron Cove bridge opened, walk/cycle traffic along the western side of Victoria Road has increased – highlighting the fact that many pedestrians and cyclists will be affected. Excessively long diversions (even if temporary) should be avoided.

OPERATIONAL AIR QUALITY IMPACTS

Air pollution has been an issue that has been a particular concern of the community through its experience with WestConnex. Council notes it has also become an issue for councils and communities north of the harbour affected by the Warringah Freeway Upgrade. As discussed elsewhere in this submission, Council's main issue in relation to the operational impacts of motorways is traffic growth, which can negate some of the benefits of technologyrelated decreases in vehicle emissions.

Council has opposed unfiltered emissions from ventilation facilities, noting that that the three unfiltered stacks within the RRY site will serve both WestConnex Stage 3B and the WHT. As air pollution at any level has a negative impact on health, Council continues to argue for filtration. Council is also concerned about the visual impact of the vent stacks.

Though the WHT EIS claims that vent facility emissions will add little to existing pollution levels, Council continues to object to the absence of stack and in-tunnel filtration, an arrangement that is not world's best practice. It supports the Recommendation 13 from the 2018 Parliamentary Inquiry into WestConnex: "*That the NSW Government install, on all current and future motorway tunnels, filtration systems in order to reduce the level of pollutants emitted from ventilation stacks.*"

Council notes from the WHT EIS that independent experts from the NSW Advisory Committee on Tunnel Air Quality reviewed the methodology of the EIS's air quality assessment and concluded that it is sound and represents best practice. The EIS also states that due to technology improvements, emissions from vehicles will further decline over the next 20 years, whether or not the tunnels are built. Emissions are slightly higher for the *"with tunnels"* scenario because WestConnex and WHT are expected to increase the distances people travel in cars and trucks. Council would prefer that the technology-related decreases in emissions were maximised.

The redistribution of traffic and emissions through ventilation stacks is predicted to cause changes in ground-level air pollution concentrations. It is of some concern to Council that the WHT EIS shows small increases in emissions where local surface feeder roads experience higher traffic volumes. Though the EIS predicts that the contribution of vent stack emissions is negligible compared to background emissions, it has not assessed the degree to which replacing WHT with public transport alternatives could further reduce emissions.

During construction there is potential for diesel, dust and odour emissions, with the possibility that dust could be contaminated. The WHT EIS states that Environmental Management Plans (EMPs) will be implemented to manage those risks. However from the experience of residents affected by WestConnex, the impact of prolonged dust and odour exposure has a significant impact on the health of local residents even with environmental management measures in place.

Parents associated with Rozelle Primary School are already concerned about construction air quality impacts on their children from the Westconnex Iron Cove construction site on Victoria Road. WHT would add to construction emissions from the activities at the former Balmain Leagues Club site. Emissions would include diesel particulates from heavy vehicles and dust from spoil handling.

IMPACTS ON HEALTH

Council has insisted that the significant construction and operational impacts the community has felt from WestConnex not be extended to other parts of the Council area by the WHT. It is acknowledged that the WHT EIS has assessed the cumulative health and other impacts of WHT combined with WestConnex, Sydney Metro West and other major projects in the Rozelle area. It would appear however that the EIS has underestimated these cumulative health impacts.

Council's concerns about health impacts from large motorway projects is from the lived experience of Haberfield-Ashfield and St Peters residents affected by WestConnex Stages 1 and 2 from 2016 to date, and more recently from residents affected by WestConnex Stages 3A & 3B from 2019 to date. Some residents have suffered obvious ill-health from incessant noise, dust emissions and sleep deprivation caused by night works.

In commenting on the WestConnex Stage 3 EIS, Council had demanded that all work on inner-urban motorways cease while the NSW Government undertakes a health study on the impacts WestConnex has had on residents of Haberfield, Ashfield and St Peters to date. This demand should now be extended to residents affected by WestConnex Stages 3A & 3B and WHT. Council believes valuable lessons need to be learned about these health impacts and how to protect residents from them. Whilst the WHT EIS has assessed all key health impacts, some of the conclusions from this assessment are in Council's view an underestimation of what will likely be experienced once construction of WHT is underway.

BIODIVERSITY IMPACTS

Council's Urban Forest & Ecology team had assessed the 2020 WHT EIS and had raised the following issues, highlighting the need for minimisation and careful management of biodiversity impacts:

- identify and assess impacts on Council's ecological restoration areas in the area
- all vegetation removed by the project to be re-established within 12-months of completion and maintained
- tree removal and trimming to be undertaken by suitably qualified professionals
- removed trees to be replaced by mature plants in a 2:1 ratio
- need for improved mapping of native plants in Yurulbin Reserve
- minimise impacts on seagrass habitats between Yurulbin Reserve and the Sydney Harbour South cofferdam

- offsets to include ecological restoration, such as recreation of saltmarsh areas at Yurulbin Point
- consider potential loss and light spill impacts on bat roosting areas
- need for monitoring of impacts on all bat habitats as construction proceeds
- consider all night-work impacts on sensitive habitats
- in addition to meeting ANZECC standards, water quality should meet standards set by the Sydney Harbour Water Quality Improvement Plan
- include water-sensitive urban design (WSUD) elements in permanent water treatment systems.

REFERENCES

- Freewater P & Kelly R (2015) *Sydney Harbour Water Quality Improvement Plan*, Published by the Local Land Services
- Inner West Council (2017) Submission on WestConnex Stage 3 (M4-M5 Link) EIS
- Inner West Council (2018) Submission to the NSW Parliamentary Inquiry into WestConnex Inquiry Submission No.379, available <u>here</u>
- Inner West Council (2018) *Submission on the Western Harbour Tunnel Reference Design,* available <u>here</u>
- Inner West Council (2018) WestConnex Local Area Improvement Strategy (LAIS)
- Inner West Council (2019) Development Control Plan (DCP) for former Balmain Leagues Club site, Rozelle
- Inner West Council (2020) *Submission on the Western Harbour Tunnel Environmental Impact Statement*, available <u>here</u>
- SGS Economics & Planning (2016) *WestConnex Business Case Review*, for former Leichhardt Council & City of Sydney
- TfNSW (2018) Reference Design for Western Harbour Tunnel & Warringah Freeway Upgrade
- TfNSW (2020) Environmental Impact Statement for Western Harbour Tunnel & Warringah Freeway Upgrade
- TfNSW (2020) Response to Submissions Report for Western Harbour Tunnel & Warringah Freeway Upgrade
- TfNSW (2014) Advisory Committee on Tunnel Air Quality TP09: Evolution of road tunnels in Sydney
- Urban Growth NSW (2016) Parramatta Road Urban Transformation Strategy
- Woolcock Institute of Medical Research Centre for Air Quality and Health Research & Evaluation (2015) *Review of the health impacts of emission sources, types and levels of particulate matter air pollution in ambient air in NSW for Environment Protection Authority (EPA)*

APPENDIX: Community comments received by Council

A draft of this submission was posted on Council's public website with a call for comments from the community. In response, Council received two e-mails from Inner West Council residents. These are copied below without personal details.

Community comment 1

"With respect to the impact of construction of the Western Harbour Tunnel (WHT) on the impact on the environment, including marine ecosystems (Inquiry Term of Reference j) the WHT EIS did not sufficiently consider the impacts to the natural resource assets of Sydney Harbour (MEMA 2014).

The proponents did not sufficiently consider the damage that will be caused by resuspension and redistribution of contaminated sediments and toxicants dissolved in the water on marine flora and fauna. The Contaminants Report (Golder-Douglas 2017) with data on the chemicals and heavy metals in the sediment (e.g. dioxins, heavy metals, organic chemicals) which are persistent in the environment was commercial in confidence. This report was not released until after the public submission period was closed. Thus, the project was not subject to the appropriate levels of transparency that would be expected by a project delivered by a public sector body (Inquiry Term of Reference i).

The Golder-Douglas Report shows the mixture of contaminants in the sediments including many banned chemicals that are harmful to humans and the marine environment. Sediments on the east and west ends of the tunnel corridor (WHT5, WHT6), where the cofferdams will be constructed, include highly contaminated samples. Among the highest levels of toxicants (TBT, dioxins, arsenic, mercury) were recorded in the sediments of the Berrys Bay WHT construction support site, as detailed in the Sydney Morning Herald article (<u>https://www.smh.com.au/national/nsw/harbour-sludge-to-be-dug-up-for-new-tunnel-contains-alarming-levels-of-toxins-20210212-p5721z.html</u>). Construction activities that will be carried out in the harbour including dredging, piling, vessel movements and construction of support sites have high potential to disturb contaminated sediments.

The risk of dredging contaminated sediments as a specific impact was not included in the Environmental Risk Analysis (Appendix A) of the EIS. This analysis did not include the impacts of remobilisation and redistribution of toxic chemicals and heavy metals into the marine environment. It also did not identify the impact of these toxicants on flora and fauna which includes death and on human health which includes carcinogenic effects. The Revised Environmental Measures (Part D) does not include management measures to address the risk of environmental poisoning.

There are no management measures to monitor the redistribution of chemicals in the waters of Sydney Harbour. For community assurance this would have to be done in real time with immediate reporting. Measures to contain sediment plumes with shallow silt curtains and track movement of the sediment are not convincing nor is the quantitative assessment of the loss of sediment in the EIS.

It is clear that the Environmental Risk Analysis and Revised Environmental Measures are not complete and should be revisited.

MEMA 2014 The Marine Estate Management Authority Sydney Harbour Background Report."

Community comment 2

"Thank you for the opportunity to comment on the draft briefing memo, which addresses the principal with construction of the WHT, particularly at Yurulbin Point.

My concerns with the WHT project have been focussed primarily on the environmental impact of installation of the Immersed Tube Tunnel that requires an excavation of sediments

and sandstone extending from Yurulbin Point to Waverton, a distance of approximately 750 metres.

In my opinion, Council should also express concern and/or require responses to the following issues:

1. The excavated tunnel in sandstone bedrock near the northern end of Louisa Road will be at shallow depths beneath houses. Foundations of all houses in this region are on sandstone bedrock and it is expected that vibration and noise due to removal of sandstone will be transmitted readily with the risk that adverse effects are expected to the condition of houses and to the amenity of occupants.

It is expected that the impact to houses in Louisa Road from tunnelling operations will be more extreme than reported in the WestConnex project in locations where clay soils are developed over shale bedrock that overlies the sandstone in which tunnelling is carried out.

Council should insist that dilapidation surveys be conducted of all houses in Louisa Road and that the cost for this be borne by TfNSW and that TfNSW and/or the contractor should bear the cost of rectification measures.

2. As I understand the situation (not made clear by TfNSW in the EIS or in the subsequent Submissions Report), within the proposed corridor of the Immersed Tube Tunnel, sandstone bedrock is present at shallow water depths adjacent to Yurulbin Point. This situation will require removal of sandstone bedrock within the corridor of the Immersed Tube Tunnel so the land portion of the tunnel is at the same elevation as the Immersed Tube Tunnel.

Council should require details of how the sandstone will be removed within the corridor of the Immersed Tube Tunnel near Yurulbin Point, whether by hydraulic hammering or by blasting.

It is expected that removal of sandstone in this area will be carried out within a coffer dam, and within an acoustic shed. Vibration will not be impeded by this structure, but noise will be reduced.

3. Council should also express concern at the unquantified risk posed to the marine environment during dredging of almost 1 million cubic metres of contaminated and uncontaminated sediments within the corridor of the Immersed Tube Tunnel and the "loss" of more than 17,000 cubic metres of sediment to the waters of Iron Cove and Snails Bay and subsequent wider dispersion to waters of Sydney Harbour which poses: an unquantified risk to the marine ecosystem, including fish, crustaceans and sea grass; and loss of amenity of these waters to the community.

In the fast flowing tidal currents experienced at Yurulbin Point ('Yurulbin' has the meaning in the language of indigenous people as 'fast flowing water'), it is expected that sediments dislodged at the seafloor during dredging will be swept away by the currents, both into Snails Bay and in to Iron Cove.

Council should express concern of the effectiveness of the method proposed to contain finegrained contaminated and uncontaminated sediments released during dredging employing a floating silt curtain extending from 2 to 3 metres from the water surface when the water depth ranges from 11 to 15 metres and where disturbance of sediments occurs at the seafloor.

Please contact me if you need further information.

I propose to make a submission, including matters referred to above, to the NSW Parliament Upper House Enquiry relating to the WHT that is scheduled to commence on 18 June."