

# North-South Corridor Program Torrens to Darlington Community Reference Group Meeting Notes of Discussion

Reference Group:	Torrens to Darlington Community & Business Reference Group (Northern Tunnel)
Meeting No:	8
Date:	Thursday, 21 October 2021
Time:	6:30PM – 8:30PM
Location:	West Adelaide Football Club, 57 Milner Road Richmond

<b>T2D Staff</b>	
Mark Douglas	Facilitator
Malcolm Short (MS)	North-South Corridor Program Delivery Office; Director Engineering, DIT
Steve Sibonis	North-South Corridor Program Delivery Office; DIT
Nancie-Lee Robinson	North-South Corridor Program Delivery Office; DIT
Nicole Walsh	North-South Corridor Program Delivery Office; DIT
<b>Business Attendees</b>	
	<b>Position</b>
Sue Curran	City of West Torrens
James Franzon	Hilton Hotel
Ron Goldfinch	Safe Fire Electrical
Evan Knapp	SA Freight Council
George Mocatta	Railway Terrace Development
Charles Mountain	RAA
Arthur Patiniotis	State Surveys
Kym Wundersitz	City of Charles Sturt
Jeff Faust	Totally Workwear
<b>Community Attendees</b>	
	<b>Position</b>
Tom Bastians	Local Resident
Catherine Cashen	Local Resident / SRIWAG Representative
Peter Del Fante	Local Resident
Mandy Doolan	Local Resident / SRIWAG Representative
Alex Filipatos	Local Resident
Suzy Hill	Save the Thebby Group
David Marshall	Local Resident / Local Business Owner
Cr Graham Nitschke	Elected Member – City of West Torrens
Ian Pilkington	Local Resident (online)
Joanne Reid	Local Resident
<b>Apologies</b>	
Sibylle Taylor	Local Resident (no longer a member)
Cr Paul Alexandrides	Elected Member – City of Charles Sturt
Greg Mander	Brickworks Marketplace (no longer a member)
Ron Goldfinch	Safe Fire Electrical
Shane Wingard	Renewal SA

## 1. Opening Formalities

### 1.1. Welcome and Apologies

Agenda items and introductions

The Department has been contacting Stage 1 New Neighbours in the Glandore area and the Departments' Property team have been in contact with 90% of acquired property owners. This evening we will be talking through the Stage 1 Glandore Design.

### 1.2. Work Health and Safety

- Nil

## 2. Items for Discussion

### 2.1. Previous meeting actions / Notes of Discussion

- Two members advised that they did not receive a copy of the Notes of Discussion.
- Nil comments on the Notes of Discussion for the Northern Community and Business groups - accepted as a record.

### 2.2. Ventilation Structures

- A diagram was shown (see presentation) to explain how the system works including: Vehicle piston effect, ventilation fans and their purpose and extraction of tunnel air using fans and ventilation structures
  - The jet fans will be similar to those used in the Heysen Tunnel.
  - There will be additional fans in the exit portal which are three and half metres in diameter.
  - The ventilation structures are designed according to the length of the tunnel and dispersed into the wider atmosphere.
  - Ventilation fans extract air from the tunnel.
  - There is lots of air flow in the tunnel.
  - The ventilation station will be located near the exit portal.
  - All equipment in the tunnels is driven by electricity – Australia is considering sustainability in tunnels to reduce electricity use.
  - *Why is the extraction system not located in the middle of the tunnel?*
    - Vehicles will push the air through the tunnel, it is not efficient to place the structure in the middle of the tunnel, we don't want to pull air back against traffic. There is a pair of tunnels in Sydney where there is a single extraction point in the middle of the tunnel and the air moves back against traffic flow - it has not been efficient and has since been changed.
  - *Where the ventilation is located, does that mean you get a high concentration of pollution in that section?*
    - No.
  - *Is the existing level of pollution studied and considered in the design?*
    - Yes we use this data to ensure we do not exceed EPA requirements.
  - *Are we reducing the current amount of pollution in the area?*
    - After the tunnels are built the air quality near the portals will be better.
  - *Is the air filtered?*
    - No its not filtered
  - *Have air filters been considered?*
    - There was a trial in Sydney which was not successful.
    - No tunnels in the world have filtration for air quality.
    - There are some filters that are used to remove pollutants from trucks because they reduce visibility (electrostatic precipitators) – these use a lot of electricity.
  - *What does the ventilation structure look like?*
    - We are working through this in the design, example images of ventilation structures were shown to the group (see presentation).

- *Working to the standard of the current air quality situation is not ok with the community. Expectation is for a distinct and measurable improvement.*
  - Pollutants emitted by vehicles have improved over the years.
  - The adoption of Euro 6 is being considered in Australia, as in other parts in the world.
  - Use of electric vehicles, as they come into the market, will reduce the emissions.
  - However we can't do anything about the number of cars on the roads overall
  - From a tunnel point of view, we will measure before and after. It will be designed to have a negligible impact. In modelling, we assume the air quality includes all the vehicles/peak. We adopt a conservative position on this modelling.
- *Is electricity drawn from the grid or the substation?*
  - From specific substations. Tunnels are considered critical infrastructure so there will be fail-safe supplies.
- *Cars stopping and starting, using brake pads, increases pollution*
  - The Project will reduce traffic on South Road.
- *How are the pollutants dispersed?*
  - This happens naturally. We look at the volume of air that needs to be extracted and the height of the structure. Vent structures will be more modest than others in Australia - some are 45 metres, we are looking at 15 meters in height.
- *How many ventilation outlets will there be?*
  - One at exit portal of each tunnel. Four in total.
- *Will the structures be right at the end of the tunnel?*
  - They will be 15 – 100m back from the tunnel
- *Will the ventilation be noisy to local residents?*
  - Inside the ventilation station it will be noisy, however there will be significant noise attenuation.
- *If weather conditions are different does this change dispersion?*
  - In Adelaide we have pollution from bushfires – this has more impact than from ventilation structures and traffic.
- *The tunnels are going to be surrounded by businesses rather than vegetation.*
  - We are mindful of the urban environment we are working in and will design accordingly.
- Success in other states – experienced little to no emissions. Undertake air quality monitoring prior and on regular basis

### Traffic modelling

- *The lanes are planned for 2040? Is there redundancy built in for future growth?*
  - The motorway will be built for 10 years' from opening. It is not possible to model for further out, we don't know what might happen between now and then. We cannot model this at the moment. We this is a standard for major road projects.

### 2.3. Northern portal of the southern tunnel

The Director Engineering, talked the group through the map of the norther portal of the southern tunnel and road alignment.

#### Questions

- *Are there four lanes from the on/off ramp merging into three lanes?*
  - It's two lanes coming out of the tunnel to surface and two lanes in the motorway.
- *What is the depth of the tunnel?*
  - 50 metres below surface and the deepest point is at Castle Plaza
  - 10 – 13 metres below ground coming out of tunnel
- *How many lanes will the Gallipoli underpass have?*

- It will change to three lanes.
- *What width will the lanes be?*
  - 3.3m
- *Will the elevated ramp impact on houses?*
  - No property acquisition for ramp structure however some trees will need to be removed.
- *Regarding access to airport, do you have to come up to surface road? You can't stay on lowered motorway?*
  - That is correct you have to come up on to the surface road.
- *There will be more sets of lights?*
  - Impact on the performance of Anzac Highway? The motorway takes away traffic from Marion Road improves Anzac Highway coming from Marion, however slight increase in traffic in city bound Anzac Highway but still performs well.
- *The design is a bit confusing, reminds me of Darlington with all the turns off. Splits into four lanes, it will be very confusing. If you get on the wrong lane you are stuck on the motorway.*
  - There will be lots of signage in the tunnel, on the surface of the road and on ceiling of the tunnel. It is a complex interchange.
- Signage at Darlington needs more detail, destination on the sign could be better. Feedback why not have signage at traffic lights. Let's get it right and learn from Darlington.
- What is the length of the ramp that is starting to elevate out?
  - 200 - 250 metres up the elevated ramp.

#### Group activity comments

- Opposite school above the tunnels should be playing fields and trees.
- There is no safe crossing over open cut between Nottingham Crescent to Anzac Highway.
- The map is confusing and reminds me of Darlington with all the exits and it's very unforgiving, need better signage and information.

#### Design feedback

- Positive feedback - good design outcome for the primary school, better access to the school and less traffic around the school.
- Concerns for the northern tunnel. Green space on the cut cover for the school would be great. There is no access from west to east.
  - The Department have been working on connectivity studies, working hard to make sure we have enough connectivity across the motorway.
- Need to consider changes to the drop off point located at Pleasant Avenue and the pedestrian and cycling crossing. Younger children will not be able to walk across on their own and what happens if it rains.
- If this design is going to be the same for the northern tunnel there will be no access to the Brickworks, it would slice the community and there would be no access to the Thebarton Oval.
- Access to the airport getting off in the tunnel? No north bound exit at Sir Donald Bradman Drive or Richmond Road.
- Overpass – do something snazzy along the bike lanes. Build wide paths for the cyclists and separate paths from pedestrians is crucial.
  - We are working to improve connectivity for cyclists, there are opportunities to put in additional bike paths.
- More access is required from Grange to Anzac Highway, need access in the middle between Sir Donald Bradman Drive and Richmond Road.
  - You will be able to exit into Richmond Road from the north. We cannot provide connectivity to every crossing road, it creates issues on how the motorway works.
- Concerns on how to travel to the airport. How do you get to the airport using the motorway?
  - Traffic Information Management Signs (TIMS) will say for example heading to the airport use the left lane, airport logos on the road, green and white signs to identify airport access.

#### 2.4. Wrap up

- Concerned about two stage project how we can learn lessons, will we miss an opportunity for the northern section.
- Will a contract be awarded for the entire project or the two halves?
  - We cannot build the entire project at once. There will be two or three contractors for the entire project. The tendering process is a complex process which will take 12 months and construction contractor will be awarded in the second half of 2023. Construction works will commence end of 2023.
- What happens if there is a change in government, opposition to the design? How locked are we?
- And making changes from the southern component?
  - We are designing the entire project. The entire reference design will be on public display in December.
- Project access report process – environmental, traffic, and cultural heritage, noise vibration all get studied and assessed. This will be available for public consultation next year.
  - Some components cannot change on this project but certainly there are things we can consider.
- We are doing two most difficult parts, we can't change where the tunnel goes around the river so why do we need to lock this in now? Can we change this type of detail?
  - We cannot promise we can change this, but it is a good idea to get involved in the project assessment report
- Luigi Rossi has said that we can build under the River Torrens, can it be done?
  - It is extremely difficult to build under the River Torrens, a key component is the connectivity in to Grange Road and this is very difficult.
- Can we have a visual to show why it is so difficult to tunnel under the Torrens?
- The cut and cover section will leave a massive scar on our neighbourhood. The community are asking why can't the tunnels go under the Torrens.
  - Cost of the project it would be more costly to go under the Torrens, this is one of the factors and it is geometrically very difficult also.
- Why is the sky road that Luigi Rossi has proposed not an option? There would be less land acquisition.
  - This would result in having to acquire land under the sky road.
- When will the reference group meetings stop?
  - At the next meeting we will discuss this.
- Will there be a chance for the community to provide input into the city shaping.
  - Once you see the full reference design you will be able to provide better input. In the coming months we will be holding road shows, pops up for broader community.
- Who sets the maximum gradients? What is the tolerance? Can we have a steep gradient around the Torrens River?
  - We need to meet all the requirements.
- We are restricted in how much information we can input into the project. Why isn't our view as important as the issue with the topography? We want this dialogue to partake in this.
  - We are trying to give you information where we can, this process is a bit of drip feed, we do value your input, some parameters are set by government. You will have the opportunity to put your view forward as part of the project assessment report.
  - We have looked at a number of options for northern tunnel portal. I encourage you to put forward your feedback.
- 1.5 – 2 km is a very short tunnel? Given the expense in using the tunnel boring machines why can't the machines be used longer and come up at James Congdon Drive, there are large parcels of land that could be utilised.
  - The northern tunnel is 2.3km. Agree the tunnel boring machine is not cheap, the overall project is not cheap, but in the scheme of things the TBM is a minor part of cost to the project.

**2.5. Next meeting**

The next meetings are scheduled for early November.

**ACTION** Can we have a visual to show why it is so difficult to tunnel under the Torrens?