Name: John Leonard

Content: Dear Planning NSW,

St Peters/Erskineville is a growing area which is currently serviced by a reliable and frequent train service.

The reports of these two stations being downgraded to a frequency level of half of what is currently there (down to every half hour in off peak) is absolutely ludicrous to say the least when there are thousands more residents moving in to the area every year.

I support the metro project and can see the benefit of another metro station in the St Peters/Erskineville area in addition to the train stations there currently as I know there is community support for public transport here.

The metro is a fantastic idea and it is something that Sydney needs, however, it should never come with a condition of downgrading the services to our suburbs, where residents like ourselves, who don't own a vehicle, have purposefully moved into an area where there is a frequent and reliable service.

Why can't St Peters and Erskineville become metro stations as well? Why would an area which is growing so rapidly with apartments with no car parking be downgraded?

I myself have a heart condition where if my defibrillator goes off, I can't drive for 6 months, public transport for people like me is REALLY important. Public transport for people who care about the environment enough to shun a private vehicle is also really important.

Residents in areas like St Peters and Erskineville have bought their properties on the understanding that a reliable and frequent public transport system goes through there, to have that downgraded not only has a hugely negative impact on their lives, it also makes their property less valuable.

We have had a freeway planned for our area which will destroy the feel of the area, no one wants it, no one here needs it. Please don't destroy the area even more with less trains.

We need more public transport, not less.

Thank you,

Regards,

John Andrew (Andy) Leonard

Content:

I urge you to approve additional stations at Alexandria and St Peters.

Please consider the following points.

- Current area transport is inadequate

- Urban Growth agenda projects massive population increases

Alexandria Metro provides for the DOUBLING of the area's population AND alleviates pressure on Erskineville station overcrowding

- Metro Alexandria would reduce road network grid lock (60,000 cars added via Westconnex, 1,600 cars from ATP, new Alex High Super School, 2,200 students, Ashmore Estate 8,000 new residents etc etc)

- Metro St Peters would provide rail to bus interchange location to 'connect Metro systemically' to surface public transport

The addition of extra Metro stations will deliver lasting value, enabling an entirely reconfigured, future oriented and progressively improving district. It would deliver a mass-transit 'spine' integration all public transport with cross-town interconnectivity from distant residential areas to high job-growth areas (Green Square and the Global Economic Corridor).

I urge you to provide added Metro stations at Alexandria and St Peters and integrate the inner-city suburbs into the Metro plan.

Content:

While supporting the overall project

I would strongly object to the spoil(dirt) & back filling from the hole for the cutter be taken out by Blues point road. Blues point rd is the only road in and out of mcmahons pt.

it is congested particularly in peak hour. It is a local restaurant and shopping strip so has high pedestrian traffic. Secondly it leads to north sydney (pacific hwy) which has a history the highest pedestrian accidents in NSW.

There are in the order of 8 schools and 4 preschools in the area plus childcare facilities.

There is also the noise factor of he trucks going uphill to north sydney. The very purpose of the Sydney metro project is to reduce road traffic.

There is an alternative to road readily available being the wharf facilitiy at the end of Blues point rd.

Content:

Please provide an additional station to service the Alexandria area. The suburb is currently growing rapidly residentially and this process will continue. Current public transport is inadequate for current need. New residents will require additional transport. As the rail line currently tunnels under the Alexandria area, please add a station to the current plans for use of the local community.

Name: Colin George

Erskineville, NSW 2043

Content:

Please see the attached file, detailing my objection on the grounds that additional metro stations should be added between Sydenham and Waterloo, namely at Alexandria (McEvoy/Maddox St).

24 June 2016

Dear Sir/ Madam

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest Chatswood to Sydenham).

I object to this proposal on the grounds of inadequate provisioning of stations on the Central to Sydenham corridor. The current provision of one station (Waterloo) reflects an inadequate, incomplete and out of date modelling of population growth, urban development, transport and traffic in the inner-city.

In particular, the Metro project makes no reference to the impact of Westconnex on inner-city traffic and transport. The Metro EIS and station location selection process does not reference the potential for additional Metro stations to increase inner-city public transport use and reduce car use. There is no comprehensive model of the potential of additional stations to off-set the multiple challenges to the inner-city traffic and transport network resulting from population growth and local major projects.

In addition, the modelling for the Waterloo line alignment did not identify the viability of a station located in Alexandria on Euston road. A supporting rationale for this additional station location is presented below as Option 1 in Section 2: Proposal for additional station options.

Furthermore, a number of recent major, inner-city infrastructure announcements have been made since the modelling to decide Metro station locations. In themselves they are significant enough to require a reconsideration of station locations and transport servicing for the inner-city.

These are described in the sub-section 'Recently announced projects'.

Finally, the Community Consultation Process should be extended to allow more time for substantive community engagement around integrated transport provisioning for the inner-city.

Details follow below to support my objection. In response I hope for and expect

- a nuanced and detailed response
- an announcement that the provision of additional Metro stations on the Waterloo to Sydenham corridor is being urgently undertaken
- an extended and meaningful community consultation will be undertaken with the residents of Alexandria, Erskineville and St Peters.

Please give my detailed objection your close, meaningful and unbiased scrutiny.

Yours sincerely

Al.

Colin George

Background to this objection

Recently announced projects

The current Metro station selection process was undertaken before several major infrastructure decisions were announced. These decisions significantly bear on the transport requirements of the inner-city and therefore should be factored into any decisions on rail services. They decisions include:

- ATP Commonwealth Bank decision (11,000 staff and 1,600 cars). SMH Nov 12, 2015
- Waterloo Housing Estate redevelopment (20, 000 + residents and associated increased car use). Announced Dec 17, 2015
- Alexandria Park Super School (2,200 students and associated increased car use). Announced May 14, 2016
- Green Square population increase forecast (60,000 + and associated increased car use (1)) SMH Oct 17, 2015
- Westconnex Euston / McEvoy Road (60,000 + cars daily). Announced Sep 2, 2015, SMH

The ATP, Alexandria Park School and Westconnex projects all add significant traffic to roads that service Alexandria, Erskineville, Waterloo and St Peters. (See Westconnex and traffic modelling)

The Waterloo Estate redevelopment (20,000 + residents) AND the upward revision of the Green Square future population projection (60,000 + residents), means that the impact of a beneficial 'transport / traffic offset' has not been adequately modelled.

A central argument of this objection is that providing more Metro stations will reduce inner-city carownership and car use. As the station provision decisions were based on out of date information and for the reasons provided above, the Metro station and transport service provision for the Waterloo – Sydenham section requires immediate revision.

Population growth and transport modelling

The Metro station location process has not correctly modelled future population growth in innerring suburbs. By extension, the transport capacity requirements for an expanded population and the resulting positive contribution of providing multiple Metro stations to mitigate traffic grid-lock and transport system breakdown has also not been adequately modelled.

The district populations are growing at a much faster pace that previous census data and recent planning predictions. The inner-city is becoming a 'hyper-dense' population area, while being under-serviced for future oriented, high-capacity mass-transit systems.

- Numerous new 'boutique' apartment developments in area
- City to Eveleigh (20,000 + residents proposed)
- Waterloo Housing Estate redevelopment (20, 000 + residents)
- Green Square population increase forecast (60,000 + and associated increased car use)

It is very likely that the population and patronage forecasts in earlier modelling are now inaccurate and need to be updated. For this reason alone, the Metro station location provisions should be reevaluated.

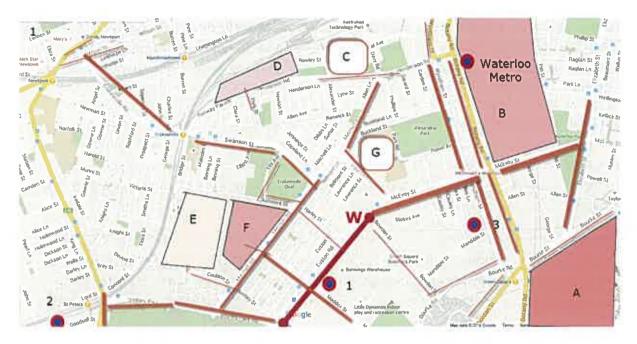


Figure 1: Planned urban development, traffic visualisation and station location options Note: the thickness of the red lines above represents the likely spill patterns of the Westconnex traffic 'dispersal' through the inner-city road network.

Major projects:

- A Green Square (60,000 + residents)
- B Waterloo redevelopment (20,000 residents)
- C ATP Commonwealth bank (11,000 employees, 1,600 cars)
- D City to Eveleigh South West, (2,000 residents approx.)
- E Ashmore Estate Eve, Casa, Erko etc (2,000 residents)
- F Ashmore Estate Golden Horn (main development, 6,000 residents)
- G Alexandria High Super School (2,200 students, many out of area, selective stream)
- W Westconnex (60,000 cars daily on Euston Road, Alexandria)

Station Options

- 1 Alexandria station
- 2 St Peters station
- **3 McEvoy station**

Westconnex and traffic modelling

The Metro EIS does not model any relationship between the Metro (Waterloo to Sydenham) and Westconnex, despite the Metro Project intersecting with Westconnex near McEvoy / Euston Road, Alexandria. That Australia's two largest transport infrastructure projects make no reference to cross impacts indicates a failure to adequately connect transport planning.

Further, the Metro EIS provides no modelling of additional Metro stations (Alexandria and St Peters) ability to reduce cross-town car use (through intra-city connectivity to the growth corridor) OR offset the local impact of Westconnex traffic by reducing local car use through improved mass transport capacity.

Value Creation and preservation of health and amenity.

The Metro station location process has provided an inadequate model for future value creation and preservation of health and amenity of inner city neighbourhoods and residents. An integrated public transport network will provide the most cost-effective, appropriate and efficient services for urban growth.

Failure to integrate comprehensive, well-integrated, large-scale transport solutions will destroy the inherent value proposition of the inner-city. Without a significant expansion of public transport, major detrimental impacts from spiralling traffic congestion and car-use can be expected to negatively impact mobility(for locals and 'through district' users), local health and general amenity.

Inadequate public consultation

Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville.

The finalised Metro route (passing under Alexandria and St Peters), announced in February 2016, is still poorly understood by the communities being bypassed. Now that the route is finalised a further meaningful and substantial community consultation process should be undertaken to truly gauge the transport needs of these communities.

Revision of station locations (Additional Metro stations)

The Phase 1 station location phase failed to identify a viable Alexandria station at the approximate 'mid-point' of the Waterloo alignment (see Figure 1). This submission proposes and evidences why the provision of an additional station (Alexandria) is a minimal response to better provisioned and better integrated transport systems in the inner-city.

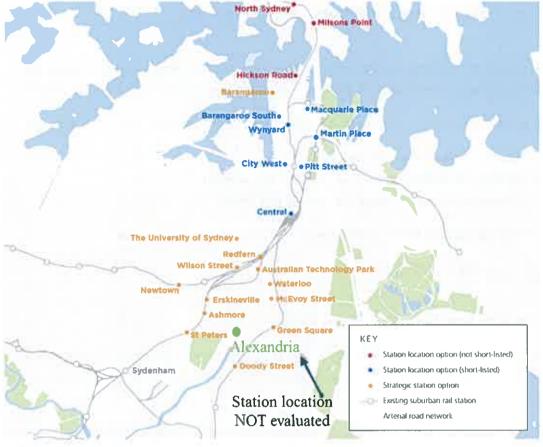


Figure 4.1 Preliminary station location options

Figure 2: Phase 1 did not identify viable station located on the 'mid-point' of the Waterloo -Sydenham alignment

Conclusion

In light of the inadequate traffic and transport capacity modelling I request an immediate review and reconsideration of the provision of additional Metro stations on the Waterloo – Sydenham alignment.

I petition that adding these Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport). They would provide a mass-transit system for the areas' rapidly increasing population, reduce chronic over-crowding on Erskineville station and reduce inner-city car congestion. A holistic analysis of future growth and long-term integrated transport will justify the addition of these stations.

Station cost and the preservation of fast-commute times for outer-suburban residents cannot be simply advanced as reasons to not thoroughly consider more inner-city Metro stations. The stations outlined below will not only provide mass-transit for growing inner-city populations, they will also service outer suburban resident's access to high job growth and service corridors. As such, each station location is likely to provide high-volume bi-directional use patterns, especially in weekly peak periods.

Further detail supporting this objection and the demand for immediate reconsideration for the provision of additional Metro stations for Alexandria, McEvoy and St Peters follows.

Section 2: Proposal for additional station options

In this objection I specifically propose that immediate modelling should be re-conducted on providing additional Metro stations on the waterloo to Sydenham section of the City Metro.

I propose that three options should be considered and immediately re-evaluated. They are:

- Option 1. Alexandria Metro Station
- Option 2. Alexandria station and McEvoy OR St Peters
- Option 3. Alexandria station, McEvoy and St Peters

Supporting evidence for each option follows.

Option 1. Alexandria Metro Station

Location: Euston and Maddox street, Alexandria

This option provides 1 additional Metro station at an approximate mid-point between Waterloo and Sydenham. Performance of this new station location against Metro project Objectives is provided in this section.

Note: This station location is NOT the same as the determinations made on an Ashmore station location, which was situated closer to Erskineville station. It therefore cannot be judged on the outcomes of the Ashmore station performance. In addition, this station location was NOT evaluated on the Metro Alignment Options (See Figures 2 and 3).

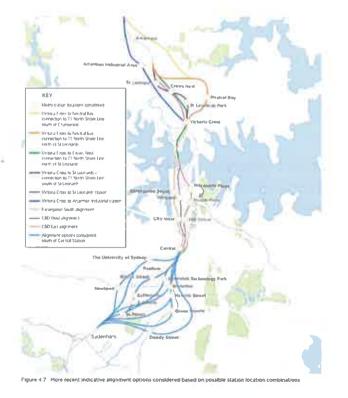


Figure 3: Metro Alignment Options

The Alexandria Metro Station location activates a new 'footprint', growing transport patronage and

network resilience as described below. It is situated at an approximate mid-point on the 4 kilometre 'station gap' between Waterloo and St Peters. Figure 5 shows the proposed Alexandria station location and catchment area.

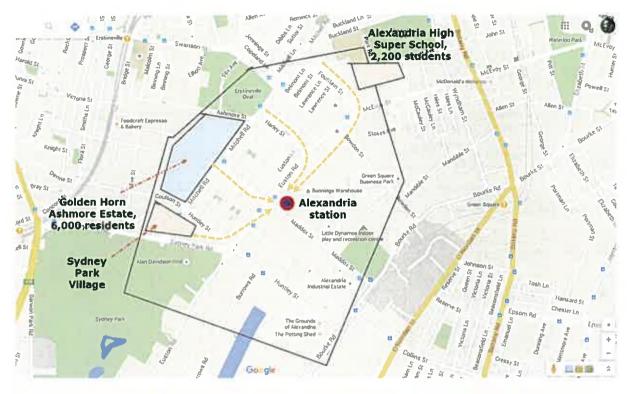


Figure 4: Alexandria Metro Station location and catchment area, (Numbers indicate known near-term population and student growth)

This station option would provide immediate high capacity patronage from the Ashmore Estate / Alexandria growth area. It would improve other train line experiences by drawing peak hour overcrowding off Erskineville station, and positively impact on overall transport network resilience (through traffic reduction). It would provide city wide interconnectivity via current bus route connections and a 10 minute walk to the Green Square / Airport rail corridor.

This station location could support a bus interchange servicing new network routes (e.g. via Maddox street) to circumvent increasing grid-lock incidence. For example, the 370 bus route can currently take between 7 to 10 minutes (3 to 4 red light cycles) to progress from Fountain street to turn right onto Botany road in the morning peak.

This location is well-sited to develop an integrated district plan for walking, cycling and bus routes, providing a public transport oriented network for the City - Green Square – Airport job / population growth corridor.

Alexandria station performance against the Metro Project Objectives

The proposed Alexandria station location is within a few hundred meters of the positively evaluated McEvoy street station location and therefore shares many of the same positive attributes already identified through the Metro projects own initial planning process (See Figure 6).

The location offers the same urban activation profile as was modelled previously for the McEvoy station location. Figures below represent the current and the proposed (revised) Project Objectives matrix for Alexandria Metro station and brief notes follow on each criteria.



Figure 5: Metro station location Alexandria and McEvoy Metro Project Objectives matrix (proposed)

Improve transport experience quality

A station at Alexandria will considerably reduce the peak-hour overcrowding at Erskineville station which is already at 147% over-capacity. Future population growth associated with Ashmore Estate (6,000 residents from 2021) and City- Eveleigh South (2,000 residents +) will overwhelm Erskineville train services and local bus route capacity.

Provide a system to satisfy long-term demand

On this criteria the Alexandria station option should be judged at minimum as 'somewhat or neutrally' aligned as per the previous evaluation of the nearby McEvoy street station option. However, when considered in light of growing population and transport infrastructure pressure (outlined in sub-section 'Transport network resilience' below), this criteria could be considered to 'positively align'.

Grow public transport patronage and mode share

Providing Alexandria and additional Metro stations will mitigate increases in local's car-use and provide train to bus interconnectivity for out of area commuters to growth corridors.

Due to already approved major apartment developments (Ashmore Estate), an Alexandria station would have an immediate and substantial patronage capacity from commencement. The proximity

of high-density development can be seen in Figure 1.



Figure 6: Sydney rail line over-capacity chart, 2014-2015 Source: Sydney Morning Herald (date)

A Metro stop at Alexandria will grow public transport patronage and not cannibalise other stations usage. Erskineville station is already over-capacity. With cessation of Erskineville's service via the T3 Bankstown line, this station will likely move onto the T4 Illawarra line. However, recently published documents (Figure 7) shows that this moves the already over-capacity Erskineville rail patronage onto an even more –crowded line than present. Additional bus services are unlikely to provide timely mass transit options (see sub-section on 'Transport network resilience' below)

This is before the arrival of 6,000 more Erskineville / Alexandria residents. The new residents are predominantly young urban professionals, who choose the inner-city for its proximity to the city and short, public transport oriented commutes. The location of this additional residential concentration is perfectly situated to be a 'new population' feed to a high-capacity station (Alexandria) capable of servicing this increased patronage volume.

Figure 8 below records a minimum of 25% of Erskineville Alexandria residents in 2006 worked in the city. This can be treated as a conservative estimate of likely patronage at Alexandria. In fact, as recent newspaper articles have recounted the acceleration of inner-city resident public transport usage, actual usage by Alexandria Metro station catchment residents to the city would likely exceed 30%.

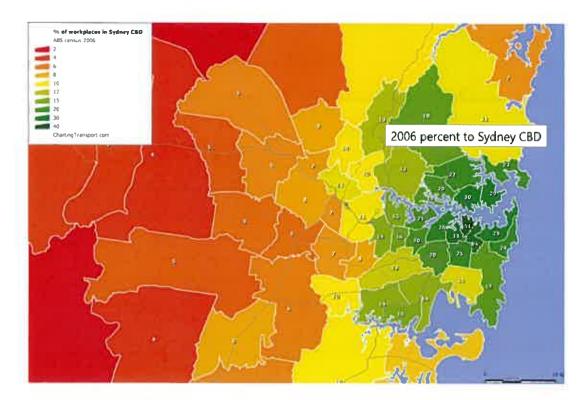


Figure 7: Proportion (percentage) of residents working in city (2006). Source https://chartingtransport.com/category/sydney/

Applying the conservative 25% figure (above) to the 6,000 Golden Horn development population (arriving 2021) to the existing Alexandria population of the Alexandria Station catchment would indicate a minimum 2,000 plus station patronage on each daily peak from commencement of service in 2024.

On this criteria therefore, the Alexandria station option should be judged 'positively aligned' as per the evaluation of the nearby McEvoy street station option.

Support the productivity of the Global Economic Corridor

A station at Alexandria would connect the northern and Bankstown rail lines to the Green Square and Airport via walking and bus access. On this criteria therefore, the Alexandria station option should be judged 'positively aligned' as per the previous evaluation of the nearby McEvoy street station option.

Stimulate urban development

On this criteria the Alexandria station option should be judged 'positively aligned' as per the nearby McEvoy street station option as it shares the same characteristics of brown-field mixed light industrial land use.

Transport network resilience

Provision of more Metro stations diversifies the transport infrastructure of the whole city transport network. Providing one (and preferably more) stations recognises the threats and opportunities of the 'whole of system' interactions of rail, bus, passive and car transportation. Extensive provisioning of public transport through the inner-city will take cars off the road. This has tremendous benefits for local amenity, car and bus trip times, pollution and greenhouse reduction and the preservation of health and amenity. It benefits the wider city as Alexandria has been chosen as the 'through point' to connect the western suburbs with the east and airport corridor as part of Westconnex (Figure 8).



Figure 8: Proximity of Westconnex to approved Metro alignment and proposed Alexandria station

The Metro and Westconnex Projects intersect near Euston Road, Alexandria. The Westconnex Project EIS states that the daily load of Euston Road is predicted to increase from 7,000 cars daily to 60,000 + cars daily. As this increased traffic proceeds north-east it is expected to 'disperse' onto local roads.

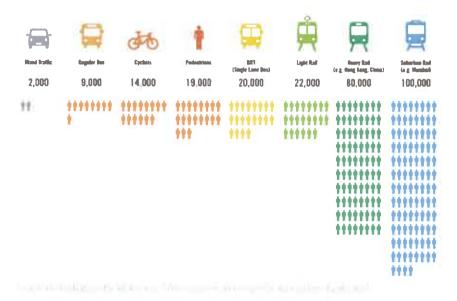
The combination of Westconnex traffic to other district traffic generators has the potential to gridlock the road networks. Major (recently announced) district projects include the State Significant Projects

- Westconnex: 60,000 cars
- ATP: 1,600 cars
- Alexandria High School: 2,200 students

In addition significant increase in car ownership and use can be anticipated with projected populations of up to 100,000 future inner-city residents (on top of the current resident population). This includes:

- City Eveleigh, 20,000
- Waterloo, 20,000 plus
- Ashmore Estate, 6,000 plus (from 2021)
- Green Square 60,000 plus

The combination of Westconnex with current and future population may break down the surface transport system which is currently already near saturation. For this reason increased bus services will not provide the load or speed capacity required for mass-transit of increased future populations and trip numbers. High-capacity transport systems are the solution in areas that have either or both high population and high in / through transport flows.



CARRYING CAPACITY BY MODE (PER HOUR ON 3.5 METRE LANE)

Figure 9: Carrying capacity by Mode (Source United Nations ESCAP, 2013)

The economic cost of traffic congestion is already well documented (Figure 10). The likely destruction of mobility in the population and job growth corridor will have a substantial, ongoing and compounding negative economic impacts for the city and the whole state.

The staggering economic costs of gridlock documented overseas and in Australia clearly outweigh the short-term cost of generous provision of public transport (additional Metro stations) planned to network mobility of whole of city population to and from high population and high job-growth corridors.

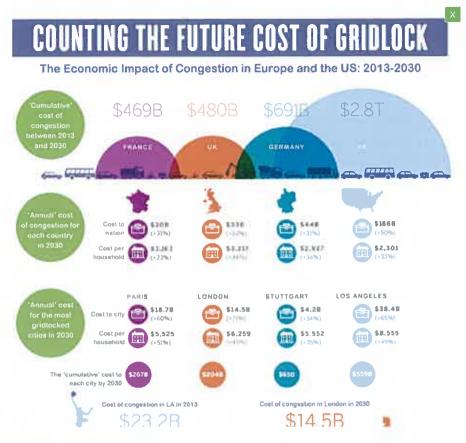


Figure 10: Cost of Gridlock

Therefore, on the 'Network Resilience' criteria the Alexandria station option should be judged 'positively aligned' as per the nearby McEvoy street station option.

Improve the efficiency and cost effectiveness of public transport

On this criteria the Alexandria station option should be at least judged 'somewhat or neutrally' aligned as per the nearby McEvoy street station option.

However, referencing the arguments in the 'Resilience' sub-section above, a thorough and holistic cost-benefit analysis of 'over-providing' public transport infrastructure would likely demonstrate not only the safeguarding of transport network resilience, but also the cost efficiency of additional Metro stations when tied into a comprehensive, long-term inner-city transport plan.

Implement feasible solutions:

On this criteria the Alexandria station option should be judged 'somewhat or neutrally' aligned as per the nearby McEvoy street station option.

Summary:

The Alexandria Metro station option has not been previously evaluated.

The proposed station is located near to new and potential population growth centres. It will diversify and strengthen the rail network and grow the use of public transport. In addition it will reduce area car-use and offset expected traffic transport increases. It will have numerous positive environmental outcomes through reduction of pollution and preservation of local amenity. For these reasons an additional Metro station sited at Alexandria (Euston and Maddox) should be immediately and impartially evaluated for addition to the Waterloo to Sydenham Metro section.

Option 2. Alexandria station and McEvoy OR St Peters

Option 2 proposes 2 additional Metro stations between Waterloo and Sydenham. This option provides greater network integration and increased mass-transit passenger capacity for the public transport system. Details justifying each station location follow below.

In this option, if St Peters is chosen as a second station, Alexandria Metro Station should be moved EAST (to the Euston Road / Harley street intersection). This provides reduced walking time to Green Square station and integrates Alexandria station better with Green Square.

If McEvoy station is chosen as a second station, Alexandria Metro Station should be moved SOUTH -WEST (to near the Sydney park Road / Euston Road intersection). This provides reduced walking time to St Peters and to employment areas around Burrows road and Huntley street.

McEvoy station option

Location: Approximately at McEvoy and Wyndham OR Wyndham and Mandible streets, Alexandria

This option would provide high train network interconnectivity (via a 3 minute walk) to the Green Square station. It would link the Northern and Bankstown lines directly into the Green Square / Airport Economic growth corridor.

It would improve other transport experiences by drawing peak hour patronage off connecting bus routes (e.g. Waterloo passengers transferring to buses to 'hop' to green Square). Thus it would positively impact on passenger transport experience via direct access to Green Square and rail line interchange onto the Airport line (for Bankstown line users). Overall transport network resilience is improved through traffic reduction resulting from better service provision

In addition, the station intersects with existing bus networks which could be expanded in future as part of an integrated district plan for walking, cycling and bus routes, providing a public transport oriented network for the City - Green Square – Airport job / population growth corridor.

The location has already been judged as positively aligned on five of eight criteria in the Metros' own modelling is presented below as Figure 12.

McEvoy Station Plate:

At minimum, serious consideration should be given to boring out station plates to provide for future station fit-outs. This provides for transport planning agility and an 'insurance policy' type approach to expand network interconnectivity rapidly if the road network reaches saturation and mass transit systems require activation.

St Peters station option

Location: Approximately at Goodsell street, St Peters

This option provides high train network and train to bus network interconnectivity to high-use public transport routes. It links Northern, Western and Southern suburbs to the King street corridor

(hospitals, universities and entertainment), bus routes to Green Square, University of New South Wales, Arncliffe and the Airport / job-growth corridor.

The St Peters option preserves the current transport experience of public transport users on the T3 Bankstown line who work in the Burrows street industrial area or interchange at St Peters to northsouth bus services. The removal of St Peters from the Bankstown line forces commuters to interchange at Sydenham, increasing trip times.

This station location could grow total network capacity by integrating to a bus interchange / increased bus routes as part of a district transport plan. While St Peters was considered to be negatively aligned for urban development, low-medium density development could be possible on this site.

St Peters Station Plate:

At minimum, serious consideration should be given to boring out a station plate at St Peters to provide for a future station fit-out. This provides transport planning agility and an 'insurance policy' type approach to expand network interconnectivity on this strategic north- south / east – west transport corridor. This provides a 'safety-net' to rapidly increase the transport network capacity if the road network reaches saturation and mass transit systems require fast activation.

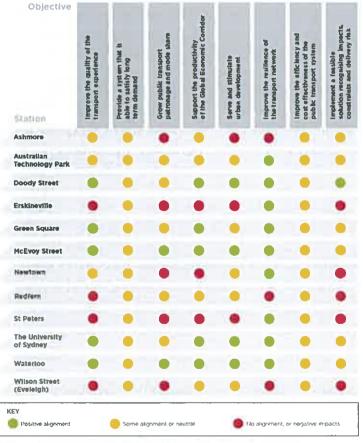


Figure 4.6 Performance of station options between Central and Sydenham against the project objectives

Figure 11: Station option performance (Metro documentation)

Option 3. Alexandria station and McEvoy and St Peters stations

Option 3 (3 additional Metro stations between Waterloo and Sydenham) provides the highest degree of transport network integration. Essentially it future –proofs the inner-city public transport network for this quadrant of the city by integrating high capacity rail with radiating bus / foot and cycling options.

Details justifying each station location have been provided above. The advantage of Option 3 is in the positive long-term transport network integration outcomes. Creating a well-provisioned innercity Metro provides a high capacity 'spine' for integrated rail, bus and passive transportation future.

When considered as foundational infrastructure, providing hyper-dense mass transport systems in the inner-city is required for districts supporting medium to hyper-dense populations. Hyper-dense population will almost certainly be accompanied by record (in Australian contexts) daily 'in-and through movements' to job opportunities, shopping and entertainment, and 'through' movements, to transport (airport), jobs (the Global Economic Corridor) and existing high use corridors (King street, eastern and southern suburbs, universities etc).

The provision of a 'suite' of stations should be considered holistically, for the value that the 'overprovisioning' of transport infrastructure provides to the current and future city over the life of the project. As outlined above, with the adequate provision of efficient and comprehensive public transport, there is a chance that the surface road network may not be totally overwhelmed in the future, which would be a disastrous and economically counter-productive outcome.

Given the long-term nature of rail infrastructure, the stated desire of the State Government to create value through a medium to hyper dense inner-city and the documented role of this district and corridor as a wealth generator for the State and nation, the short-term expense of three additional Metro stations on the Waterloo to Sydenham section of City metro can be supported for the long-term gain.

Summary

For the detailed reasons advanced above, I object to the current Metro proposal and urge that immediate, detailed and impartial consideration be given to the addition of extra stations on the waterloo to Sydenham section.

In response I hope for and expect

- a nuanced and detailed response
- an early announcement that the provision of additional Metro stations on the Waterloo to Sydenham corridor is being urgently undertaken
- an extended and meaningful community consultation be undertaken with the residents of Alexandria, Erskineville and St Peters.

Please give my detailed objection and evidenced proposals for additional stations your serious consideration.

References:

 "an increase of 50,000 vehicles per average weekday on Euston road" Source page 53 Westconnex technical paper 1 Traffic report, accessed online at www.westconnex.com.au/.../Tech%20Paper%201%20-%20Traffic%20report%20Final

Traffic congestion costs in Sydney, current and projected

http://www.news.com.au/finance/economy/australian-economy/clogged-roads-are-expensive-and-one-reason-we-spend-an-average-85-minutes-a-day-commuting/newsstory/934ad0c2fca8f15dca346fe6934401c7 Yours sincerely,

Colin George 1

Declaration:

I have made no reportable political donations made in the previous two years.

Yours Faithfully, l Colin George

Name: Karen Rook

Sydney, NSW 1585

Content: Please find attached Objection to the Crows Nest Metro. Lyall Resident, 26 Clarke St, Crows Nest NSW 2065. Dr. Karen Rook

Karen Rook, MPhty, Ph.D. PO Box 587, Crows Nest NSW 1585 m. 0405 321 775 kmr9000@me.com

 24^{th} June 2016

Major Projects Assessment Department of Planning and Environment GPO Box 39, Sydney, NSW 2001

RE: IMPACT TO LOCAL RESIDENTS FROM METRO CONSTRUCTION

To Whom It May Concern:

I am a resident of The Lyall, 605, 26 Clarke St, Crows Nest. I have enjoyed a peaceful coexistence with my neighbours in the Lyall during this time I have been living here, have never been troubled by traffic or construction noises and myself and neighbours contribute to the harmonious well-being of the area.

I am concerned about the proposed construction by NSW Transport of a metro in close proximity to my bedroom. I am also concerned that the proposed construction is to be 24 hours a day for 4 years. Lack of sleep for 4 years is not a viable proposition.

My primary concerns are with respect to noise, vibration, and safely, which are outlined below:

1. Construction Noise: construction noise is estimated to be least 90 decibels for 24 hours a day. As somebody who needs to sleep 8 hours a night, I am concerned that this noise level will be above a threshold that is tolerable for sleep and therefore have a catastrophic effect on my health and for my neighbours who have bedrooms and children's bedrooms that face Clarke Lane. Humans normally sleep in bedrooms of 30 decibels maximum, yet all residents with bedrooms backing onto Clarke Lane will have constant noise at 90 decibels. This will have deleterious effect to the sleep quality, and resultant health of these families.

Mistimed sleep disrupts circadian regulation of the human transcriptome.

http://www.ncbi.nlm.nih.gov/pubmed/?term=Mistimed+sleep+disrupts+cir cadian+regulation+of+the+human+transcriptome+Simon+N.+Archer1

Sleep deprivation and gene expression. http://www.ncbi.nlm.nih.gov/pubmed/25646722

This Is What Happens To Your Brain On No Sleep

Time, April 2016-06-24 http://time.com/4282023/this-is-what-happens-to-your-brain-on-no-sleep/

Influence of sleep deprivation and circadian misalignment on cortisol, inflammatory markers, and cytokine balance.

http://www.ncbi.nlm.nih.gov/pubmed/?term=Influence+of+sleep+deprivati on+and+circadian+misalignment+on+cortisol%2C+inflammatory+markers% 2C+and+cytokine+balance.

Adverse metabolic consequences in humans of prolonged sleep restriction combined with circadian disruption.

http://www.ncbi.nlm.nih.gov/pubmed/?term=Adverse+metabolic+conseque nces+in+humans+of+prolonged+sleep+restriction+combined+with+circadia n+disruption.

Metabolic effects of sleep disruption, links to obesity and diabetes. <u>http://www.ncbi.nlm.nih.gov/pubmed/24937041</u>

Sleep disorders and oral health: a cross-sectional study.

http://www.ncbi.nlm.nih.gov/pubmed/27178314

We understand that the proposed acoustic apparatus that is intended to deaden this noise will not be built until after initial excavation, exposing myself and local residents to a prolonged, intolerable level of noise.

2. Vibration. Furthermore, the metro is only to be placed at 25 metres below ground upon completion, instead of 40 metres, like other stations, with no underlying rubber to deaden the noise subjecting locals to constant vibration noise. This is of urgent concern to all local residents and business owners. I have grave unease with regard to the vibration caused by the construction works and by the metro traffic itself once construction has been completed. Research conducted on rail traffic noise and vibration have shown a negative effect on human health with regard to sleeping heart rate, overall quality of sleep, cardiovascular health and the corollary of impaired sleep, such as deleterious effects on mental and general well-being and reduced day-time functioning.

Cardiovascular responses to railway noise during sleep in young and middle-aged adults.

http://www.ncbi.nlm.nih.gov/pubmed/?term=Cardiovascular+responses+to +railway+noise+during+sleep+in+young+and+middle-aged+adults.

Effects of train noise and vibration on human heart rate during sleep: an experimental study.

http://www.ncbi.nlm.nih.gov/pubmed/?term=Effects+of+train+noise+and+v ibration+on+human+heart+rate+during+sleep%3A+an+experimental+study

Nocturnal road traffic noise: A review on its assessment and consequences on sleep and health.

http://www.ncbi.nlm.nih.gov/pubmed/?term=Nocturnal+road+traffic+noise %3A+A+review+on+its+assessment+and+consequences+on+sleep+and+heal th.

Vibration from freight trains fragments sleep: A polysomnographic study.

http://www.ncbi.nlm.nih.gov/pubmed/?term=Vibration+from+freight+train s+fragments+sleep%3A+A+polysomnographic+study

3. Safety. I am anxious with respect to both the local residents, who comprise of not an insignificant number of elderly or families with young children. Traffic congestion due to changes in road direction and blockages, night transit of traffic and trucks, and sheer number of construction vehicles pose an alarming risk to the pedestrians.

In addition to the above, the extensive time frame for construction, the potential affects of the works to local building stability and increased traffic burden to an already busy area pose a very real concern to me, my business and livelihood and the peaceful existence to which local businesses and residents currently enjoy.

I submit that if construction is to go ahead, NSW transport look compensate and protect locals by **triple glazing** to all the windows, **placing rubber under the tracks** to reduce the ongoing noise and define for us how long we will have to endure the the construction noise, vibration, and traffic.

Yours sincerely,

Dr. Karen Rook Physiotherapist, MPhty, Ph.D. Name: Murray Gunn

Alexandria, NSW 2015

Content:

Providing public transport options is a much better long-term plan for transport than building roads such as WestConnex which will just become congested again in a few years, but has limited impact without providing more stations.

MURRAY GUNN

C11/147-161 MCEVOY ST ALEXANDRIA

25/6/16

METRO EIS OBJECTION

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest Chatswood to Sydenham)

I object to this proposal on the grounds that the project should provide additional Metro stations at Alexandria and St Peters. The objection is based on the project's flawed and inadequate traffic and transport capacity modelling as well as an inadequate public consultation process.

Further detail supporting this objection and the demand for immediate reconsideration and provision of additional Metro stations for Alexandria and St Peters follows.

1. Inadequate transport capacity modelling

The current Metro station selection process was undertaken before several recent infrastructure decisions and therefore requires immediate revision. These decisions significantly bear on the transport requirements of the inner-city. They include the ATP Commonwealth Bank project (11,000 workers, 1,600 cars), the Waterloo Public Housing redevelopment (20,000 residents), the Alexandria Super School (2,200 students), the Ashmore Estate development (6,000 additional residents) and Green Square as a high-job-growth area. Collectively these developments will swamp local road networks, limiting the ability of bus services to scale up to service growing transport needs.

2. Inadequate traffic modelling

The Metro EIS does not model any relationship between the Metro (Waterloo to Sydenham) and Westconnex traffic , despite the Metro line running under McEvoy / Euston Road and St Peters. The EIS has no modelling of additional Metro stations (Alexandria and St Peters) ability to reduce cross-town car use or offset the impact of Westconnex traffic spilling onto the inner-city road network.

3. Inadequate public consultation

Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville now that the Metro route from Central to Sydenham has been finalised.

The finalised Metro route (passing under Alexandria and St Peters), announced in February 2016, is still poorly understood by the communities being bypassed. Now that the route is finalised a further meaningful and substantial community consultation process should be undertaken to truly gauge the transport needs of these communities.

4. Additional (Alexandria and St Peters) Metro stations

In light of the flawed and inadequate traffic and transport capacity modelling and inadequate public consultation process I urge an immediate reconsideration of the provision of additional Metro stations for Alexandria and St Peters. I petition that adding these Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport). It provides mass-transit systems for the areas' doubled population, reduces chronic over-crowding on Erskineville station and reduces inner-city car congestion.

Declaration:

I have made no reportable political donations in the previous two years. Yours Faithfully, (Insert your name here) Name: Attila Stopic

Marrickville, NSW 2204

Content:

I think this is an excellent project overall and I believe the decision to use single-deck metro trains in this area is the right one. However I believe the route from Central to Sydenham has been very poorly chosen.

For the section from Central to Sydenham, Waterloo was chosen over Sydney University. The proposed station at Waterloo is already within close walking distance to not one but two existing train stations (Redfern and Green Square), while Sydney Uni is much further away. Additionally the new station will be less than 200 m from the existing airport line tunnel. If a new station is so vital for Waterloo, why can't a new station be created at Waterloo along the existing airport line and instead route the new line to areas that do not currently have rail? As the need for a station at Waterloo is further into the future (Sydney Uni's need is immediate), this could be done once this metro project has been completed (and possibly convert the airport line to metro too).

Also I was surprised at how few stations there are between Central and Sydneyham (one). The existing heavy rail has three and metro systems can handle stations closer together. In such a high density area stations should be much closer together (say around 1 km) - I couldn't imagine any other city having such widely-space stations so close to the CBD. A better route between Central and Sydenham would be something like Central - Victoria Park (Sydney Uni East) - RPA (Sydney Uni West) - Newtown - Enmore Park - Sydenham.

Name: Laura Bayndrian

Alexandria, NSW 2015

Content:

I object to the building of the City and Southwest Metro on the following grounds:

- The metro is not about providing more passenger capacity across suburban rail network; it is just a facilitation of over development of Waterloo, Sydenham and around all the stations on the Bankstown line. The metro would destroy communities by displacing existing residents and creating high rise slums.

- At a cost of \$12 billion, the City and Southwest Metro is a very expensive way of increasing track capacity through the CBD. Utilising existing infrastructure a heavy rail link for double deck trains could be built for less than \$4 billion.

- The metro would not, as claimed increase capacity across the Sydney Rail Network. The purported 60% increase (stated in the "Have your say" brochure) relies on signalling improvements on existing lines. This is not part of the metro proposal and has evidently been included to mislead the public about the actual capacity increase claimed for the metro.

Name: Gavin Imhof

Lane Cove, NSW 2066

Content: Dear Sir or Madam:

Re: Sydney Metro City & Southwest - Chatswood to Sydenham

Thank you for the opportunity to provide a submission on this project.

I would like to reject the conclusions reached with regard to 4.4.3 (Phase 3 - additional station options) regarding the provision of a Station in the Artamon Industrial Area.

In my view the outcome was poor in the `Performance of Artarmon Industrial Area Station against the project objectives' because you did not take into account the possible impacts on Lane Cove.

If a station is placed on the Pacific Hwy in the vicinity of Alto PI it will have a positive impact on the residents of the existing & future high density housing in the area and the Lane Cove Shopping Centre. Furthermore it can still be utilised by those commuting to the Artarmon Industrial Area.

It seems to me that by only considering the Artarmon Industrial Area in assessing the performance of a station you have missed an opportunity to provide a train link to Lane Cove.

I'd imagine that it's unusual to find, in modern urban metro systems, stations as far apart from each other as Crows Nest & Chatswood. Ie 3.7km in a straight line, 5.3km by road.

Clearly once the tunnel's board you can't change it. You have a responsibility to ensure that a public system of this magnitude is able to have a positive impact on the highest number of people. By leaving Lane Cove out of the equation you are not doing this.

Yours faithfully

Gavin Imhof

Submission on the Sydney Metro EIS Dept Planning & Environment Gavin Imhof 18 Angus Avenue LANE COVE 2066

Hm: 02 8094 1678 Wk: 02 9519 0900

25 June 2016

Dear Sir or Madam:

Re: Sydney Metro City & Southwest - Chatswood to Sydenham

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Yours faithfully

Gavin Imhof

Name: Ursulla Dewar

Chatswood, NSW 2067

Content:

Please see uploaded detailed submission:

This submission objects strongly to Chatswood Option 3 (CO3), while expressing qualified support for the Sydney Metro project, preferably St Leonards Option 2. However, in "Your view on the application", there are only 3 choices.

This submission objects strongly to Chatswood Option 3, while expressing qualified support for the Sydney Metro project, preferably St Leonards Option 2 (although "discarded" by EIS, p.78). My qualified acceptance of Metro City is dependent on:

*Metro addressing a number of issues both with the construction and operational phases of the project. *My recommendations or "Conditions of Approval" being incorporated as part of the Determination / Approval by the Minister for Planning NSW, including extra expenditure elaborated below.

INTRODUCTION:

My submission:

*Objects to Chatswood Option 3 (opposes tunnel portal on western side of the rail-corridor).

*Prefers St Leonards Option 2 (prefers dive north of St Leonards station to dive south).

While the NSW Government concludes that "the consequences of not proceeding (do nothing) would result in unacceptable impacts" (p.972), nevertheless the impacts of Chatswood Option 3 ("CO3") would be equally unacceptable to local residents.

ISSUE: our community was not well-informed

People who will be mostly impacted were not properly consulted before the 2015 Metro Forum: this raises concerns about the adequacy of the community consultation process.

Metro has not adequately communicated information about dive options at initial meetings: St Leonards versus Chatswood.

The 2015 Information Session only focused on "preferred station locations, options for extra stations and information about the proposed rail line route" (Newsletter 15 June).

Our residents were not well-informed before the 2015 Metro Forum and most did not attend this Forum: most of the 45 residents/owners in my block were unaware of the 2015 Metro Forums and that a decision about the dive location would be made before November 2015. The feedback at these Forums led to the CO3 decision rather than St Leonards.

I had a knock on my front door by two Metro representatives at about noon on November 16th, asking whether I've heard about the Metro decision (to build it virtually at my front door).

The Project Overview (June 2015) had identified the "Stations & Alignment" but had not identified the potential dive sites other than announcing briefly:

*"Options for where the tunnels start include just south of Chatswood or at St Leonards".

*"From the end of Stage 1 at Chatswood, the new metro rail network will continue under Sydney Harbour".

Recommendation: to form a local community consultative committee to ensure locals are well-informed.

SUMMARY:

Issues: areas most adversely affected

There are many local issues that need to be addressed as Conditions of Approval for CO3, which the EIS does not deal with in its "Conclusions" (29.7).

The areas to benefit least from Sydney Metro are also the areas that will be most adversely impacted:

*The benefits (p.972) do not apply to the residences neighbouring CO3: the Metro is not needed between Chatswood and Sydney CBD because the existing transport system is regular and reliable.

- *This issue affects me on more than two frontages. The dive site is located on two sides of my residence:
- to the south at Ausgrid dive site opposite 9 Nelson Street (my main entry by car)
- to the east along the rail-corridor & Frank Channon Walkway, between 2 Gordon Ave & 9 Nelson St, where my unit faces the rail-corridor.

To the west, Pacific Hwy will be more congested due to closure of Nelson St Bridge.

*Willoughby City Council will benefit least from Sydney Metro, while North Sydney Council will benefit most because the two new Metro stations are located within North Sydney Council: Crows Nest and Victoria Cross. (p.749)

(contd.)

SUMMARY (cont.):

RECOMMENDATIONS SUMMARY: CONDITIONS OF APPROVAL

Benefits for this Chatswood dive structure area should include extra expenditure on the following, although my numbering does not imply priority:

[1] A new two-way local road for light traffic running parallel to the extended Frank Channon Walk between Nelson St and Mowbray Rd, if the Nelson St Bridge is not re-built.

[2] Signalisation of Nelson St/Pacific Hwy intersection (new traffic lights): as interim solution if Nelson St Bridge is to be rebuilt.

[3] No entry or egress of Metro construction trucks into Nelson Street West; with alternative entry via a "slip lane" at Pacific Hwy.

[4] A resident parking scheme and mobility parking should be implemented in Nelson St and Gordon Ave , while maintaining existing "on street parking" provision.

[5] Metro provides a Traffic Control Plan to alleviate local traffic congestion.

[6] Increasing length of the 400m dive structure to preclude building a rail-bridge at Nelson St: a rail-bridge is not recommended.

[7] Dampers instead of concrete slabs for both T1 & Metro: dampers to replace increasing the height of noise barriers which cause an echo effect.

[8] At property treatment for residences adjoining rail-corridor near Metro dive structure.

[9] A Landscape Master Plan for the Ausgrid dive site, and at least a 2 for 1 tree replacement program initiated before start of Metro construction phase.

Issues 1 & 2: closure of Nelson Street Bridge (6.9.1)

Closure of Nelson St Bridge should not proceed: closure will have an impact on our residents that has been understated by Metro. Removal of Nelson St Bridge:

*Dramatically limits entry of residents to their Nelson St property. Currently, travelling northbound, a Nelson St resident can turn right off the Highway in Mowbray Rd, left into Orchard St and left into Nelson St. With the removal of the bridge this will no longer be possible.

*Increases traffic congestion on Pacific Hwy by cutting off entry to Orchard Rd via Nelson St east: prohibits vehicles using Orchard Rd as an alternative route south via Elizabeth St, Artarmon.

*Closure of Nelson St Bridge together with closure of the Frank Channon Walk will impact on the safety of the disabled, who use a walker to walk to Chatswood for shopping; and will limit cycists' access of Frank Channon Walk.

RECOMMENDATIONS: CONDITIONS OF APPROVAL

Without other alternative options for residents in Nelson Street West, the proposed permanent closure of Nelson Street Bridge is not supported.

Nelson St residents should be assured of unrestricted vehicle access to their property by:

[1] Car lanes running parallel to the extended Frank Channon Walk between Nelson St and Mowbray Rd at a location similar to existing private road within the Ausgrid site; or connecting Nelson St to the signalised Hampden Rd/Mowbray Rd intersection.

This solution is preferred to replacing the Nelson St bridge with a traffic bridge linking Gordon Ave to Orchard Road via Hopetoun Ave because the latter would be built over the covered dive structure.

EIS states: "It is anticipated that the traffic signals introduced at Mowbray Road / Hampden Road for the construction phase would be retained during operation." (p.382)

[2] New signalised intersection at Nelson St/Pacific Hwy as interim solution, permitting residents, who previously used Orchard Road, to exit northbound: with a right turn arrow northbound be installed on the Pacific Highway at Nelson St.

Otherwise, residents & tradesmen travelling north along Pacific Hwy would need to travel a long circular congested loop through Chatswood CBD (Albert Ave), along narrow congested Orchard Road, to get to Nelson Street: Orchard Road at corner of Albert Avenue is always congested due to jam at Pacific Hwy.

Issue 3: Metro construction traffic access via Nelson St (Figure 8-13)

"The Chatswood dive site would be a substantial spoil removal site. About 520,000 cubic metres would be removed through the site (460,000 cubic metres from tunnelling and 60,000 cubic metres from the dive structure)." (p.213)

Truck movements during dive construction are expected to be:

Demolition: 96 per day plus 78 light vehicles Excavation: 234 per day plus 248 light vehicles Tunnel excavation: 286 per day and 248 light vehicles Tunnel fit out: 254 per day and 248 light vehicles

RECOMMENDATIONS: CONDITIONS OF APPROVAL

[3.1] No Metro entry/egress from the site via Nelson St: entry to and egress from the site by Metro construction vehicles should not be from Nelson Street.

[3.2] A new access point to Ausgrid dive should be established on the eastern side of the Pacific Highway by way of a "slip lane": enabled by the "widening of the Pacific Highway to the north of the Mowbray Road intersection". (p.298)

[3.3] As track maintenance access points are adjacent to local residential properties, such as Nelson Street, then Council and all residents should be informed about proposed works.

Issue 4: on-street parking in Nelson St is limited RECOMMENDATIONS: CONDITION OF APPROVAL

[4.1] A resident parking scheme and mobility parking should be implemented in Nelson St.

[4.2] Metro trades vehicles should be restricted from parking in the vicinity of the site (on the basis that Metro implement a 'park & ride' option from a remote location.

Issue 5: local traffic congestion

*Issue: construction traffic: see 3 above.

*Issue: long delays at intersection Pacific Hwy/Mowbray Rd (8.4.6)

"Intersections currently experience long delays and a poor level of service due to high through traffic volumes and conflicting right-turn movements" (p.298).

*Issue: ECRL conversion 6 months (26)

"Additional delays for general traffic on the Pacific Highway due to construction vehicle movements to and from the construction sites and additional bus movements associated with the Epping to Chatswood Rail Line conversion." (p.900)

RECOMMENDATIONS: CONDITION OF APPROVAL

[5.1] Metro should be required to present a Traffic Control Plan to the Willoughby Traffic Committee, considering that:

"Table 8-17 and Figure 8-15 shows ... that a number of intersections currently experience long delays and a poor level of service due to high through traffic volumes ... With construction traffic, there would be a minor increase in the degree of saturation and the average delay at some intersections.": e.g. Pacific Hwy/Mowbray Rd (p.298)

[5.2] I'm not supporting upgrading of the North Shore Line to freight capability used for spoil removal because:

*Increased noise.

*Adverse impact on visual amenity: T1 northbound track will be realigned several times during Metro construction & then raised on a 60m rail-bridge, with 100-300 meters long grade ether side. (p.213)

[5.3] The cuttings should not be brought back from Blues Point to the Nelson Street distribution point for trucking away.

Issue 6: rail-bridge for T1 (6.4.2.)

"The realigned T1 ... track would pass over the top of the metro Chatswood dive structure on a bridge. The track level across the bridge would be around two metres higher than the existing track level. The bridge is anticipated to be a single-span concrete structure around 60 metres long". (p.174)

This 60m rail-bridge will have 100-300 meters long grade either side: suggesting that the T1 track will be sloping up/down above-ground and alongside the entire 400m Metro "dive structure" which is sloping downwards under-ground.

While the "dive structure" is 400m long (with height unspecified), the works corridor is much longer: about 800 metres from Brand St to Albert Ave. (p.501) This indicates that the major construction impact will be concentrated between Nelson St & Gordon Ave (just outside my residence).

The rail-bridge under the Mowbray Road Bridge is an issue: needing permanent support work to the western abutment.

An underground railway station was not built at Chatswood when the ECRL was built in 2008.

RECOMMENDATIONS: CONDITION OF APPROVAL

[6.1] To re-align Metro & T1 tracks at or north of Chatswood Station, although this could slow down speed.

[6.2] A more expensive solution should be found if the distance from Chatswood station to Mowbray Road is not enough to create a grade separation between the existing T1 tracks and the new Metro tracks. The rail-bridge solution has been proposed by Metro because this is the cheapest way to make the crossing of T1 & Metro tracks.

[6.3] Commence the dive cut-and-cover structure (the tunnel portal) north of the Bowling Club, at about Chapman Ave/Chatswood Oval: to increase length of the 400m dive structure.

This would provide adequate height separation at Nelson Street between the Metro & T1 tracks, without constructing the 60m rail-bridge. (Re: Figure 10-1, p.416)

[6.4] Commence widening of rail-corridor north of Chatswood Oval Underpass: to extend length of 400m dive structure, to avoid building rail-bridge.

[6.5] The rail-bridge, at Nelson St, should be lower than and not higher than the Frank Channon Walk.

[6.6] The trains on any part of the rail-bridge should not be higher than the existing noise-barriers. Higher noise-barriers are not recommended for reasons given below: they create an echo effect, and reduce amount of sunlight and cooling ocean breeze for residents at 2 Gordon Ave/9Nelson St.

Reverberations are amplified with sound waves bouncing from the east to west rail escarpments (piles dug about 2005) between Hopetoun Ave/Gordon Ave & Nelson Street.

[6.7] More information should be provided about traffic management while providing "permanent support work to the western abutment of Mowbray Road bridge", which is required when building the 60 rail-bridge:

"The western pier would also require a deflection wall around the existing pier columns due to the increased height of the realigned T1 ... track", i.e. the 60 rail-bridge (p.116,213)

Issue 7.1: noise due to concrete slabs

6.4.1: "The surface metro tracks would generally be placed on ballast with concrete sleepers. Alternative track types may be used in some locations where additional noise mitigation is required." (p.135)

6.7.1: "The Chatswood dive structure would commence about 250 metres south of Chatswood Station ... The dive structure would comprise an initial length of open trough, which would then transition to a cutand-cover structure (the tunnel portal). The Chatswood dive structure would also incorporate rail dampers and deck absorption to provide mitigation for operational train noise." (p.169)

RECOMMENDATIONS: CONDITION OF APPROVAL

Dampers & not concrete slabs on all: realigned T1 tracks, concrete rail-bridge & Metro tracks. Installing dampers (tracks sound-isolated for vibrations) will preclude raising height of noise barriers: increasing height of noise barriers will magnify echo effect. [6.9.3; p.493]

Issue 7.2: noise due to tracks slewed west (6.4.1)

"T1 North Shore Line 'down' (northbound) track would be relocated to the west." (p.135) *Tracks will be slewed west by 3m closer to our Strata at Gordon Ave/Nelson St. (p.208, 212) However, distance of the slewed northbound tracks from my residential façade should be more than 15 metres (according to EPA licence guidelines 12208).

*Noise had increased when T1 was previously re-aligned and slewed westward (up to 7 metres) before linking up to the new western Chatswood Station platform on 16thOctober 2006.

RECOMMENDATIONS: CONDITION OF APPROVAL

Dampers & not concrete slabs on both realigned T1 North Shore Line, the rail-bridge & Metro tracks. Thus dampers would be used on the raised 60m concrete rail-bridge which will have 100-300 meters long grade ether side. (p.213)

Issue 7.3: noise barriers (6.9.3 & 11.4.2)

Excessive height: "An increase in the height (to four metres) of the noise barrier between Nelson Street and Gordon Avenue" (p.494) on the western side the rail line to mitigate airborne noise impacts.

Noise barriers are too close to residences and limit visual amenity by reducing amount of sunlight and cooling ocean breeze for residents at 2 Gordon Ave/9 Nelson St.

RECOMMENDATIONS: CONDITION OF APPROVAL

Dampers to replace concrete slabs for T1, concrete rail-bride and Metro, instead of increasing noise barrier height. During the re-alignment of the North Shore tracks, concrete slabs should be replaced by sound-mitigating dampers.

Dampers will avoid raising height of noise barriers: increasing height of noise barriers will magnify echo effect between east and west rail escarpments.

Eliminating the concrete rail-bridge will alleviate a noise issue. On the T1 rail-bridge, the upper parts of the rail carriage will extend about 2 metres above the noise barrier. Thus noise will emanate from the interface of the power-frame above the carriage and the overhead power cables.

Final design of the noise barriers should be provided to affected residents and Council for review.

Issue 8: at property treatment (11.4.2)

My location is at 2 Gordon Ave (thru to 9 Nelson St), opposite 1-3 Gordon Ave which has a "predicted exceedance of the noise trigger levels". (p.494)

Noise exceedances will be in excess of 20dB for 9 Nelson St/2Gordon Ave & also 1-3 Gordon Ave, according to:

EIS Appendix F, "Construction Ground-borne Noise Predictions" (Report 610.14718R1 of 4.4.2015).

Source: Sydney Metro C2S EIS Technical Paper 2 Noise & Vibration Appendix F.

If 1-3 Gordon Ave "would be considered for at property treatment" (p.494), then also should our block opposite at the cul-de-sac: 2 Gordon Ave/9 Nelson St.

Actual interior measurements in 2008 by WCC for 9 Nelson Street demonstrated noise was excessive: an LA_{eq16hr} level of 40.6dB(A) and an L_{max} level of 75.4dB(A).

Mr Weber (Snr Environmental Health Surveyor) pointed out to Willoughby Council Town Planner on 18.1.1999 that the "maximum passby level" has "the effect upon the resident of sleep disturbance due to the intermittent passby noise of the individual trains, which is considerably higher than the $L_{eq(24hr)}$, reaching an average level of 80 dBA".

New Metro tracks will result in more frequent excessive noise: with a metro train every four minutes when Metro City is complete. (contd.)

Issue 8 (cont.)

RECOMMENDATIONS: CONDITION OF APPROVAL

2 Gordon Ave/9 Nelson St should be "considered for at property treatment", considering residents "may experience an increase in train passby vibration levels". (p.490)

Mitigation measures should include: "At property treatments would be offered where there are residual exceedances of the trigger levels." (p.498)

If dampers cannot reduce interior noise (vibration & air-borne) to acceptable levels, then double-glazing is to be installed to units adjoining the rail-corridor.

Issue 9: visual amenity & landscape (p.621)

Residential properties to west of Frank Channon Walk, including mine, will be adversely impacted due to: *"the proposed removal of vegetation from within the rail corridor and scale of metro infrastructure, which would result in unfiltered views of the rail corridor, noise barriers and dive structure". (p.635)

*"the proposed removal of trees, the scale of the adjacent retaining structure and noise barriers, and associated overshadowing". (p.634)

*The noise wall shown on p.1153 (Aecom) is much too high and the width of the Frank Channon Walk has been narrowed: the existing FCW has a bordering garden with a lower noise wall.

A cross-section diagram of the overlapping structures is not provided between Nelson St & Gordon Ave: - The rail-bridge is not shown on Fig.7-7 (p.209) & Fig.7-8 (p.214), although they do show both the dive structure & T1.

- Neither T1 nor the rail-bridge is shown at the "dive structure" on p.169, 502, 633 & 759.

- The "line bridge" p.136 (fig.6-6) is not a cross-section; fig.6-7 does not show the rail-bridge

The CO3 site is too small for the large scale of this Metro infrastructure: Metro does not have the space at Ausgrid site that's available for the Metro Northwest to Rouse Hill. (Source: Artist's impression of Sydney Metro Trains Facility in Rouse Hill, Sydney Metro ElS Summary, p.16.)

From Chatswood the dive to Sydney Harbour will be deep, from about 150m above sea-level at Chatswood, and not so deep for the St Leonards option (about 110m).

RECOMMENDATIONS: CONDITION OF APPROVAL

*An artist's impression should be provided showing a cross-section of both of the 2 major structures within the rail-corridor to be built alongside until the Ausgrid dive portal: showing the height of the 400m dive structure and the 60m rail-bridge which will have 100-300 meters long grade ether side. (p.213)

*A landscape master plan for the Ausgrid dive site should be prepared for tree planting and gardening, with subsequent maintenance after completion of Metro rail construction.

*Post-construction development plan for the Ausgrid site should exclude high-rise.

*At least a 2 for 1 tree replacement program initiated before start of Metro construction phase, to filter views of the dive structure within the rail-corridor & within the Ausgrid site.

*Extra tree planting at south and north side of Nelson Street, and east side of Nelson Street Bridge, before construction starts, e.g. on the nature-strip adjoining the Ausgrid dive site. The artist's two impressions from viewpoint 11 at Nelson Street shows trees removed from the nature-strip near the pathway adjoining hoardings around the Ausgrid dive portal. (p.637)

*Trees planted now would provide cover for any graffiti on these hoardings.

*Vines growing on the noise-barriers adjoining Frank Channon Walk planted after ECRL upgrade 2007 should be retained, as should the height of the existing noise-barriers (without being increased). The vines provide a barrier against graffiti.

*The EIS was prepared by Environmental Scientists, but EIS should have included evaluation by a Behavioural Scientist to investigate how people interact with the built environment. 19.4.3 is too brief: "During construction, changes to amenity of public places and local centres near to construction sites may impact on people's use and enjoyment of these areas" (p.784). No mention is made of impact of CO3 & closure of Nelson St Bridge & Frank Channon Walk which would reduce access by car/walk to Chatswood Oval and Chatswood shops. Name: willa zheng

erskineville, NSW 2043

Content:

While I think another railway line through Waterloo is sorely needed in Sydney, and a high frequency service is fantastic, I am opposed to the Metro. Why not build another heavy rail line? That way, it is integrated with the rest of the network and people don't need a separate fare system. Also, transferring services is such a drag and time waster in a person's daily commute. If you're waiting approx 10min on average for your connecting train service (after you've hopped off the metro), that's 20min of your day wasted!

Also, given the length of the line, a single decker carriage is not suitable. My stomach sinks the idea of standing for 30min in a crowded carriage going to work and then returning home after a long hard day at work. In London and Paris, the metro is only used for the inner city rim.

Content:

Please see the uploaded pdf. I object on the grounds that no alternative to the use of Blues Point Reserve as a temporary retrieval point for the TBM on the grounds that no alternative solutions have been proposed, failure to mitigate impact, failure to assess true cost to the community,

BLUES POINT RESIDENT OBJECTION

NSW Government Sydney Metro Project

Objection to Proposed Blues Point Reserve Temporary TBM Retrieval Point Application Number SS15 7400

I am a resident of McMahon's Point **Contract Contract Con**

- In the first instance failure to make the case that retrieval of the TBM from Blues Point Reserve is the only feasible solution to the need to use 2 different types of TBM. NO alternative solutions have been put forth for public consideration.
- 2. Objection to the EIS assessment of impact of proposal as "regional", not "national"
- **3.** Failure to recognise, acknowledge and mitigate the sustained and serious impact of this proposal on local residents, visitors and tourist, local businesses, natural, built and heritage environments, safety, health and amenity, pollution, parking, local traffic and congestion.
- 4. Failure to account for the true costs of the impact of using trucks and dismissing the use of barge to remove sandstone and spoils. This shifts the costs of the project from the state to local residents and businesses.

Objections in Detail

1. Failure to make the case that retrieval of the TBM from Blues Point Reserve is the only feasible solution to the need to use 2 different types of TBM. NO alternative solutions have been put forth for public consideration.

Why is Blues Point Reserve as a "temporary" TBM retrieval "point" the only proposal put forth? Were alternative solutions considered? If not, why not? This project will have a profound impact upon the local community and beyond. If alternative solutions were

considered what were these alternatives? And what are the reasons these alternatives have been dismissed and not put forth for public consideration? The apparent glossing over the profound impact that this proposal does not mitigate the impact. If cost is an issue then I challenge this on the grounds that there has not been a true assessment of the costs of retrieval of the TBM from Blues Point Reserve. Costs that may be difficult to quantify are still costs. I would be very surprised if there are no methodologies for putting a figure on the impact of this project on the local community. The marketing of this project either ignores the real impacts of this project. The EIS lacks detail and critical analysis. The treatment of 132 constructions trucks a day is bland, matter of fact and fails to examine how this translates from tables and gant charts onto the terrain. For instance there are no specifications for the construction vehicles. I suspect the reference to semi-trailers is for the transport of some construction materials and the retrieved TBMs. However this is not stated. There are general statements about haulage and construction vehicles and semi-trailers. One could conclude that semi-trailers will transport the excavated sandstone up Blues Point Road. Nonetheless the Lavendar Bay Precinct flyer notes the trucks will be 30 – 40 tonnes. The EIS is silent on the reality of 6 fully laden construction vehicles travelling up the steep narrow Blues Point Rd an hour, 11 hours a day, and 6 empty construction vehicles travelling down the steep narrow Blues Point Rd. And how can we judge this without even basic specification of the trucks..

The Chatswood to Sydenham EIS explains that tunnelling will occur in the south-east direction from Chatswood and north-east from Sydenham. Due to decision the harbour crossing decision to tunnel through sediment under Sydney Harbour for the harbour crossing, alternative TBM equipment is required for the Blues Point to Barangaroo section of the tunnel. The tunnelling plan includes retrieval of TBM equipment from a temporary shaft at Blues Point Reserve. While the need for alternative TBM equipment is explained, the need to retrieve the TBM equipment is not, nor is there an explanation as to why retrieval can only occur the swap over point. In all the documentation provided for the Sydney Metro project, no alternatives to TBM retrieval at Blues Point Reserve are considered. WHY NOT? I ask is this necessary? Is there no other solution to this problem? Collective efforts have put humans on the moon and mapped the genome. Surely someone can come up with a smarter solution – a solution that uses sites such as Victoria Cross and Barangaroo, which are integral to the metro construction and for which there is no alternative, to retrieve the TBMs. Is creating another site really necessary??? Or is it just sort of convenient, or a job creation scheme? Without an explanation to the community what are we to conclude about process, transparency and respect for residents and businesses?

I am dismayed by the failure of NSW Government's to seriously consider alternatives and appeal to the ingenuity of the Architects and Engineers to come up with a better solution. The Blues Point Reserve Temporary TBM Retrieval site is not a requirement for the Chatswood to Sydenham Sydney Metro. It is a proposed solution to a construction problem. I do not accept that this is the only possible viable solution. For example, numerous tunnel boring projects worldwide have assessed the cost and impact of TBM retrieval as greater than simply burying the equipment after use. Does the value of 4 used TBMs exceed the cost, profound impact and risks to human life of constructing the Blues Point Reserve retrieval shaft.

Option A. Do not retrieve TBMs

How about this?

- Turn the south-east TBM equipment into a siding under Blues Point Reserve and seal with concrete
- Tunnel the north-east TBM equipment from Barangaroo through to a similar siding under Blues Point Reserve and seal with concrete
- Complete any finishing or gaps manually or with a different construction solution if necessary

Option B: Alternative methods of TBM retrieval

If the TBMs must be retrieved then further consideration must be made to alternative approaches to TBM retrieval site at Blues Point Reserve. Alternatives could include;

- Dismantle the TBM equipment underground (from within the tunnel) and retrieve via the tunnel back to Victoria Cross and Barangaroo ie;
 - Tunnel southeast to the vicinity of Blues Point Reserve and stop
 - Excavate around the TBM equipment and dismantle it in place
 - o Retrieve the dismantled equipment back to Victoria Cross
 - Tunnel north under the harbour from Barangaroo to the previously excavated dismantling point
 - Dismantle and retrieve back to Barangaroo or
- Retrieve from Victoria Cross and Barangaroo only, ie;
 - o Tunnel southeast to Victoria Cross and retrieve TBM equipment there
 - o Tunnel northeast to Barangaroo and retrieve TBM equipment there
 - Insert specialised TBM equipment at Barangaroo for the Harbour Crossing
 - Tunnel to Victoria Cross and retrieve TBM equipment

Option C: Use a barge instead of trucks

If there is no other feasible – even if more dollar costly – alternative to using Blues Point Reserve as a "temporary" TBM retrieval point, then the impact of this project must be mitigated by using barge and not 6 x2 30-40 tonne trucks per hour up and down Blues Point Road. I do not accept the understatement of the impact of this project, and the sacrifice of the locale in the decision to use trucks instead of a barge. The impact on the people who live here has been dismissed by people who don't live here.

2. Objection to the EIS assessment of impact caused by this proposal as "regional", not "national"

The unique foreshore perspective afforded by Blues Point Reserve of the iconic Sydney Opera House framed by iconic Sydney Harbour Bridge is enjoyed by tens of thousands of international, national, regional and local visitors each year. The EIS rates the impact of the view from the Opera House as of "national" importance and the view of the Opera House framed by the Harbour Bridge as of "regional" importance. Blues Point Reserve is a public park on the foreshore of Sydney Harbour, a short walk from the ferry wharf serving the tourist ferry circuit from Circular Quay to Darling Harbour. This accessible public space has unobstructed world class views of the Sydney Harbour Bridge, Sydney Opera House, Luna Park, Lavendar Bay, the Rocks, the skyline of Sydney city, the harbour, and Fort Denison. It is a popular destination on the weekends, and come New Year people camp for days to secure a place to watch the fireworks.

If this proposal to use Blues Point Reserve at the location for the TBM retrieval goes ahead the reserve will be closed to the public for 2 years if the project runs on time, longer if the project is delayed. Few projects of this scale are completed on time.

A vista as unique as the one from Blues Point Reserve is surely of "national" importance. What methodology has been used to rate this view as of regional but not national importance? As a local resident and on behalf of the tens of thousands of visitors who have not been given the opportunity to object, I hereby object to the impact assessment as only "regional" in scope as this **significantly downplays** the importance of disruption to this site. 3. Failure to recognise, acknowledge and mitigate the sustained and serious impact of this proposal on local residents, visitors and tourist, local businesses, natural, built and heritage environments, safety, health and amenity, parking, local traffic and congestion.

• Objection to the inadequate assessment and mitigation plans in the EIS caused by tip truck activity on Blues Point Road

Blues Point Road is a steep, winding road, of one lane in each direction, with traffic calming devices narrowing the carriageway, a pedestrian crossing and cars parked parallel on both sides. The road runs through a residential area and Blues Point Village, onto the weekday metropolosis of North Sydney and on to the Pacific Highway. The EIS is silent on the impact of these trucks on the Pacific Highway, lined with residential property and renowned for traffic congestion. **Furthermore what are the greenhouse gas implications of all of these trucks**?

• Increased Safety Risks for all Road Users

The intersection of Blues Point Road and Henry Lawson Drive, located at the end of a long steep ill, terminates in a car park with a dead end, and has multiple structural hazards for vehicles and pedestrians. The EIS notes that the trucks will turn left into the site and left out of the site but makes no mention that the trucks will turn right from Henry Lawson Drive into Blues Point Road. I invite you to visit this intersection and see how visibility is blocked by the topology of the land and a large retaining wall on the north eastern corner of the intersection. The entrance to car parking of 2 apartment blocks (Blues Point Tower, a 25 story apartment building, and Westbridge an older block of 27 apartments) are confluent and open directly onto the intersection. Footpaths vanish at the intersection and there is no footpath at all on the north side of Henry Lawson Drive. The only footpath on Henry Lawson Drive is along Blues Point Reserve. It is predictable that people will walk along Henry Lawson Drive rather than the proposed redirected footpath along the foreshore to and from the McMahaon's Point ferry terminal or their parked car.

You only need to look at Google Street View to see the danger to pedestrians travelling south on the eastern side of Blues Point Road to Henry Lawson Avenue.



As the clip from Google Street view above shows, this area is already dangerous! The cumulative risk of high volume heavy haulage trucks in the area, errant pedestrians, disrupted access and the ensuing confusion creates another critical risk of injury, accident and fatality.

The EIS also fails to consider the movement of earth, sandstone and various site spoils will undoubtedly cause an increase in loose sand on the road surface. Combined with the inclined road surface on this corner, this again creates a cumulative risk through increased difficulty for heavy moving vehicles to stop in time to avoid collisions.

The EIS is lacking in details about the specifications of the construction vehicles. Information provided by the Lavendar Bay Precinct notes the trucks will be 30-40 tonnes. Will these trucks be operated by a reputable trucking company, or will these trucks be operated by independent contractors? Given the recent serious compliance failures of trucking companies I ask how will compliance with all truck safety operations be monitored and enforced. The royal commission into home insulation program highlights the perils of poor oversight of contractors. Failure of truck brakes on Blues Point Road would be predictably disastrous. There are no run off options. Will truck drivers be drug and alcohol tested? I am

serious. The impost of 12 haulage trucks an hour, 11 hours a day for however long it will take to excavate the site and then refill it, is a serious road safety issue.

I question the safety of 6 x 30-40 tonne trucks fully loaded with sandstone per hour up the hill during excavation and downhill during rehabilitation. In particular I am concerned about the safety of fully laden trucks travelling down hill with no run off options. Not only is a downhill fully loaded truck extremely noisy, it is also extremely difficult to stop. Consider the risk of this in wet weather with road a muddy slide. The cumulative risk profile of high frequency heavy haulage, damage to the road, close proximity and volume of pedestrians including slow moving elderly and unpredictable children creates a critical risk situation which will exist for an unacceptable duration. The probability of accident, injury, and fatality is surely too great to allow this to proceed. If someone is killed or seriously injured will the trucking operation be ceased and sandstone and spoils shipped out by barge?

I laughed out loud when I read that the 60 workers will be encouraged to catch public transport to the site to minimise the impact. I can find no discussion on the mitigation of the impact of conveyor belt of 30-40 tonne trucks, all day, day in day out for 12 months and 6 months. I have to ask has the impact of all these trucks has been taken seriously? Really?

Impact on residents along Blues Point Road

Residential properties along Blues Point Road are very close to the road. Noise, dust, diesel emissions, and vibrations from an ongoing stream of trucks up and down Blues Point Road will have a major impact upon the health and amenity of residents. This is not a trivial matter. How is the cost to residents accounted when calculating the costs of tip trucks vs barge? Or is the cost to residents not counted. If not then why not? Looking at one cost - the costs of house cleaning can be calculated. There is the opportunity cost of cleaning house - that is not doing something else. In essence this is a theft of life, and reduction in quality of life. How do you account for the cost of that? Blues Point has been a site of industry in the past has the site been assessed for ground toxins? If there are ground toxins what are the risks to workers, residents and visitors? And what about noise? Of a fully laden 30-40 tonne truck turning right and hauling up Blues Point Road, or a fully laden 30-40 tonne truck using engine brakes coming down Blues Point Road. How will the timing of trucks coming and going be managed or will there be a congo line of trucks. If these trucks are travelling up and down the Pacific Highway they will not be operating to a neat clock work like timetable. So will trucks queue up with engines running, blocking in parked cars, preventing residents from getting home, or leaving home. Will the engines by running? I can hear the engine of

the bus around the corner in Henry Lawson Drive – so truck engines will be heard within homes, all day.

• Impact to local businesses

The proposed route along Blues Point Road passes through Blues Point Village, north from Blues Point Hotel to Lavender Road. There is competition for limited parallel to curb parking, a challenging manoeuvre for many. For 12 months, a constant stream of empty trucks will go down the road and return up the steep gradient fully loaded. Imagine how difficult and potentially dangerous this will be with wide trucks travelling up and down this road, in high frequency. The road is line with small businesses, predominantly cafes and restaurants with street dining. The noise from a fully loaded truck on a steep gradient in close proximity to street dining will cause significant degradation of enjoyment and will ultimately reduce business revenues. How has this cost been accounted when considering the costs of trucks vs barge. Or is this cost shifted to small business?

• Structural impact to residences and built environment

The gradient from Henry Lawson Avenue up Blues Point Road is significant, especially for a fully loaded truck. The vibrations from the thousands of truck movements up and down this street will impact the comfort of residents and because of the relatively close proximity of mostly older brick and concrete constructed properties. There is a high probability of structural damage. Any damage claims by property owners caused by truck movements from the site, for years after the construction will incur a cost to process, assess and repair. This objection is to the absence of a full cost analysis to the alternative of a much lower impact option to use a barge to remove spoils from the construction site.

Will all of these trucks damage the road? Who will be responsible for the maintenance and repair of the road, and who will pay the cost?

• Traffic Congestion

Imagine this. A cyclist, or cyclists, with gears at high rate, wobbling up Blues Point Road with a fully laden 30-40 tonne truck behind them. And then someone trying to parallel park, in a tight spot. And someone moving house and the removalist is double parked. So does the laden truck overtake? A road traffic accident involving a truck is highly likely. Should this happen then there is the risk of gridlock on Blues Point Road, including people being blocked from existing parking bays.

• Objection to inadequate mitigations of increased impact during the planned TBM retrieval events

The increased noise, reduced resident and visitor parking and extended hours of operation during the planned TBM retrieval events are unacceptable. For 4 periods of 4 weeks, many residents will be forced to travel further to find parking and for the 4 nights of anticipated overnight activity, will suffer significant disruption to sleep. Mitigation plans must be enhanced to include temporary alternative accommodation for the periods of increased impact. The temporary accommodation provided to all residents in the area must be in close proximity, should be a minimum 4 star quality hotel and include parking. Or perhaps we can house swap.

Objection to the inadequate mitigation of impact on local parking by construction workers

Many residential properties in the proximity of Blues Point Reserve do not include off-street parking. North Sydney Council operate parking permit scheme to manage local parking. The removal of 4 parking places for the full 2 years is significant. Add in the parking of workers – who will need to move their cars due to time limits, driving around in hunt of a parking spot. Throughout the week and especially on weekends, disgruntled visitors who can't find a parking spot to enjoy the view regularly rev-up and speed out of the area and back up Blues Point Road. The reduction of parking spaces will significantly degrade the experience for many visitors as well as increasing congestion and reducing safety as drivers

. Encouragement of workers to use public transport is honourable but how will that be done? There is some all day parking but most parking is time limited. As this area is residential there is no car parking for workers. To be fair to the workers – perhaps a shuttle bus arrangement from an alternate makeshift parking area should be considered.

Objection to the plan to rehabilitate from Q4 2020 through to Q1 2021 thereby impacting 2 years of NYE

Every New Years Eve, thousands of visitors flock to Blues Point Reserve to watch the fireworks. The reserve is one of the best places in Sydney to watch the iconic event.

Construction activity					Inc	lica	tiv	e co	onstr	uc	tior	n tir	ne	fra	me			
	16.724 pt	2018		2019			2020			2021				2022			202	
	Q1 Q2 Q3 Q4	Q1 Q2	Q3 Q4		Q2 Q	3 Q.4		Q2	a 3 Q4			Q3				Q3	Q1 (92
Enabling works and site establishment				•														
Shaft excavation				•	_	•	٦											
TBM retreival (Barangaroo drive 1)						•												
TBM Retreival (northern drives)						ſ	•	•										
TBM retreival (Barangaroo drive 2)									•									
Rehabilitation									•	•)							

Table 7-11 Blues Point temporary site indicative construction program

As the snip from Page 220 of the EIS shows, Blues Point Reserve will be mostly unusable for NYE celebrations on NYE2020 and NYE2021. If the park is to be used for this project, greater efforts need to be made in the planning to bring forward proposed rehabilitation and limit the impact to NYE to just NYE2020.

Objection to the inadequate consideration of barge removal of sandstone and spoils instead of tip trucks

The EIS, Page 71, Table 3.2 : Spoil haulage options, states "... the establishment of barging facilities at this site is not considered to be a feasible solution. Barge transport of spoil may be feasible at this site subject to further investigations. "

Really? Not feasible but may be feasible subject to further investigations. Please explain to the local community and businesses why barge transport is not considered a feasible solution? The impacts of truck transport have not been honestly appraised and the true costs of truck transport will be shifted on to local residents and businesses.

And why have these further investigations not been conducted and what would these further investigations be? How can the community have any confidence in the proposal and planning with such statements?

This is just not good enough. Why has the removal of spoil haulage by barge been dismissed in favour **132 30-40 tonne trucks a day up** and down a steep, narrow and highly used residential and commercial route over a period of 12 months to remove and a further 6 months to return/refill. The profound impact of this "solution" is denied, minimised, glossed over, the true costs are not accounted for, and the costs are shifted on to residents and small businesses rather than being bourne by the state. The metro project is for the overall benefit of Sydney commuters and therefore the costs should not be shifted onto a small community. Name: Jacky Chan

Carlingford, NSW 2118

Content: I support the new Sydney Metro

However would like to see solutions to greater pedestrian integration , especially at the Pitt St Station

It has already need identified on page 457 of the full volume EIS that potential impacts of the increased number of pedestrians may have on the surrounding environment

Greater analysis of mitigating this pedestrian impact would be greatly appreciated, including having a station entrance and exit in the block of building between Park, Castlereagh, Bathurst and Pitt streets, thus minimising pedestrians on roads or extending a pedestrian tunnel underneath Pitt street to connect to the Galleries Victoria, allowing pedestrians to reach far to Kent street, King Street, York street Liverpool street whilst being protected against hazards of vehicular traffic

Yours sincerely

Jacky Chan

Name: Lesley Watson

Newtown, NSW 2042

Content: Lesley Watson 126 Lord Street, Newtown, NSW, 2042. 26 June 2016 Attention: Director, Infrastructure Projects Submission on EIS Application no. SSI 15_7400 Dear Sir or Madam,

After viewing the EIS documents online and speaking to expert members of the project team at the community information session at the Concordia Club, Tempe, I would like to lodge an objection to this project.

I object to the building of the City & Southwest Metro project on the following grounds:

* I have concerns about damage to residential properties in Lord Street, especially those in close proximity to the proposed dive site, where the tunnels come up to the surface. The majority of houses in Lord Street, which the twin tunnels will be constructed under, are over 100 years old. The soil is extremely reactive clay, and there is substantial movement of foundations during dry and wet weather. As to date no geotechnical engineering tests have been conducted in the area to determine any risks that may be posed. While I have been reassured that there is contingency fund to cover damage, I would like more information about this and in writing.

* The twin tunnels are being constructed under a known aquifer and a high water table in Lord Street, particularly problematic on the western end of Lord Street, between John Street and Edgeware Road. I have concerns that this may be disturbed by the tunnelling, which in turn may create subsidence problems for residential housing above the tunnel sites.

* The tunnels will also be constructed underneath water pipes and sewer pipes which are over 100 years old. Further information and investigations will need to be undertaken on this infrastructure before any tunnelling occurs.

* The new proposed Bankstown line excludes our two local, heavily used railway stations of St Peter's and Erskineville. Please note that approximately a third of passengers who use the Bankstown rail line commute from these two stations. Local residents, who are heavy users of public transport, have not been consulted, advised or informed of what alternative rail transport will be provided to our communit. In short there has been no transparency of government plans to provide rail transport to our local area. Bus transport is not a viable alternative due to the proposed WestConnex motorway which is going to only add to road congestion in our area. Buses already run 15-20 minutes late on King Street to the city. Our two stations should be added to the new proposed Bankstown line.

* On this new metro line there would be very few seats. In peak travel time 70% of commuters would be forced to stand for up to 30 minutes. With existing double deck trains, 70% of passengers are seated. Metro lines generally operate over short distances, and the proposed Bankstown line operates over a long commuting distance, which makes this form of transport inappropriate.

* There are also safety concerns in relation to the tunnel segment from Waterloo to Sydenham. The proposed evacuation procedure - through the end doors to track level - does not cater to people in wheelchairs or those with limited mobility. Evacuation would be slow, and there will be no on-board staff to assist with evacuation procedures in the event of an emergency. This is a serious WH & S which has not yet been addressed.

* At a cost of \$12 billion, the City and Southwest Metro is a very expensive way of increasing track capacity through the CBD. Utilising existing infrastructure, a heavy rail link for double deck trains could be built for less than \$4 billion. The proposed metro can only carry 36,000 passengers per hour, while if the line were built to accommodate double deck trains the capacity would be 45,000 per hour, based on the same frequency.

I have not made a reportable donation.

I have read the Department's Privacy Statement and agree to the Department using my submission in the ways it describes. I understand this includes full publication on the Department's website of my submission, any attachments, and any of my personal information in those documents, and possible supply to third parties such as state agencies, local government and the proponent. Sincerely yours,

Lesley A. Watson

Lesley Watson 126 Lord Street, Newtown, NSW, 2042.

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Sincerely yours,

Lesley A. Watson

Name: iain wallace

SURRY HILLS, NSW 2010

Content:

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest Chatswood to Sydenham)

I object to this proposal on the grounds that the project should provide additional Metro stations at Alexandria and St Peters. The objection is based on the project's flawed and inadequate traffic and transport capacity modelling as well as an inadequate public consultation process.

Further detail supporting this objection and the demand for immediate reconsideration and provision of additional Metro stations for Alexandria and St Peters follows.

1. Inadequate transport capacity modelling

The current Metro station selection process was undertaken before several recent infrastructure decisions and therefore requires immediate revision. These decisions significantly bear on the transport requirements of the inner-city. They include the ATP Commonwealth Bank project (11,000 workers, 1,600 cars), the Waterloo Public Housing redevelopment (20,000 residents), the Alexandria Super School (2,200 students), the Ashmore Estate development (6,000 additional residents) and Green Square as a high-job-growth area. Collectively these developments will swamp local road networks, limiting the ability of bus services to scale up to service growing transport needs.

2. Inadequate traffic modelling

The Metro EIS does not model any relationship between the Metro (Waterloo to Sydenham) and Westconnex traffic , despite the Metro line running under McEvoy / Euston Road and St Peters. The EIS has no modelling of additional Metro stations (Alexandria and St Peters) ability to reduce cross-town car use or offset the impact of Westconnex traffic spilling onto the inner-city road network.

3. Inadequate public consultation

Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville now that the Metro route from Central to Sydenham has been finalised.

The finalised Metro route (passing under Alexandria and St Peters), announced in February 2016, is still poorly understood by the communities being bypassed. Now that the route is finalised a further meaningful and substantial community consultation process should be undertaken to truly gauge the transport needs of these communities.

4. Additional (Alexandria and St Peters) Metro stations

In light of the flawed and inadequate traffic and transport capacity modelling and inadequate public consultation process I urge an immediate reconsideration of the provision of additional Metro stations for Alexandria and St Peters. I petition that adding these Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport). It provides mass-transit systems for the areas' doubled population, reduces chronic over-crowding on Erskineville station and reduces inner-city car congestion.

Declaration:

I have made no reportable political donations made in the previous two years. Yours Faithfully, iain wallace

Name: Craig Casey

SURRY HILLS, NSW 2010

Content:

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The current Metro station selection process was undertaken before several recent infrastructure decisions and therefore requires immediate revision. These decisions significantly bear on the transport requirements of the inner-city. They include the ATP Commonwealth Bank project (11,000 workers, 1,600 cars), the Waterloo Public Housing redevelopment (20,000 residents), the Alexandria Super School (2,200 students), the Ashmore Estate development (6,000 additional residents) and Green Square as a high-job-growth area. Collectively these developments will swamp local road networks, limiting the ability of bus services to scale up to service growing transport needs.

2. Inadequate traffic modelling

The Metro EIS does not model any relationship between the Metro (Waterloo to Sydenham) and Westconnex traffic , despite the Metro line running under McEvoy / Euston Road and St Peters. The EIS has no modelling of additional Metro stations (Alexandria and St Peters) ability to reduce cross-town car use or offset the impact of Westconnex traffic spilling onto the inner-city road network.

3. Inadequate public consultation

Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville now that the Metro route from Central to Sydenham has been finalised.

The finalised Metro route (passing under Alexandria and St Peters), announced in February 2016, is still poorly understood by the communities being bypassed. Now that the route is finalised a further meaningful and substantial community consultation process should be undertaken to truly gauge the transport needs of these communities.

4. Additional (Alexandria and St Peters) Metro stations

In light of the flawed and inadequate traffic and transport capacity modelling and inadequate public consultation process I urge an immediate reconsideration of the provision of additional Metro stations for Alexandria and St Peters. I petition that adding these Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport). It provides mass-transit systems for the areas' doubled population, reduces chronic over-crowding on Erskineville station and reduces inner-city car congestion.

Declaration:

I have made no reportable political donations made in the previous two years. Yours Faithfully, craig casey

Name: Alex Walker

Rankin Park, NSW 2287

Content:

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest Chatswood to Sydenham)

I object to this proposal on the grounds that the project should provide additional Metro stations at Alexandria and St Peters. The objection is based on the project's flawed and inadequate traffic and transport capacity modelling as well as an inadequate public consultation process.

Further detail supporting this objection and the demand for immediate reconsideration and provision of additional Metro stations for Alexandria and St Peters follows.

1. Inadequate transport capacity modelling

The current Metro station selection process was undertaken before several recent infrastructure decisions and therefore requires immediate revision. These decisions significantly bear on the transport requirements of the inner-city. They include the ATP Commonwealth Bank project (11,000 workers, 1,600 cars), the Waterloo Public Housing redevelopment (20,000 residents), the Alexandria Super School (2,200 students), the Ashmore Estate development (6,000 additional residents) and Green Square as a high-job-growth area. Collectively these developments will swamp local road networks, limiting the ability of bus services to scale up to service growing transport needs.

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Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville now that the Metro route from Central to Sydenham has been finalised.

The finalised Metro route (passing under Alexandria and St Peters), announced in February 2016, is still poorly understood by the communities being bypassed. Now that the route is finalised a further meaningful and substantial community consultation process should be undertaken to truly gauge the transport needs of these communities.

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Declaration:

I have made no reportable political donations made in the previous two years. Yours Faithfully, alex walker

Name: Margaret Sheppard

Gladesville, NSW 2111

Content:

I oppose the Sydney Metro construction because it is destroying communities and will result in more and more high density housing along the route. This will result in more, NOT less congestion and be detrimental to quality of health and life in general. Sydney is already choking from such high density housing with it's consequent problems and destroying the character of lovely suburban communities. the privately run Metro will be of course run for profit, not even for commuter comfort and benefit, let alone that of the broader community. It is designed on short term profitability grounds and will only ever allow for single decker trains. The arguments put forward to ostensibly support the benefits of this are easily contoured with examples from overseas experience and current transport initiatives. Why is NSW so beholden to business interests against the interests of the people who actually live here and vote?? I object most absolutely!

Content:

I object to the current planning for the Chatswood to Sydenham Metro as it passes under Alexandria, with only One statiob at Waterloo on the 6 km Central-Sydenham section.

Alexandria is currently gridlocked with major developments planned which will add almost double the number of residents. Adding stations at Alexandria and St Peters will provide needed mass transit. Alexandria Technology park will have 11,000 more residents, Asmore Estate 8,000, Alexandria Park Super School 2,200. An Alexandria station would relieve Erkskinville's over crowding and off set 60,000 West Connex cars.

More metro stations will provide mass transit train capacity for the growing population and take local cards off the alrerady saturated roads. Rail can conncet the city to the high-job growth corridor- Green Square to the airport, better than cars.

Further more some homes in Laurence Street and Belmont street, will be compulsory acquired witht the current planning at a depth of 45 metres. If stations were built at Alexandria and St Peters the tunneling would only be up to 25 meters and would create less pollution and.

I object to the EIS statement due to local resident not been given enough information regarding the project or be involved in the planning process. There is also a major lack of planning by not including additional stations at Alexandria and St Peters.

Yours sincerely

Name: Deepak Khuller

Alexandria, NSW 2015

Content: I object to Metro as it is not doing anything to remove people congestion in and around Alexandria.

Sydney Metro City & Southwest Chatswood to Sydenham Environmental Impact Statement Objection

Contents

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Sydney Metro City & Southwest Chatswood to Sydenham Environmental Impact Statement Objection and proposal for the consideration of added inner-city stations.

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest Chatswood to Sydenham).

I object to this proposal on the grounds of inadequate provisioning of stations on the Central to Sydenham corridor. The current provision of one station (Waterloo) reflects an inadequate, incomplete and out of date modelling of population growth, urban development, transport and traffic in the inner-city.

In particular, the Metro project makes no reference to the impact of Westconnex on inner-city traffic and transport. The Metro EIS and station location selection process does not reference the potential for additional Metro stations to increase inner-city public transport use and reduce car use. There is no comprehensive model of the potential of additional stations to off-set the multiple challenges to the inner-city traffic and transport network resulting from population growth and local major projects. In addition, the modelling for the Waterloo line alignment did not identify the viability of a station located in Alexandria on Euston road. A supporting rationale for this additional station location is presented below as Option 1 in Section 2: Proposal for additional station options.

Furthermore, a number of recent major, inner-city infrastructure announcements have been made since the modelling to decide Metro station locations. In themselves they are significant enough to require a reconsideration of station locations and transport servicing for the inner-city.

These are described in the sub-section 'Recently announced projects'.

Finally, the Community Consultation Process should be extended to allow more time for substantive community engagement around integrated transport provisioning for the inner-city.

Details follow below to support my objection. In response I hope for and expect

- a nuanced and detailed response
- an announcement that the provision of additional Metro stations on the Waterloo to Sydenham corridor is being urgently undertaken
- an extended and meaningful community consultation will be undertaken with the residents of Alexandria, Erskineville and St Peters.

Please give my detailed objection your close, meaningful and unbiased scrutiny.

Yours sincerely,

Background to this objection

Recently announced projects

The current Metro station selection process was undertaken before several major infrastructure decisions were announced. These decisions significantly bear on the transport requirements of the inner-city and therefore should be factored into any decisions on rail services. They decisions include:

- ATP Commonwealth Bank decision (11,000 staff and 1,600 cars). SMH Nov 12, 2015
- Waterloo Housing Estate redevelopment (20, 000 + residents and associated increased car use). Announced Dec 17, 2015
- Alexandria Park Super School (2,200 students and associated increased car use). Announced May 14, 2016
- Green Square population increase forecast (60,000 + and associated increased car use (1)) SMH Oct 17, 2015
- Westconnex Euston / McEvoy Road (60,000 + cars daily). Announced Sep 2, 2015, SMH

The ATP, Alexandria Park School and Westconnex projects all add significant traffic to roads that service Alexandria, Erskineville, Waterloo and St Peters. (See Westconnex and traffic modelling)

The Waterloo Estate redevelopment (20,000 + residents) AND the upward revision of the Green Square future population projection (60,000 + residents), means that the impact of a beneficial 'transport / traffic offset' has not been adequately modelled.

A central argument of this objection is that providing more Metro stations will reduce inner-city carownership and car use. As the station provision decisions were based on out of date information and for the reasons provided above, the Metro station and transport service provision for the Waterloo – Sydenham section requires immediate revision.

Population growth and transport modelling

The Metro station location process has not correctly modelled future population growth in innerring suburbs. By extension, the transport capacity requirements for an expanded population and the resulting positive contribution of providing multiple Metro stations to mitigate traffic grid-lock and transport system breakdown has also not been adequately modelled.

The district populations are growing at a much faster pace that previous census data and recent planning predictions. The inner-city is becoming a 'hyper-dense' population area, while being under-serviced for future oriented, high-capacity mass-transit systems.

- Numerous new 'boutique' apartment developments in area
- City to Eveleigh (20,000 + residents proposed)
- Waterloo Housing Estate redevelopment (20, 000 + residents)
- Green Square population increase forecast (60,000 + and associated increased car use)

It is very likely that the population and patronage forecasts in earlier modelling are now inaccurate and need to be updated. For this reason alone, the Metro station location provisions should be re-evaluated.

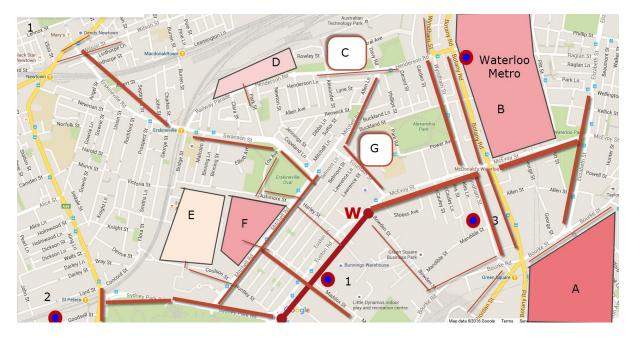


Figure 1: Planned urban development, traffic visualisation and station location options Note: the thickness of the red lines above represents the likely spill patterns of the Westconnex traffic 'dispersal' through the inner-city road network.

Major projects:

- A Green Square (60,000 + residents)
- B Waterloo redevelopment (20,000 residents)
- C ATP Commonwealth bank (11,000 employees, 1,600 cars)
- D City to Eveleigh South West, (2,000 residents approx.)
- E Ashmore Estate Eve, Casa, Erko etc (2,000 residents)
- F Ashmore Estate Golden Horn (main development, 6,000 residents)
- G Alexandria High Super School (2,200 students, many out of area, selective stream)
- W Westconnex (60,000 cars daily on Euston Road, Alexandria)

Station Options

- 1 Alexandria station
- 2 St Peters station
- 3 McEvoy station

Westconnex and traffic modelling

The Metro EIS does not model any relationship between the Metro (Waterloo to Sydenham) and Westconnex, despite the Metro Project intersecting with Westconnex near McEvoy / Euston Road, Alexandria. That Australia's two largest transport infrastructure projects make no reference to cross impacts indicates a failure to adequately connect transport planning.

Further, the Metro EIS provides no modelling of additional Metro stations (Alexandria and St Peters) ability to reduce cross-town car use (through intra-city connectivity to the growth corridor) OR offset the local impact of Westconnex traffic by reducing local car use through improved mass transport capacity.

Value Creation and preservation of health and amenity.

The Metro station location process has provided an inadequate model for future value creation and preservation of health and amenity of inner city neighbourhoods and residents. An integrated public transport network will provide the most cost-effective, appropriate and efficient services for urban growth.

Failure to integrate comprehensive, well-integrated, large-scale transport solutions will destroy the inherent value proposition of the inner-city. Without a significant expansion of public transport, major detrimental impacts from spiralling traffic congestion and car-use can be expected to negatively impact mobility(for locals and 'through district' users), local health and general amenity.

Inadequate public consultation

Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville.

The finalised Metro route (passing under Alexandria and St Peters), announced in February 2016, is still poorly understood by the communities being bypassed. Now that the route is finalised a further meaningful and substantial community consultation process should be undertaken to truly gauge the transport needs of these communities.

Revision of station locations (Additional Metro stations)

The Phase 1 station location phase failed to identify a viable Alexandria station at the approximate 'mid-point' of the Waterloo alignment (see Figure 1). This submission proposes and evidences why the provision of an additional station (Alexandria) is a minimal response to better provisioned and better integrated transport systems in the inner-city.

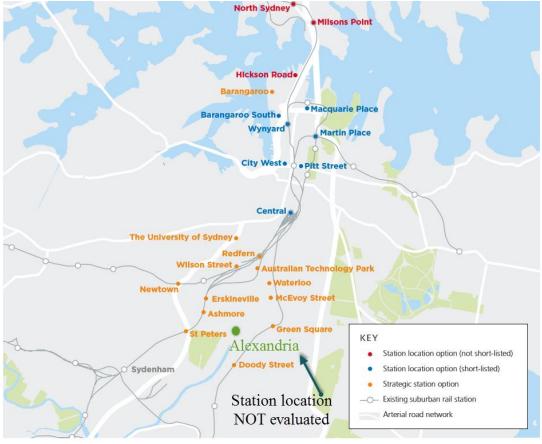


Figure 4.1 Preliminary station location options

Figure 2: Phase 1 did not identify viable station located on the 'mid-point' of the Waterloo - Sydenham alignment

Conclusion

In light of the inadequate traffic and transport capacity modelling I request an immediate review and reconsideration of the provision of additional Metro stations on the Waterloo – Sydenham alignment.

I petition that adding these Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport). They would provide a mass-transit system for the areas' rapidly increasing population, reduce chronic over-crowding on Erskineville station and reduce inner-city car congestion. A holistic analysis of future growth and long-term integrated transport will justify the addition of these stations.

Station cost and the preservation of fast-commute times for outer-suburban residents cannot be simply advanced as reasons to not thoroughly consider more inner-city Metro stations. The stations outlined below will not only provide mass-transit for growing inner-city populations, they will also service outer suburban resident's access to high job growth and service corridors. As such, each station location is likely to provide high-volume bi-directional use patterns, especially in weekly peak periods.

Further detail supporting this objection and the demand for immediate reconsideration for the provision of additional Metro stations for Alexandria, McEvoy and St Peters follows.

Section 2: Proposal for additional station options

In this objection I specifically propose that immediate modelling should be re-conducted on providing additional Metro stations on the waterloo to Sydenham section of the City Metro.

I propose that three options should be considered and immediately re-evaluated. They are:

- Option 1. Alexandria Metro Station
- Option 2. Alexandria station and McEvoy OR St Peters
- Option 3. Alexandria station, McEvoy and St Peters

Supporting evidence for each option follows.

Option 1. Alexandria Metro Station

Location: Euston and Maddox street, Alexandria

This option provides 1 additional Metro station at an approximate mid-point between Waterloo and Sydenham. Performance of this new station location against Metro project Objectives is provided in this section.

Note: This station location is NOT the same as the determinations made on an Ashmore station location, which was situated closer to Erskineville station. It therefore cannot be judged on the outcomes of the Ashmore station performance. In addition, this station location was NOT evaluated on the Metro Alignment Options (See Figures 2 and 3).

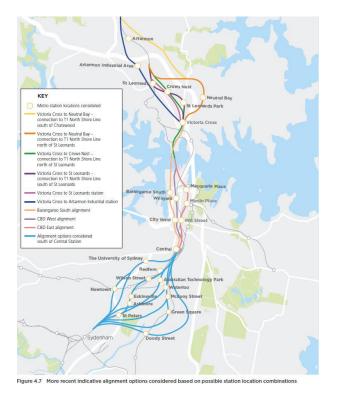


Figure 3: Metro Alignment Options

The Alexandria Metro Station location activates a new 'footprint', growing transport patronage and

network resilience as described below. It is situated at an approximate mid-point on the 4 kilometre 'station gap' between Waterloo and St Peters. Figure 5 shows the proposed Alexandria station location and catchment area.



Figure 4: Alexandria Metro Station location and catchment area, (Numbers indicate known near-term population and student growth)

This station option would provide immediate high capacity patronage from the Ashmore Estate / Alexandria growth area. It would improve other train line experiences by drawing peak hour overcrowding off Erskineville station, and positively impact on overall transport network resilience (through traffic reduction). It would provide city wide interconnectivity via current bus route connections and a 10 minute walk to the Green Square / Airport rail corridor.

This station location could support a bus interchange servicing new network routes (e.g. via Maddox street) to circumvent increasing grid-lock incidence. For example, the 370 bus route can currently take between 7 to 10 minutes (3 to 4 red light cycles) to progress from Fountain street to turn right onto Botany road in the morning peak.

This location is well-sited to develop an integrated district plan for walking, cycling and bus routes, providing a public transport oriented network for the City - Green Square – Airport job / population growth corridor.

Alexandria station performance against the Metro Project Objectives

The proposed Alexandria station location is within a few hundred meters of the positively evaluated McEvoy street station location and therefore shares many of the same positive attributes already identified through the Metro projects own initial planning process (See Figure 6).

The location offers the same urban activation profile as was modelled previously for the McEvoy station location. Figures below represent the current and the proposed (revised) Project Objectives matrix for Alexandria Metro station and brief notes follow on each criteria.



Figure 5: Metro station location Alexandria and McEvoy Metro Project Objectives matrix (proposed)

Improve transport experience quality

A station at Alexandria will considerably reduce the peak-hour overcrowding at Erskineville station which is already at 147% over-capacity. Future population growth associated with Ashmore Estate (6,000 residents from 2021) and City- Eveleigh South (2,000 residents +) will overwhelm Erskineville train services and local bus route capacity.

Provide a system to satisfy long-term demand

On this criteria the Alexandria station option should be judged at minimum as 'somewhat or neutrally' aligned as per the previous evaluation of the nearby McEvoy street station option. However, when considered in light of growing population and transport infrastructure pressure (outlined in sub-section 'Transport network resilience' below), this criteria could be considered to 'positively align'.

Grow public transport patronage and mode share

Providing Alexandria and additional Metro stations will mitigate increases in local's car-use and provide train to bus interconnectivity for out of area commuters to growth corridors.

Due to already approved major apartment developments (Ashmore Estate), an Alexandria station would have an immediate and substantial patronage capacity from commencement. The proximity

of high-density development can be seen in Figure 1.



Figure 6: Sydney rail line over-capacity chart, 2014-2015 Source: Sydney Morning Herald (date)

A Metro stop at Alexandria will grow public transport patronage and not cannibalise other stations usage. Erskineville station is already over-capacity. With cessation of Erskineville's service via the T3 Bankstown line, this station will likely move onto the T4 Illawarra line. However, recently published documents (Figure 7) shows that this moves the already over-capacity Erskineville rail patronage onto an even more –crowded line than present. Additional bus services are unlikely to provide timely mass transit options (see sub-section on 'Transport network resilience' below)

This is before the arrival of 6,000 more Erskineville / Alexandria residents. The new residents are predominantly young urban professionals, who choose the inner-city for its proximity to the city and short, public transport oriented commutes. The location of this additional residential concentration is perfectly situated to be a 'new population' feed to a high-capacity station (Alexandria) capable of servicing this increased patronage volume.

Figure 8 below records a minimum of 25% of Erskineville Alexandria residents in 2006 worked in the city. This can be treated as a conservative estimate of likely patronage at Alexandria. In fact, as recent newspaper articles have recounted the acceleration of inner-city resident public transport usage, actual usage by Alexandria Metro station catchment residents to the city would likely exceed 30%.

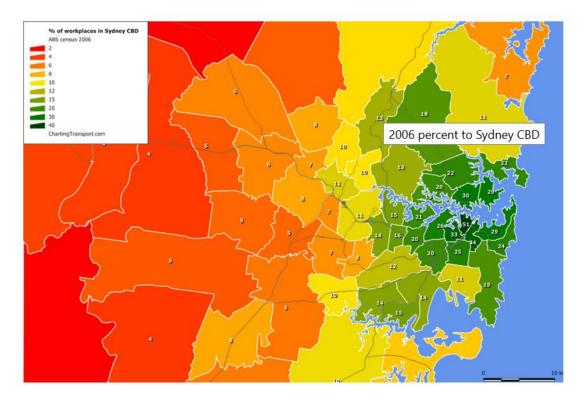


Figure 7: Proportion (percentage) of residents working in city (2006). Source <u>https://chartingtransport.com/category/sydney/</u>

Applying the conservative 25% figure (above) to the 6,000 Golden Horn development population (arriving 2021) to the existing Alexandria population of the Alexandria Station catchment would indicate a minimum 2,000 plus station patronage on each daily peak from commencement of service in 2024.

On this criteria therefore, the Alexandria station option should be judged 'positively aligned' as per the evaluation of the nearby McEvoy street station option.

Support the productivity of the Global Economic Corridor

A station at Alexandria would connect the northern and Bankstown rail lines to the Green Square and Airport via walking and bus access. On this criteria therefore, the Alexandria station option should be judged 'positively aligned' as per the previous evaluation of the nearby McEvoy street station option.

Stimulate urban development

On this criteria the Alexandria station option should be judged 'positively aligned' as per the nearby McEvoy street station option as it shares the same characteristics of brown-field mixed light industrial land use.

Transport network resilience

Provision of more Metro stations diversifies the transport infrastructure of the whole city transport network. Providing one (and preferably more) stations recognises the threats and opportunities of the 'whole of system' interactions of rail, bus, passive and car transportation.

Extensive provisioning of public transport through the inner-city will take cars off the road. This has tremendous benefits for local amenity, car and bus trip times, pollution and greenhouse reduction and the preservation of health and amenity. It benefits the wider city as Alexandria has been chosen as the 'through point' to connect the western suburbs with the east and airport corridor as part of Westconnex (Figure 8).

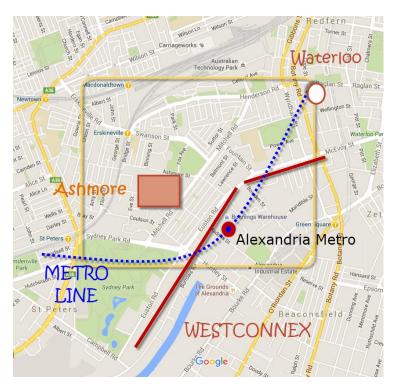


Figure 8: Proximity of Westconnex to approved Metro alignment and proposed Alexandria station

The Metro and Westconnex Projects intersect near Euston Road, Alexandria. The Westconnex Project EIS states that the daily load of Euston Road is predicted to increase from 7,000 cars daily to 60,000 + cars daily. As this increased traffic proceeds north-east it is expected to 'disperse' onto local roads.

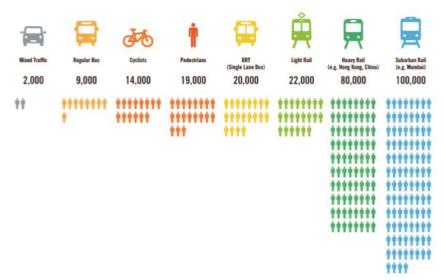
The combination of Westconnex traffic to other district traffic generators has the potential to gridlock the road networks. Major (recently announced) district projects include the State Significant Projects

- Westconnex: 60,000 cars
- ATP: 1,600 cars
- Alexandria High School: 2,200 students

In addition significant increase in car ownership and use can be anticipated with projected populations of up to 100,000 future inner-city residents (on top of the current resident population). This includes:

- City Eveleigh, 20,000
- Waterloo, 20,000 plus
- Ashmore Estate, 6,000 plus (from 2021)
- Green Square 60,000 plus

The combination of Westconnex with current and future population may break down the surface transport system which is currently already near saturation. For this reason increased bus services will not provide the load or speed capacity required for mass-transit of increased future populations and trip numbers. High-capacity transport systems are the solution in areas that have either or both high population and high in / through transport flows.



CARRYING CAPACITY BY MODE (PER HOUR ON 3.5 METRE LANE)

Source: United Nations ESCAP, Review of Developments in Transport in Asia and the Pacific 2013

Figure 9: Carrying capacity by Mode (Source United Nations ESCAP, 2013)

The economic cost of traffic congestion is already well documented (Figure 10). The likely destruction of mobility in the population and job growth corridor will have a substantial, ongoing and compounding negative economic impacts for the city and the whole state.

The staggering economic costs of gridlock documented overseas and in Australia clearly outweigh the short-term cost of generous provision of public transport (additional Metro stations) planned to network mobility of whole of city population to and from high population and high job-growth corridors.

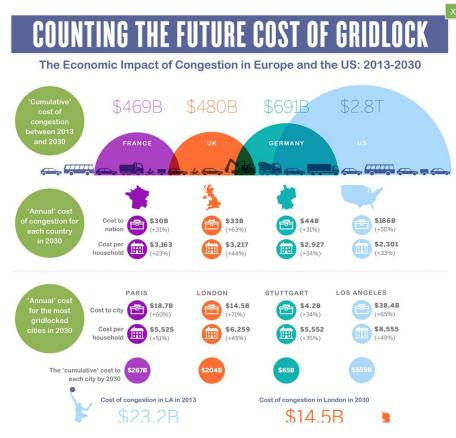


Figure 10: Cost of Gridlock

Therefore, on the 'Network Resilience' criteria the Alexandria station option should be judged 'positively aligned' as per the nearby McEvoy street station option.

Improve the efficiency and cost effectiveness of public transport

On this criteria the Alexandria station option should be at least judged 'somewhat or neutrally' aligned as per the nearby McEvoy street station option.

However, referencing the arguments in the 'Resilience' sub-section above, a thorough and holistic cost-benefit analysis of 'over-providing' public transport infrastructure would likely demonstrate not only the safeguarding of transport network resilience, but also the cost efficiency of additional Metro stations when tied into a comprehensive, long-term inner-city transport plan.

Implement feasible solutions:

On this criteria the Alexandria station option should be judged 'somewhat or neutrally' aligned as per the nearby McEvoy street station option.

Summary:

The Alexandria Metro station option has not been previously evaluated.

The proposed station is located near to new and potential population growth centres. It will diversify and strengthen the rail network and grow the use of public transport. In addition it will reduce area car-use and offset expected traffic transport increases. It will have numerous positive environmental outcomes through reduction of pollution and preservation of local amenity. For these reasons an additional Metro station sited at Alexandria (Euston and Maddox) should be immediately and impartially evaluated for addition to the Waterloo to Sydenham Metro section.

Option 2. Alexandria station and McEvoy OR St Peters

Option 2 proposes 2 additional Metro stations between Waterloo and Sydenham. This option provides greater network integration and increased mass-transit passenger capacity for the public transport system. Details justifying each station location follow below.

In this option, if St Peters is chosen as a second station, Alexandria Metro Station should be moved EAST (to the Euston Road / Harley street intersection). This provides reduced walking time to Green Square station and integrates Alexandria station better with Green Square.

If McEvoy station is chosen as a second station, Alexandria Metro Station should be moved SOUTH - WEST (to near the Sydney park Road / Euston Road intersection). This provides reduced walking time to St Peters and to employment areas around Burrows road and Huntley street.

McEvoy station option

Location: Approximately at McEvoy and Wyndham OR Wyndham and Mandible streets, Alexandria

This option would provide high train network interconnectivity (via a 3 minute walk) to the Green Square station. It would link the Northern and Bankstown lines directly into the Green Square / Airport Economic growth corridor.

It would improve other transport experiences by drawing peak hour patronage off connecting bus routes (e.g. Waterloo passengers transferring to buses to 'hop' to green Square). Thus it would positively impact on passenger transport experience via direct access to Green Square and rail line interchange onto the Airport line (for Bankstown line users). Overall transport network resilience is improved through traffic reduction resulting from better service provision

A McEvoy street location would directly service outer suburban workers access to job opportunities at both Green Square and the Global Economic Corridor. Green Square alone is projected to generate 21,000 permanent jobs on completion. The majority of these would be in the town centre area, an easy walk from a McEvoy street location. See reference to predicted job numbers Green Square at: http://www.cityofsydney.nsw.gov.au/vision/major-developments/green-square

In addition, the station intersects with existing bus networks which could be expanded in future as part of an integrated district plan for walking, cycling and bus routes, providing a public transport oriented network for the City - Green Square – Airport job / population growth corridor.

The McEvoy street location has already been judged as positively aligned on five of eight criteria in the Metros' own modelling is presented below as Figure 12.

McEvoy Station Plate:

At minimum, serious consideration should be given to boring out station plates to provide for future station fit-outs. This provides for transport planning agility and an 'insurance policy' type approach to expand network interconnectivity rapidly if the road network reaches saturation and mass transit systems require activation.

St Peters station option

Location: Approximately at Goodsell street, St Peters

This option provides high train network and train to bus network interconnectivity to high-use public transport routes. It links Northern, Western and Southern suburbs to the King street corridor (hospitals, universities and entertainment), bus routes to Green Square, University of New South Wales, Arncliffe and the Airport / job-growth corridor.

The St Peters option preserves the current transport experience of public transport users on the T3 Bankstown line who work in the Burrows street industrial area or interchange at St Peters to northsouth bus services. The removal of St Peters from the Bankstown line forces commuters to interchange at Sydenham to travel one stop further to St Peters to complete trips to

- The King street corridor (North and South)
- Burrows road industrial estate
- 370 to UNSW & eastern suburbs
- 348 to Zetland
- 308 to Redfern

St Peters provides a superior train to bus interchange point over Sydneham. This because St peters station intersects with a larger number of bus routes (4 versus 3) AND they are much higher capacity routes (they service busy King street, principally the hospital an university) and the popular 370 link to UNSW via green Square. The 3 Sydenham station bus connecting services carry lower passenger loads and don't connect to employment growth areas.

Image here

A careful consideration of the number of current and potential future commuters being dislocated by excising St Peters from the Bankstown line should be undertaken In addition, the opportunity for a St Peters Metro station location to grow total network capacity by integrating train to a bus interchange providing new bus routes as part of a district transport plan should be considered. While St Peters was considered to be negatively aligned for urban development, low-medium density development could be possible on this site and a holistic appraisal should be re-undertaken.

St Peters Station Plate:

At minimum, serious consideration should be given to boring out a station plate at St Peters to provide for a future station fit-out. This provides transport planning agility and an 'insurance policy' type approach to expand network interconnectivity on this strategic north- south / east – west transport corridor. This provides a 'safety-net' to rapidly increase the transport network capacity if the road network reaches saturation and mass transit systems require fast activation.

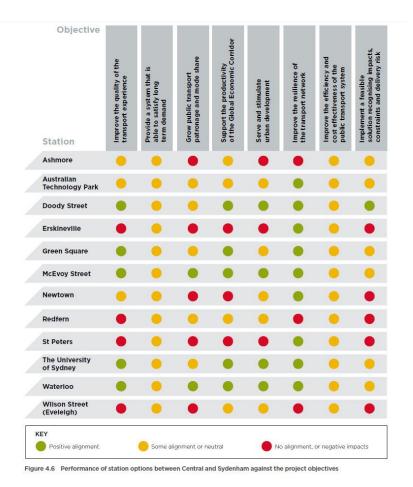


Figure 11: Station option performance (Metro documentation)

Option 3. Alexandria station and McEvoy and St Peters stations

Option 3 (3 additional Metro stations between Waterloo and Sydenham) provides the highest degree of transport network integration. Essentially it future –proofs the inner-city public transport network for this quadrant of the city by integrating high capacity rail with radiating bus / foot and cycling options.

Details justifying each station location have been provided above. The advantage of Option 3 is in the positive long-term transport network integration outcomes. Creating a well-provisioned innercity Metro provides a high capacity 'spine' for integrating several rail lines, rail to bus all facilitating appropriate, radiating local passive (waling and cycling) transportation.

When considered as foundational infrastructure, providing hyper-dense mass transport systems in the inner-city is required for districts supporting medium to hyper-dense populations. Hyper-dense population will almost certainly be accompanied by record (in Australian contexts) daily 'in-and through movements' to job opportunities, shopping and entertainment, and 'through' movements, to transport (airport), jobs (the Global Economic Corridor) and existing high use corridors (King street, eastern and southern suburbs, universities etc).

The provision of a 'suite' of stations should be considered holistically, for the value that the 'overprovisioning' of transport infrastructure provides to the current and future city over the life of the project. As outlined above, with the adequate provision of efficient and comprehensive public transport, there is a chance that the surface road network may not be totally overwhelmed in the future, which would be a disastrous and economically counter-productive outcome.

Given the long-term nature of rail infrastructure, the stated desire of the State Government to create value through a medium to hyper dense inner-city and the documented role of this district and corridor as a wealth generator for the State and nation, the short-term expense of three additional Metro stations on the Waterloo to Sydenham section of City metro can be supported for the long-term gain.

Summary

For the detailed reasons advanced above, I object to the current Metro proposal and urge that immediate, detailed and impartial consideration be given to the addition of extra stations on the waterloo to Sydenham section.

In response I hope for and expect

- a nuanced and detailed response
- an early announcement that the provision of additional Metro stations on the Waterloo to Sydenham corridor is being urgently undertaken
- an extended and meaningful community consultation be undertaken with the residents of Alexandria, Erskineville and St Peters.

Please give my detailed objection and evidenced proposals for additional stations your serious consideration.

Yours sincerely,

Declaration:

I have made no reportable political donations made in the previous two years. Yours Faithfully,

References:

 "an increase of 50,000 vehicles per average weekday on Euston road" Source page 53 Westconnex technical paper 1 Traffic report, accessed online at www.westconnex.com.au/.../Tech%20Paper%201%20-%20Traffic%20report%20Final

Traffic congestion costs in Sydney, current and projected

http://www.news.com.au/finance/economy/australian-economy/clogged-roads-are-expensive-andone-reason-we-spend-an-average-85-minutes-a-day-commuting/newsstory/934ad0c2fca8f15dca346fe6934401c7 Content: Sydney Metro City & Southwest - Chatswood to Sydenham Submission on EIS - Application Number: SS1 15_7400

I object to the building of the City & Southwest Metro on the following grounds

* At a cost of \$12 billion, the City & Southwest Metro is a very expensive way of increasing track capacity through the CBD. There is no information on how this new Metro will affect other lines that already run through the CBD. I believe ripping up existing platforms - particularly platforms 13, 14 and 15 at Central - is particularly shortsighted.

* Why can't existing heavy rail infrastructure be used with increased double deck capacity? Ecotransit says this can be built for less than \$4 billion. The proposed Metro is not good value for taxpayer dollars.

* I don't believe the Metro will increase capacity across the Sydney Rail Network, which appears to be the central tenet of this entire proposal. The alleged 60 per cent increase (which is consistently used in any brochures and other literature I have received) relies on improvements on existing lines. This is not part of the actual Metro proposal - certainly in none of the literature I received at the community consultation in Tempe - and I believe this is misleading. How is this 60 per cent figure derived?

* I would like clarified why double deck trains, particularly those with seating, and their capacity have not been used as a comparison, since most Sydney rail passengers would be familiar with these. The numbers are not stacking up. At 30 trains per hour (one every two minutes, and yes no timetable required) the Metro would carry only 36,000 passengers per hour, most of these crammed in Hong Kong sardine style. If the line were built and operated with double decker trains, the capacity would be 45,000 passengers per hour, based on the same frequency. Expecting passengers/customers to stand for 30 minutes, regardless of the frequency, is not mentioned at all.

* I believe the Metro will lead to greater overdevelopment of Waterloo, Sydenham and large tracts of all stations on the Bankstown line. The eyesore that is currently mushrooming at Canterbury station is just an unpleasant portent of what is to come. I believe the promotion of ``value capture" has not been adequately explained to the public during these community consultations, and has not been addressed by the NSW Government during the recent submissions regarding the Sydenham-Bankstown stage of this line. * I echo safety concerns raised by Eco Transit regarding proposed evacuation procedures with no on-board staff. Working with people with disability and older people, this is very concerning to me.

* What is happening to Erskineville and St Peters stations?, will the Waterfall/Hurstville line be expected to pick up these passengers, along with all the bussed in customers dumped at Sydenham once the Bankstown line is closed for construction? Already the Illawarra line is experiencing severe overcrowding - I catch the 7.27am service from Tempe -city and can no longer get a seat. The crowding on this service over the past 3 years has become quite pronounced. Will customers be consulted about timetable and service changes or will they simply be imposed upon train customers with no feedback?

* Where does Wynyard station fit into these plans, if it is no longer on the Bankstown line, on which line will it be? * Has the community been consulted about the proposed changes at Unwins Bridge Road with a new right turn light from May Street into Bedwin Road? And the removal of on-street parking spaces on Edinburgh Road?

* I am very concerned the driverless Metro is being pitched as a solution, and the only way to provide a more frequent service at 3minute intervals, when such frequency on double decker trains is already happening on the North Shore line in peak hour. To say only a Metro can provide increased capacity and service frequency is misleading, particularly when customers will be standing for long periods, and they risk losing the benefits of inner and outer west communities if Hong Kong-style high rise precincts are being planned without any local community consultation and input. Content: uploaded

Sydney Metro City & Southwest Chatswood to Sydenham Environmental Impact Statement Exhibition

Attention: Director, Transport Assessments



26 June 2016

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest Chatswood to Sydenham)

I object to this proposal on the grounds that the project should provide additional Metro stations at Alexandria and St Peters. The objection is based on the project's flawed and inadequate traffic and transport capacity modelling, as well as an inadequate public consultation process.

Further detail supporting this objection and the demand for immediate reconsideration and provision of additional Metro stations for Alexandria and St Peters follows.

1. Inadequate transport capacity modelling

The current Metro station selection process was undertaken before several recent infrastructure decisions and therefore requires immediate revision. These decisions significantly bear on the transport requirements of the inner-city. They include the ATP Commonwealth Bank project (11,000 workers, 1,600 cars), the Waterloo Public Housing redevelopment (adding 20,000 residents), the Alexandria Super School (increasing to 2,200 students), the Ashmore Estate development (adding another 6,000 residents to the area) and Green Square as a high-job-growth area. Collectively these developments and others in the process of application approval will swamp local road networks, limiting the ability of bus services to scale up to service growing transport needs.

2. Inadequate traffic modelling

The Metro EIS does not model any relationship between the Metro (Waterloo to Sydenham) and Westconnex traffic , despite the Metro line running under McEvoy / Euston Road and St Peters. The EIS has no modelling of additional Metro stations (Alexandria and St Peters) ability to

reduce cross-town car use or offset the impact of Westconnex traffic spilling onto the inner-city road network.

3. Inadequate public consultation

Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville, now that the Metro route from Central to Sydenham has been finalised. Poor attempts at publicising the sparse consultations were evident, as the general area were largely unawares. Your attendance records will validate my point.

The finalised Metro route (passing under Alexandria and St Peters), announced in February 2016, is still poorly understood by the communities being bypassed. Now that the route is finalised a further meaningful and substantial community consultation process should be undertaken to truly gauge the transport needs of these communities.

4. Additional (Alexandria and St Peters) Metro stations

In light of the flawed and inadequate traffic and transport capacity modelling and inadequate public consultation process I urge an immediate reconsideration of the provision of additional Metro stations for Alexandria and St Peters.

I petition that adding these Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport). It provides mass-transit systems for the areas' doubled population, reduces chronic over-crowding on Erskineville station and reduces inner-city car congestion. This will be in line with other major cities across the developed world. Look at New York - Look at London and Paris. Sydney should be right up there as a model international city to be envied. This should be the legacy of the Baird administration not a tangled road system with increasing pollution from cars and poor public transport infrastructure. Show some leadership Baird. Do your job you were elected to do. Do something about it for the future of Sydney.

Declaration:

I have made no reportable political donations made in the previous two years.

Yours sincerely,

Name: Daria Harnett

Sydney, NSW 2015

Content:

Sydney Metro City & Southwest Chatswood to Sydenham Environmental Impact Statement Exhibition

Attention: Director, Transport Assessments

Ms Daria Harnett

50 Anderson Street

Alexandria NSW 2015

26 June 2016

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Declaration:

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Yours sincerely,

Daria Harnett

Name: Maureen Flowers

Hunters Hill, NSW 2110

Content:

I cannot believe that this 'Metro Line' project is even being considered, as it will serve to downgrade our existing double deck train system - a transport system that much of the rest of the world are trying to adopt!

To plan for such a deterioration in passenger comfort and capacity is astounding and takes no account of the fact that most people have to work on their long commuting journeys. To make the majority of passengers stand in future will further exacerbate the stress of the already hard commute that many people have to face.

It is not correct to say that only a Metro can provide increased capacity and service frequency. The existing Sydney double deck trains can, and do, run at 2-3 minute intervals through the CBD in peak hour.

Once again, you are selling NSW to property developers, this time in the form of MTR Hong Kong. We have no wish to emulate Hong Kong ,so do not destroy our city in your quest for profit and power.

Content:

I support improving public transport in Sydney. I do not want high rise towers built as part of the project in Crows Nest. It is important to maintain the village character of Crows Nest. High buildings should be clustered around the commercial centres of St Leonards and North Sydney. Crows Nest is a local centre, not a regional centre. The scale of the building of the metro station should fit with the suburban local centre. Any future developments associated with the metro station or in the precinct should be not be high rise.

Content:

I oppose the design and construction of the Sydney Metro Chatswood to Sydenham section in its current form because:

1. The design involves demolition of a number of places of local heritage significance. This demolition cannot be readily mitigated. Archival photographic recording is a poor substitute for the preservation of authentic historic places that contribute to the character and identity of our local communities.

2. I particularly object to the demolition of two above-ground buildings within my local community for what is essentially an underground station: the former Jeweller's Shop and Tower Square on Miller Street in North Sydney. These two buildings are some of the few low rise buildings to remain within the North Sydney commercial area, and make an important contribution to the social and visual character of the Miller Street district. Tower Square has particularly high amenity value, as an area of high quality, defacto public open space within the business district, and which also has a very interesting historic architectural character. I note that Tower Square is not addressed in the heritage assessment for the project because it is not a listed heritage item. I believe that this is negligent, and that the report should also include places of potential heritage value for the local community. It is unclear whether the project has considered ways to construct Victoria Cross Station without the need to demolish buildings with high heritage and amenity value to the local community. It is also unclear why buildings on the opposite side of Miller Street with no heritage value could not instead be demolished to facilitate this project.

3. I am disappointed that the EIS provides little or no information on the types of buildings that would be raised above Victoria Cross Station, in the place of the Jeweller's Shop and Tower Square on Miller Street, or how any new buildings could/would mitigate the loss of social and aesthetic amenity in this area. I object to the fact that is not possible to understand or appreciate how any new buildings on this site would visually impact on other important heritage items in the immediate vicinity, including the neighbouring MLC building to the south and the Rag and Famish Hotel to the north.

4. I object to the demolition of the block of flats designed by Emil Sodersten and Marion Best on Elizabeth Street in the Sydney CBD, a rare and important example of modernist residential design to remain in the CBD. The loss of this building cannot be mitigated.

5. I object to the construction methodology at Central Station, which would involve the removal of platforms 13 to 15 and irreversible damage to the historic canopy structures across this major station precinct. The regular patterns of the trusses supporting the canopies are a particularly important aesthetic feature of the station. It is unacceptable that rare elements of historic railway infrastructure with important aesthetic value would be irreversibly damaged and degraded for construction of a temporary footbridge structure.

6. Most of all, I object to the construction of an elevated access bridge into the Sydney Yards, which would obstruct significant views to the former Mortuary Station from passing trains. I believe that the heritage and visual assessments for this project underplay the loss of heritage value that would result from constructed of the elevated bridge. I understand that Mortuary Station has been flagged as a place of potential national heritage significance. The removal of Mortuary's sister station from Rookwood Cemetery in 1958 (before current heritage legislation was in place) was a severe loss to the historic heritage of NSW. It is unacceptable that the visual setting of the remaining Mortuary Station would be so egregiously compromised by construction of an elevated bridge in this location. Most people appreciate the station as a visual landmark on their entry to Central Station by train. If new access to the Sydney Yards is required, why are they not designing a tunnel rather than an elevated bridge in order to preserve the heritage value of this historic station site?

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Content: Please publish To whom it may concerned:

Re: Objection to proposed noise abatement measure at the Chatswood dive site.

I am very concerned to the noise and air management at the Chatswood dive for the Sydney Metro City & Southwest - Chatswood to Sydneyham project. I understand that the project will last for several years, 24 hours and 7 days a week. Hence, it is important that noise and air pollution are kept at the minimum during this construction progress. To minimise noise and air pollution level, we suggest installation of acoustic shed and high permanent barrier fencing. As my children and grandchildren are living with me, it is important that both of the above factors are minimised for the whole family.

Thank you for your urgent attention in this matter,

Name: Graham Strauss

Cheltenham, NSW 2119

Content:

I support and encourage the provision of as much secure enclosed bicycle parking as can be accommodated up to the maximum likely customer demand in the foreseeable future.

The type of parking I refer to is the sort I've seen announced lately at Blacktown station for example, and have also seen on the ground floor level of car parking stains adjacent and to the north of Parramatta station. The ones at Parramatta were dingy afterthoughts but had adjacent 'end of journey' change and easy up rooms including lockers I think. They didn't seem to be well used which I put down to poor location an an uninviting presence. It occurs to me that any retro fitted facility of this sort will suffer from being in a sub optimum location less than perfect support 'end of journey' arrangements.

I began a discussion on this topic with Sydney Metro staff at Tempe during the stage 2 EIS presentation there and was encouraged by what I heard, not so much on specific arrangements for nominated stations but about the factors that go into choosing the right stations for what sort of parking facility, and how to make them convenient, attractive and secure.Proximity to facilities for coffee breaks and snacks, up to light meals were alluded to as a way of giving the cycle / train interchange more appeal.

The discussion was brief but I have been thinking about it since, and the possibility that provision of such parking from the start for the stage 1 Skytrain section might be a missed opportunity, but if not, all to the good.

Stage 2 might not offer a lot of opportunity either given that so many of the stations are city based, where people will arrive to work rather than live. Perhaps Barangaroo might be a place where people pedal to from accommodation in the vicinity for a commute to, say, the North Ryde or Norwest. Sydenham also for parking the cycle and heading to Redfern or into the city. Dara available to Sydney Metro will help make sound decisions where I am only guessing.

Strage 3 presents another opportunity with existing stations to be remodelled and made Metro, at least on one set of tracks.

I sense there is plenty of capability in Sydney Metro for assessing and planning the provision of these things. It may even be that a broad general plan is already underway, or perhaps just a few pilots.

Whatever the situation I encourage the most adventurous approach possible, to not just get people onto Metro and trains, but out of cars and onto bikes wherever possible for getting to a station.

Good luck with the whole thing, and with as expansive an approach as is possible to making the cycle to the train option attractive.

Name: Kate Carroll

Sydney , NSW 2000

Content: Submissions attached in PDF form.

Submissions regarding proposed Sydney Metro Waterloo site

The proposed location being located between Botany Road, Cope Street, Raglan Street and Wellington Street.

I submit the above stated Waterloo site is unsuitable for many reasons including the following:

Adverse Environmental Impacts on natural & built environments

The impact of this proposed development will create major adverse environmental impacts on both the natural and built environments.

Aboriginal Archaeological Deposits

There is a high likely hood of Aboriginal archaeological deposits in the Waterloo area which would be of significance.

In particular this relates to the proposed tunnel between Marrickville dive site and Waterloo Stations runs beneath Sheas Creek, a now concrete canal which forms the north-eastern extent of Alexandra Canal.

Alexandra Canal area has been listed as areas of archaeological potential.

Artefact Heritage in their technical paper 5 Aboriginal Heritage Archaeological Assessment published the following;

"animal bones (Dugong) and Aboriginal stone artefacts were identified by workers during extension of the Alexandra Canal in the 1890s at Shea Creek.. Palaeontologist Etheridge identified cuts and scars on the bones consistent with the animal being butchered. Two hatchet heads were also retrieved from the same area".

"7.11.5 Assessment of archaeological potential

The survivability of Aboriginal archaeological deposits in sites such as Waterloo Station is dependent largely on the extent and nature of subsequent phases of historical construction activities. As demonstrated at archaeological excavations across the Quaternary sand sheet, discrete portions of surviving archaeological deposit containing Aboriginal objects may occur beneath extant buildings and deep layers of introduced fill.

There are likely to have been significant, although not necessarily comprehensive, sub-surface impacts across the Waterloo Station site from 19th and 20th century construction and service installation across the site. The extent of introduced fill and depth of excavation during construction of the extant structures was unknown at the time this report was prepared.

Results from previous archaeological excavations across the Quaternary sand sheet demonstrate the potential for buried Aboriginal sites associated in those contexts. These sites can occur buried beneath areas of surface impact. Results of geotechnical investigations in the vicinity of the Waterloo Station site indicates the presence of buried sand beneath layers of introduced fill overlying Ashfield shale.

There is moderate-high archaeological potential for Aboriginal objects in sub- surface contexts where there have not been extensive sub-surface impacts."

"Intact Aboriginal archaeological deposits within the area are extremely rare and would be of high research significance.

"It is also possible that out-of-context Aboriginal artefacts may be present in the layers of fill used in the area."

However the map showing the location of Aboriginal sites has been removed, seemingly by Sydney Metro, from the public version of this document.

Native Animal Life

Waterloo is a known area of bat roosting.

Arcadis in their Technical Paper 9 Biodiversity Assessment state the Eastern Freetail-bat (Mormopterus norfolkensis) and Eastern Bentwing-bat (Miniopterus schreibersii oceanensis) are both listed as Vulnerable under the TSC Act, and are considered to have a moderate likelihood of occurrence at the Waterloo.

It can be observed that the native Fig trees at this site provide foraging habitat for the bats as well as the Rainbow Lorikeet (Trichoglossus haematodus) and Common Sulphur-crested Cockatoo (Cacatua galerita).

Contamination

Jacobs in their Technical Paper 8 Contamination Investigation state;

"the historical and current commercial/industrial use of the Waterloo Station site (including present day activities including dry cleaners, automotive use and a sub-station) represents a potential source of contamination associated with the chemicals used in the dry cleaning process (i.e. chlorinated hydrocarbons, and volatile organic compounds), the automotive industry (hydrocarbons), substation (hydrocarbons and PCB) and miscellaneous chemicals associated with historical commercial/industrial operations.

The risk to construction activities is considered moderate given that construction would require excavation of potentially contaminated soils, contact with potentially contaminated groundwater and potential volatilisation of some organic compounds. These volatile compounds (if present) may need to be managed during construction activities and vapours may need to be monitored within sub-surface spaces during operation of the station (dependent of the design of the station).

There is an area of high Acid sulfate soils (ASS) probability to the north of Alexandra Canal. It is possible that the construction of the Waterloo Station site may require excavation of alluvial soils which could contain ASS. Further investigations are required to better understand the potential risks."

Significant negative impact of Property acquisition

There is the need for Sydney Metro to acquire and estimated 18 properties, resulting in acquisition or relocation of occupying businesses, out of all of the proposed stations to be built Waterloo features the highest number of total forced acquisitions.

The proposed Waterloo Station site is a commercial / industrial / retail precinct including services such as a dry cleaner, automotive sales and repairs, printing press premises and shopping outlets, these commercial premises provide jobs and manufacturing in Australia for Australians. The removal of these businesses is not in the public interest of Australians, business owners, customers or the locals.

Detrimental affect to existing residents, buildings and structures

There will be an increase in erosion, adverse ground water impacts and risk to buildings and structures due to ground movement. As well as health issues and social issues of the following:

Proposed Substation located on Cope Street

The land use surrounding the project area is commercial, retail and high density residential. SLR Global Environmental Solutions in their technical paper 2 noise and vibration state there is a potential substation located on Cope Street - this would be a major adverse environmental and health impact as Cope Street is high density residential housing. There has been no community consultation on this at all.

It appears that there has also been NO assessment on the impacts stations and ancillary equipment such as substations and ventilation systems will cause;

"Operational Airborne Noise from Stations and Ancillary Facilities

The potential operational noise impacts from stations and ancillary equipment such as substations and ventilation systems have been assessed."

Noise, vibration and dust

It has been published by Jacobs in their Technical Paper 8 that the construction work, including excavation, could disturb businesses and the work environment through noise, vibration and dust.

Tunnelling construction works are proposed to occur on a 24 hour per day 7 days per week According to SLR Consulting Australia the tunnelling construction works are proposed to occur on a 24 hour per day basis and up to 7 days per week.

Excessive round-borne noise and vibration levels from tunnelling It has been reported the ground-borne noise and vibration levels from tunnelling may exceed the management levels at residential receiver locations during the evening and night-time period when people are resting or sleeping.

Excessive Noise

For residents north, south, east and west of the work they may experience an excess of 20 decibels of noise in the day and 20 decibels at night.

It has been reported that careful design consideration would be required at Barangaroo, Pitt Street and Waterloo stations to minimise noise at the nearest residences.

Servicing and delivery access problems

It has been published servicing and delivery access problems will occur, specifically servicing and delivery constraints for business located along Botany Road or on opposite sides of Raglan Street and Buckland Street.

Reduction on customer access & passing trade

It has been published customer access & passing trade with the construction would result in changes to vehicle and pedestrian flows that could influence the level of trade passing businesses and subsequent customers and sales.

Botany Road provides essential business trade which requires service & delivery access from the adjoining streets of Wellington, Ragland, Buckland and Cope Street. Vehicle and pedestrian flow to Botany road also relies heavily on access to Wellington Ragland, Buckland and Cope Street - disruption to these areas will affect key businesses will lead to the demise of trade and community services as well as the community.

These are just SOME of the many reasons to be found in the environmental impact statements published on the Sydney Metro website as to why Waterloo Metro Station proposal should be rejected.

The Waterloo Metro is not wanted or needed by the Redfern & Waterloo community, there has been public outcry over this as seen at the community events held by Sydney Metro, Urban Growth and Clover Moore who is also seemingly against the Metro and what it stands for.

Public outcry can be seen through social media sites including: Redwatch.org.au, Waterloo Public Housing Action Group, Greenleft.org.au, Better Planning Network, Stealing Our Skies, North Eveleigh Info, Alexandria Residents Action Group. Other supporting groups are Millers Point Community Association (MPCA) and Action for Public Housing (APH).

Newspapers including the Sydney Morning Herald, Australian Financial Review (AFR) and Daily Telegraph have been vocalising their concerns.

e.g. AFR 16 December 2015

"Mirvac, Chinese Developers to benefit from Sydney's new Waterloo metro station".

Television stations such as channel nine, SBS and ABC have also documented public outcry against the Waterloo station build.

Greens NSW representatives have raised transport, housing, and accessibility concerns in response to NSW Governments announcement for a Sydney Metro station at Waterloo.

Greens NSW MP and Transport spokesperson Dr Mehreen Faruqi said:

"Transport decisions should be made to provide for accessibility for all. The government shouldn't be using the proposed private metro line as an excuse to overdevelop the area."

Greens NSW MP for Newtown Jenny Leong said:

"It's understandable that the community is asking - if they build a new station at Waterloo what will happen to the long-going struggle for a Redfern Station upgrade to ensure full accessibility of this key transport hub? And what about the public housing in Waterloo?"

"Once again we are seeing that this state government is willing to put the interests of the big developers ahead of community interests. Urban Growth might pull all the strings when it comes to decisions made by the NSW Government but they do not control this community.

Greens NSW City of Sydney Councillor Irene Doutney said:

"The announcement of the new Metro station in Waterloo will send a wave of dread through the public housing estates that surround the proposed site. UrbanGrowth has made it more than clear that the siting of the station at Waterloo would trigger the redevelopment of the Waterloo/Redfern Estates.

"The consequences of such redevelopment will be destruction of our local public housing communities which will be replaced with medium to high-rise private development. We are seeing this happen in Millers Point where the local community is being wiped out by gentrification.

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The survivability of <u>Aboriginal archaeological deposits in sites such as Waterloo</u> <u>Station</u> is dependent largely on the extent and nature of subsequent phases of historical construction activities. As demonstrated at archaeological excavations across the Quaternary sand sheet, <u>discrete portions of surviving archaeological</u> <u>deposit containing Aboriginal objects may occur beneath extant buildings and deep</u> <u>layers of introduced fill.</u>

There are likely to have been significant, although not necessarily comprehensive, sub-surface impacts across the Waterloo Station site from 19th and 20th century construction and service installation across the site. The extent of introduced fill and depth of excavation during construction of the extant structures was unknown at the time this report was prepared. <u>Results from previous archaeological excavations across the Quaternary sand</u> <u>sheet demonstrate the potential for buried Aboriginal sites associated in those</u> <u>contexts</u>. These sites can occur buried beneath areas of surface impact. <u>Results of</u> <u>geotechnical investigations in the vicinity of the Waterloo Station site indicates the</u> <u>presence of buried sand beneath layers of introduced fill overlying Ashfield shale.</u> <u>There is moderate-high archaeological potential for Aboriginal objects in</u> <u>sub-surface contexts where there have not been extensive sub-surface impacts</u>."

"Intact Aboriginal archaeological deposits within the area are extremely rare and would be of high research significance.

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Native Animal Life

Waterloo is a known area of bat roosting.

Arcadis in their Technical Paper 9 *Biodiversity Assessment* state <u>the Eastern</u> <u>Freetail-bat (*Mormopterus norfolkensis*) and Eastern Bentwing-bat (*Miniopterus* <u>schreibersii oceanensis</u>) are both listed as Vulnerable under the TSC Act, and are <u>considered to have a moderate likelihood of occurrence at the Waterloo</u>.</u>

It can be observed that the native Fig trees at this site provide foraging habitat for the bats as well as the Rainbow Lorikeet (Trichoglossus haematodus) and Common Sulphur-crested Cockatoo (*Cacatua galerita*).

Contamination

Jacobs in their Technical Paper 8 Contamination Investigation state;

"the historical and current commercial/industrial use of the <u>Waterloo Station</u> site (including present day activities including dry cleaners, automotive use and a substation) <u>represents a potential source of contamination associated with the</u> <u>chemicals used in the dry cleaning process</u> (i.e. chlorinated hydrocarbons, and volatile organic compounds), the <u>automotive industry</u> (hydrocarbons), substation (hydrocarbons and PCB) and miscellaneous chemicals associated with historical commercial/industrial operations.

The risk to construction activities is considered moderate given that construction would require excavation of potentially contaminated soils, contact with potentially contaminated groundwater and potential volatilisation of some organic compounds. These volatile compounds (if present) may need to be managed during construction activities and vapours may need to be monitored within sub-surface spaces during operation of the station (dependent of the design of the station).

There is an area of high Acid sulfate soils (ASS) probability to the north of Alexandra Canal. It is possible that the construction of the Waterloo Station site may require excavation of alluvial soils which could contain ASS. Further investigations are required to better understand the potential risks."

Significant negative impact of Property acquisition

There is the need for Sydney Metro to acquire and estimated 18 properties, resulting in acquisition or relocation of occupying businesses, <u>out of all of the proposed stations to be built Waterloo features the highest number of total forced acquisitions</u>.

The proposed Waterloo Station site is a commercial / industrial / retail precinct including services such as a dry cleaner, automotive sales and repairs, printing press premises and shopping outlets, these commercial premises provide jobs and manufacturing in Australia for Australians. The removal of these businesses is not in the public interest of Australians, business owners, customers or the locals.

Detrimental affect to existing residents, buildings and structures

There will be an increase in erosion, adverse ground water impacts and risk to buildings and structures due to ground movement. As well as health issues and social issues of the following:

Proposed Substation located on Cope Street

The land use surrounding the project area is commercial, retail and high density residential. SLR Global Environmental Solutions in their technical paper 2 *noise and vibration* state there is a <u>potential substation located on Cope Street - this</u> would be a major adverse environmental and health impact as Cope Street is high density residential housing. There has been no community consultation on this at all.

It appears that there has also been <u>NO assessment on the impacts stations and</u> <u>ancillary equipment such as substations and ventilation systems will cause;</u>

"Operational Airborne Noise from Stations and Ancillary Facilities The potential operational noise impacts from stations and ancillary equipment such as substations and ventilation systems have been assessed."

Noise, vibration and dust

It has been published by Jacobs in their Technical Paper 8 that the construction work, including excavation, could disturb businesses and the work environment through noise, vibration and dust.

Tunnelling construction works are proposed to occur on a 24 hour per day 7 days per week

According to SLR Consulting Australia the tunnelling construction works are proposed to occur on a <u>24 hour per day basis and up to 7 days per week</u>.

Excessive round-borne noise and vibration levels from tunnelling

It has been reported the ground-borne <u>noise and vibration levels from tunnelling</u> <u>may exceed the management levels at residential receiver locations during the</u> <u>evening and night-time period when people are resting or sleeping</u>.

Excessive Noise

For residents north, south, east and west of the work they may experience an excess of 20 decibels of noise in the day and 20 decibels at night.

It has been reported that careful design consideration would be required at Barangaroo, Pitt Street and Waterloo stations to minimise noise at the nearest residences.

Servicing and delivery access problems

It has been published servicing and delivery access problems will occur, specifically servicing and delivery constraints for business located along Botany Road or on opposite sides of Raglan Street and Buckland Street.

Reduction on customer access & passing trade

It has been published customer access & passing trade with the construction would result in changes to vehicle and pedestrian flows that could influence the level of trade passing businesses and subsequent customers and sales.

Botany Road provides essential business trade which requires service & delivery access from the adjoining streets of Wellington, Ragland, Buckland and Cope Street. Vehicle and pedestrian flow to Botany road also relies heavily on access to Wellington Ragland, Buckland and Cope Street - disruption to these areas will affect key businesses will lead to the demise of trade and community services as well as the community.

These are just SOME of the many reasons to be found in the environmental impact statements published on the Sydney Metro website as to why Waterloo Metro Station proposal should be rejected.

The Waterloo Metro is not wanted or needed by the Redfern & Waterloo community, there has been public outcry over this as seen at the community events held by Sydney Metro, Urban Growth and Clover Moore who is also seemingly against the Metro and what it stands for.

Public outcry can be seen through social media sites including: Redwatch.org.au, Waterloo Public Housing Action Group, Greenleft.org.au, Better Planning Network, Stealing Our Skies, North Eveleigh Info, Alexandria Residents Action Group. Other supporting groups are Millers Point Community Association (MPCA) and Action for Public Housing (APH).

Newspapers including the Sydney Morning Herald, Australian Financial Review (AFR) and Daily Telegraph have been vocalising their concerns. e.g. AFR 16 December 2015 *"Mirvac, Chinese Developers to benefit from Sydney's new Waterloo metro station"*.

Television stations such as channel nine, SBS and ABC have also documented public outcry against the Waterloo station build.

Greens NSW representatives have raised transport, housing, and accessibility concerns in response to NSW Governments announcement for a Sydney Metro station at Waterloo.

Greens NSW MP and Transport spokesperson Dr Mehreen Faruqi said:

"Transport decisions should be made to provide for accessibility for all. The government shouldn't be using the proposed private metro line as an excuse to overdevelop the area."

Greens NSW MP for Newtown Jenny Leong said:

"It's understandable that the community is asking – if they build a new station at Waterloo what will happen to the long-going struggle for a Redfern Station upgrade to ensure full accessibility of this key transport hub? And what about the public housing in Waterloo?"

"Once again we are seeing that this state government is willing to put the interests of the big developers ahead of community interests. Urban Growth might pull all the strings when it comes to decisions made by the NSW Government but they do not control this community. Greens NSW City of Sydney Councillor Irene Doutney said:

"The announcement of the new Metro station in Waterloo will send a wave of dread through the public housing estates that surround the proposed site. UrbanGrowth has made it more than clear that the siting of the station at Waterloo would trigger the redevelopment of the Waterloo/Redfern Estates.

"The consequences of such redevelopment will be destruction of our local public housing communities which will be replaced with medium to high-rise private development. We are seeing this happen in Millers Point where the local community is being wiped out by gentrification. Name: Marie Healy

Hurlstone Park, NSW 2193

Content: I have attached by document below Attention: Director, Infrastructure Projects plan_comment@planning.nsw.gov.au

Personal Submission - Objection to the Chatswood-Sydenham Metro

Application No: SSI 15_4400

Marie Healy

1. Economic case

The Baird Government proposes overhauling laws surrounding biodiversity. As part of this process, the definition of "environmentally sustainable development" will include economic considerations.

Given the government has refused to release in full details of the costings of this project, I am opposed to it progressing.

The Baird Government cannot have their cake and eat it too.

I understand that costs have already blown out.

The public needs to be convinced of the economic benefit of this plan before it is allowed to proceed.

It is the height of arrogance to proceed with an ideologically-driven project without full disclosure of the business case to all taxpayers and their representatives.

Secondly, I believe the metro will be operated privately, for profit, yet the taxpayers of NSW are paying for its building.

According to he Sun Herald (26th June 2016) the Baird Government will spend \$12.6 million of tax-payers money on promoting the Metro.

2. Conflicts of interest

The media has brought to the attention of the public, donations from developers to the Liberal Party. Developers are going to be the big winners with the new Metro, especially if the "Hong Kong mode" prevails, which is more than likely. This will see major developments along the Metro Lines and possibly in the airspace above stations. The benefits for developers are significantly multiplied by the "urban renewal strategies" that propose mass rezoning along the corridors involved.

Already developers are moving up the BRW rich list at an exponential rate.

Providing a station at Barangaroo, the site of Packer's casino, is concerning, as the Packer family are also Liberal Party donors. Why the tax payers should fund such a station is questionable.

3. Ideological issues

The Metro Plan marries perfectly with the Liberal Party's well-known opposition to unions and pushes their privatisation agenda forward.

I am opposed to a privately-operated rail system.

It also provides tax-payer funded infrastructure to developers in their pre-determined priority growth areas.

The Metro is being used an excuse for inappropriate over-development. I am also deeply suspicious at the cynical move by the Baird Government to simultaeuosly promote the Metro, plan mass rezoning along the lines and force council amalgamations onto concerned communities.

4. Technical, engineering and access issues.

This poorly-conceived plan involves the ripping up of current rail lines, and the remodelling existing railway platforms. It also includes the drilling of tunnels that will only fit the new system.

The new metro will not connect with the current rail system, and there will be little or not hope or reconnecting in the future.

The lack of integration with the existing transport network is short-sighted.

It appears that there has been little, if not any, consideration to simply improving capacity on existing lines, and adding connections where needed.

The capacity of the new system is also questionable, given double-decker trains will be replaced by single deck units.

5. Heritage Concerns

This is a mojor concern, especially as mass rezoning, to benefit a Metro operator and developers, is intrinsically linked to the plan.

The mass rezoning of areas along the corridor fails to significantly take into account the built and social heritage of each suburb. Compulsory acquisitions of properties will also occur.

In Haberfield, we have seen the destruction of beautiful Federation homes for the similarly controversial privately-run and costly West Connex.

This Government cannot be trusted to either appreciate or protect the built and social heritage of Sydney's suburbs, and the marriage of the Metro Plans with the Urban Renewal Strategies will spawn character-less high-rise slums in previously pretty residential areas.

The expert evidence for retaining the heritage character and unique suburbs of Sydney is overwhelming. Many experts have spoken openly on this issue, and in opposition to the Baird Government's "One size fits all" approach to urban planning, including Assoc Professor Elizabeth Farrelly, Professor John Landis and Dr Toni Recsei.

6. Wastage of existing resources and duplication

The remodelling of existing stations, platforms and lines is wasteful and has not been adequately justified. This is not a good model for sustainability.

There are also the plans for petitioned-off platforms, video surveillance and other technologies which will use power.

7. Poor planning of travel requirements

Leaving out St Peters and Erskineville stations will result in extra travel for people

wanting to go to or leave these areas. These areas are serviced quite well under the current system.

Currently the existing rail system from Bankstown to Sydenham and then to the city is underutilised. It is only busy and close to capacity at peak travel times and for some special events. In the middle of weekdays, and on the weekends, carriages are almost empty and platforms pretty much abandoned. The DPE has claimed that the Sydenham-Bankstown corridor is one of the most densely populated in Sydney, yet the Rail system is hardly used outside of peak times. The case for the Metro is not convincing. Having trains running every few minutes when there are few commuters is a terrible waste of power. Simply increasing peak services would suffice.

8. Lack of consideration of altertnatives

Instead of ripping up rail lines that already exist, improving public transport along Parramatta Road should be a priority.

The light rail from Dulwich Hill to the City, for example, has been an exclellent addition and did not face the level of opposition seen in relation to the Metro.

Name: Bec Bowring

Alexandria, NSW 2043

Content: There seems to be a huge distance between stations and a complete lack of stops in the soon to be very busy Alexandria area (especially near the Ashmore estate development). This seems to be a complete waste of an opportunity and extra stops should be established now rather than retrofitted later

Whilst I support the extension of the Sydney Metro along this route, I feel there is a missed opportunity to add a much-needed station at Alexandria - especially given the expected growth in this area over the next 5-10 years. The development at the Ashmore precinct would be a perfect opportunity to add a station and leaving it out seems short-sighted.

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest - Chatswood to Sydenham)

I object to the proposed tunnel going under homes on Lawrence and Belmont streets and Sydney Park Village.

As a shift worker in a safety critical field it is very important that I am able to sleep during the day. Given the EIS states that noise levels will be above the nominated acceptable level, I have serious concerns about the amount of noise and vibration that my house will be subjected to both during construction and on an ongoing basis once the project is operational.

I am concerned about damage to properties surrounding the tunnel, including those some within heritage conservation areas.

I am object to a degradation in air quality associated with exhaust stacks from the tunnel.

I also object to the project due to its admitted potential to increase local flooding, which is already a significant factor in Alexandria.

I wish to lodge my objection to the current plans for the Chatswood dive-site for the Sydney Metro Sydney & Southwest "Chatswood to Sydenham" project.

I understand progress must occur due to our enlarging population, however it should not be at the expense of local affected residents who were not initially consulted or even given the opportunity to offer alternate suggestions.

The Environmental Impact Statement Summary shows that this project has been in the pipeline for some time and, even though residents are now being given the opportunity to voice their concerns (for all they are worth), it is obviously too late. The State Government appears to have decided this project will be proceeding no matter what! My main concerns and objections are as follows:-

- why weren't local residents, who will be directly affected by the project, not consulted at the start when this project was in it's initial stages? Am certain many of the objections could have been sorted and alternatives proposed; and concerns could have been alleviated by working through the various ideas and solutions.

- objection to the removal of the rail bridge at Nelson St

Traffic through Chatswood is already very congested (especially in peak hour and on the weekends) and this will only exacerbate the problem as local residents - in particular those from surrounding streets of Ellis St, Pacific Hwy, Gordon Ave & Nelson St - will now be required to drive south down the Pacific Hwy and turn left into Mowbray Road and then either left again at Orchard Rd or proceed further down Mowbray Rd to Archer St to drive to the shopping centre. eg. This will add a minimum of 15-30 minutes extra for residents in the local vicinity just to get around the corner and then to return home, the extra time will be even longer due to the current congestion along Albert Avenue daily! The removal of the Nelson Road bridge will also force more local traffic onto roads that are already clogged, congested and unable to cope with current traffic numbers. No alternative traffic routes have been proposed for when the Nelson Street bridge is removed. Why not?

NB. Also, the removal of the railway bridge was never noted as an option in searches when properties were purchased over past years. When purchasing previous property in another suburb the initial property search there resulted in being advised of the possibility of the Government widening a major road. The value of all properties (especially those nearest the project) will be adversely affected by the removal of the bridge. Will the Government be compensating Residents???

SOLUTION: Build a new bridge for local resident use only.

SEMI-SOLUTION: Install a set of traffic lights at Nelson St/Pacific Hwy/Moriarty Rd.

This solution will also be favourable for truck traffic during construction of the tunnel and when the site will be redeveloped at a later stage. Traffic should be able to turn either right or left from Nelson St or go straight ahead to Moriarty Rd (and vice verse). Understand there would be no option for a right-hand lane into Nelson St travelling north on Pacific Hwy as this would be detrimental to traffic flow and there would be no extra room to build a lane. NB. Up until a few years ago, cars were able to turn right from Nelson St or drive directly across to/from Moriarty Rd.

- objection to the modification of the Mowbray Rd/Pacific Hwy intersection by widening of the Pacific Hwy to add a right turn lane travelling southbound

How will the residents of Nelson St (current and future) be able to drive across to get to their required lane on the Pacific Hwy? It is currently difficult enough to enter the Pacific Hwy to get into the far left lane to travel south, trying to get across 3 lanes will be impossible.

SOLUTION: Recommend that "keep clear" signs be enforced on Pacific Hwy at Nelson St to allow Nelson St residents and visitors

onto Pacific Hwy as this is usually blocked

- objection to new traffic lights at Hampden Rd & Mowbray Rd

This will mean there are 3 sets of lights in a space of less than half a kilometre. Traffic will not be able to flow freely, no matter how synchronised the lights will be, which means residents from the north who will now be required to use Pacific Hwy & Mowbray Rd, will be caught up in even more traffic.

The removal of the Nelson Road bridge will force more local traffic onto roads that are already clogged and unable to cope with current traffic numbers. No alternative traffic routes have been proposed once the Nelson Street bridge is removed. I also note that the route chosen for the trucks accessing the dive site has allowed for a right hand exit onto Mowbray Road with the installation of traffic lights at Hampden Road so as to allow the trucks to travel north up the Pacific Highway without having to travel along Orchard Road and Albert Avenue.

SEMI-SOLUTION: A one-way road/lane from Nelson St to Mowbray Road for both Residents and Metro truck use.

- concerns regarding future noise and vibrations and ability to minimise impact

There is mention of noise barriers & hoarding (?) and an acoustic shed, however am doubtful this will be enough to stop the vibrations and noise reverberating underground to neighbouring properties in the vicinity.

- concerns regarding adequate Public Transport alternatives of `train replacement services" during adjustments to the T1 North Shore line

What are the `train replacement services'? Am guessing buses?? How will the surrounding roads be able to cope with the amount of buses required to transport the many thousands of passengers travelling south along the North Shore Line every morning. Trains are already filled to capacity in peak hour and it is very very doubtful that buses would be able to handle the capacity in a timely manner. Passengers will be coming from the North from as far as Newcastle/Central Coast and also from Epping (even though some of them will be able to travel via the Northern line). Has a proper study been conducted as to the extra amount of time this will now add to our already lengthening commute times and what were the solutions?

Other Various concerns are:-

- Northbound T1 track, adjacent to sp65120, will be about 2m higher than it is at present and current Noise-wall will be higher by similar amount.

- Maximum height of rail-bridge (for northbound track) will be between Nelson St & Gordon Ave but some other Metro reps said the 60m rail-bridge will be located over the Ausgrid site!

- apparently the Metro & North Shore tracks cannot be realigned at/before Chatswood Station as this would slow down the speed of trains. Why was this not considered at time of ECRL before 2007?

- as the Metro tracks will be concrete slabs (EIS Ch.6, p135) will dampers be used to mitigate noise?

- will the Noise study being revised?

- recommendations for a "Resident Only Parking Scheme" in Nelson St & Gordon Ave requested to be favourably considered.

the mind buggles why gore hill has not gotten a train station included in the new metro link proposal from chatswood to sydenham. yet crows nest and north sydney will get one. it would make sense to have one at gore hill with all the offices from st leonards moving here plus to get a supermarket like woolies or coles to open up here to service artarmon, greenwich, and st leonards which only has a small coles express.

such inclusion would also direct the tunneling away from residential area of artarmon and under industrial zone

Name: Fiona Rimes

Marrickville, NSW 2204

Content:

I object to the size and design of the proposed Martin Place Station because of the visual impact. It appears to take up a large amount of open space in Martin Place which has a negative environmental impact.

From the drawings, it appears to propose a building not in keeping with the architectural period of other buildings in Martin Place. It appears to be a modern design mostly of glass which has a negative environmental impact. The visual impact in such a key open space in the City must be kept to a minimum as are the current entrances to the railway.

Name: Ray Laverack

Epping, NSW 2121

Content:

Provision should be made at the site of the Barangaroo Station to include additional platforms, preferably to allow for cross platform interchange, for a future Sydney Trains City Relief Line from Eveleigh or alternatively the West Metro to Parramatta.

It is not clear if there will be a direct pedestrian underground connection between the proposed Pitt St Station and the existing Town Hall Station. This should be an essential prerequisite similar to the Martin Place interconnection between the new metro line and the existing Sydney Trains station.

I object to Sydney Metro Project specifically in respect of construction of the Chatswood Metro tunnel dive siteand heavy rail works immediately adjacent to my home construction and also excessive noise and vibration at our home during operation of the rail networks on completion.

Sydney Metro City & Southwest Chatswood to Sydenham section State Significant Infrastructure Application SSI 15_7400

1 APPLICATION NAME

Sydney Metro City & Southwest - Chatswood to Sydenham

2 APPLICATION NUMBER

SSI 15_7400

3 OBJECTION SUMMARY

I object to Sydney Metro Project specifically in respect of construction of the Chatswood Metro tunnel dive siteand heavy rail works immediately adjacent to my home at

due to the lengthy excessive noise and vibration during construction and also excessive noise and vibration at our home during operation of the rail networks on completion.

The EIS plans for dealing with construction noise have significant clauses which permit breaches without any penalty to the Contractor on the grounds of "unavoidable events or work" and "impractical to mitigate or avoid". My review of the complaints reports for the Norwest Metro project reveal this excuse is used in almost every instance of breach, and that the mitigations are trivial or too late.

Similarly, the entire operational noise performance and criteria is referenced to the "Rail Infrastructure Noise Guideline (EPA, 2013)" which is a VOLUNTARY GUIDELINE, not mandatory. It also contains multiple exclusions / excuses to exceed noise and vibration levels without action or penalty. This was quoted to us by the operators and project management after the Chatswood to Epping project which caused frequent and intolerable excessive operational noise and vibration

4 SPECIFIC REASONS FOR OBJECTION

4.1 EXCESSIVE RAIL OPERATIONAL NOISE AND VIBRATION - EXISTING

High levels of TrainNoise of can be heard and vibration felt at 1-3 Gordon Avenue from the current railway, and is frequently intrusive and interrupts sleep of the residents. The noise is both direct and also regenerated ground borne noise.

The northbound rail line was already moved 3m closer to the unit block during the Chatswood to Epping rail project. At various times since that work many complaints have been lodged, but with little or no useful action by the operators. It is only in the last twelve months that there has been some improvement in the noise and vibration, for reasons unknown, and unpredictably. I cannot rely on this improvement based upon bitter past experience.

The existing high levels also create an excuse for the operators to base the new operational noise limits higher than otherwise defined as acceptable, based upon on the already intolerable high levels being pre-existing.

1.1 EXCESSIVE RAIL OPERATIONAL NOISE AND VIBRATION - POST COMPLETION

It is proposed to move the northbound heavy rail line closer to **sector sector** by another three meters, and elevate it by 2m on a bridge structure which will make the noise at my unit much worse. This is on top of the existing 3m closer relocation carried out under the Chatswood to Epping project in 2006.

Gordon Avenue is specifically mentioned in the EIS as an address that will remain affected excessively by operational noise after completion of the work. It further states that it is impractical to create an adequate noise barrier.

The is an inadequate and incomplete reference to "at site mitigation", which implies someone may attempt to make some token sound proofing at the building, but not until after operation commences, and on an "ad hoc" basis. It is unclear who will be responsible, and police the process. As stated earlier, the EPA Railway Noise document is only a non-compulsory and unenforceable "guideline". The operators may deem the situation is satisfactory or beyond their own definition of "reasonable" control.

- 1. The very close proximity of the works, the ground structure and our building basement and stairwell arrangement will result in vibration being amplified within our premises to excessive levels.
- 2. The realignment of the existing T1 northbound rail line to the temporary route requires heavy machinery and excavation work after hours with multiple rail corridor closure events that will cause severe disruption and noise fatigue effect to the life of all residents.
- 3. T1 northbound track is closer to Gordon Avenue unit block increasing the noise and vibration impact.
- 4. New Metro tracks will carry more traffic than the existing T1 tracks did. This volume is in addition to the T1 track traffic which will remain.
- 5. The T1 northbound track is raised in height due to being routed over the dive structure. However, in addition to this the dive structure itself finishes at Nelson Street which

requires the T1 northbound track to be supported by a concrete bridge structure. This structure will generate significantly more noise than a closed structure and will also allow rail noise from the Metro tracks to pass through to the Gordon Avenue unit block.

- 6. For upper level units, the elevated T1 northbound trains and additional Metro trains will be noisier.
- 7. Ground vibration is a major concern with the increased volume of rail traffic on the T1 plus Metro lines. This vibration can potentially be amplified through the basement area of 1-3 Gordon Avenue.

1.2 EXCESSIVE CONSTRUCTION NOISE AND VIBRATION AT **1-3** GORDON AVENUE

The extensive and heavyconstruction the works associated with the tunnel dive site and existing rail realignment will generate excessive noise, vibration and dust at Gordon Avenue that cannot be mitigated adequately because the rail line is too close to the block, and the upper floor units immediately overlook the works and cannot be screened visually or acoustically;

- 1. The very close proximity of the works, the ground structure and our building basement and stairwell arrangement will result in vibration being amplified within our premises to excessive levels.
- 2. The realignment of the existing T1 northbound rail line to the temporary route requires heavy machinery and excavation work after hours with multiple rail corridor closure events that will cause severe disruption and noise fatigue effect to the life of all residents.
- The construction of the bridge to accommodate the new T1 northbound track over the new dive structure requires major rock excavation and piling works immediately adjacent to Gordon Avenue, with probable excessive noise and even structural damage.
- 4. Construction vehicles and material will continuously be moving in the track area adjacent to the Gordon Avenue unit block. This construction traffic will occur when preparing the site for the new dive structure, bridge and track foundations for the new t1 northbound location.
- 5. There is the potential for noise and vibration from existing rail traffic to increase due to the temporary nature of the relocated main northern line.
- 6. While a noise barrier is planned for the Nelson St construction site, no such noise barrier is proposed between the Gordon Avenue unit block and the excavation area during the excavation work required for the T1 northbound bridge, dive structure and tunnel. This noise barrier is required during the construction of the bridge over the dive structure for T1 northbound. In addition, a noise barrier is required during the building of new Metro tracks.

7. Potential 24x7 work during the construction phase of this project will severely adversely impact residence during and after work hours. There are significant aftershours large earth works, demolition, piling and track work proposed in the proximity of Gordon Avenue unit block.

1.3 BUSINESS INTERRUPTION DUE TO CONSTRUCTION & OPERATIONAL NOISE

I operate home business or work night shift work, requiring sleep, during the hours of 7am - 8 pm, the project will result in having a disruptive and high impact noise level unacceptably high for a work or daytime sleep environment. They will be forced to relocate at great personal expense. The adverse effects on these residents must be mitigated for this imposition by the project, by temporary or permanent relocation. Loss of income and rent must also be compensated for.

1.4 TRAFFIC PROBLEMSFOR GORDON AVENUERESIDENTS

The loss of the Nelson Street direct access to Chatswood is a major transport problem for the residents of Gordon Avenue, and hundreds of all other residents between Albert Avenue and Nelson St.We currently have direct easy road access to our local Chatswood retail, business, schools and community without traffic lights, without having to further congest the Pacific Highway and Mowbray Road, or Orchard Road intersections.

The Mowbray Road - southbound Pacific Highway intersection is already extremely congested at all times of the day, and particularly in morning and afternoon times. The location of the construction site entrances in Nelson Road and Mowbray Road mean that there will be continuous major truck "movements" through this intersection aggravating the situation to an unacceptable level. Trucks will invariably block this lane an make it nearly impossible for us to enter the Pacific Highway.

Residents in Gordon Avenue will experience increased difficulty when joining onto Pacific Highway. Already there is major gridlock caused by cars blocking the exit from Gordon Avenue. Once truck start using the left lane to enter the Nelson Street site, causing increased congestion this problem will become much worse.

On completion the traffic problems will remain with increased travel time and pollution.

As a minimum mitigation we require that a DEDICATED LEFT TURN ONLY lane is established at the southbound Pacific Highway / Mowbray road intersection, without traffic light control and

at the beginning of the project. There is plenty of space on the southwest corner in the large construction site to allow this to be built immediately at the project start. We also require that the intersection of Gordon Avenue and Pacific Highway is line marked and signposted with "Do not Block this Intersection" and that this is policed.

1.5 TRAFFIC NOISE DURING CONSTRUCTION FOR GORDON AVENUE

Trucks will use exhaust brakes to slow down to enter the Nelson St Site entry, particularly at night from high speed. This noise will affect ALL the residents including 1-3 Gordon Avenue because we have line of sight and reflectance of the Payless Tyres building façade.

A strict "no exhaust brakes" law, signage and enforcement is required, or alternatively ban construction traffic between 8pm and 7am.

My comments are in relation to the Waterloo Station development.

Noise and Vibration

My home is only a short distance from the proposed station entrance and the EIS shows that the railway line will be built directly underneath my home at a depth of 25 metres. My major concern is not the noise and vibration from building works that will inevitably occur, but the noise and vibration that may occur once the station is operational and trains are passing directly underneath my home. I am aware of other locations along the airport line (the Alexandria Hotel and buildings in Mascot) where the vibration of the train passing underneath can be felt inside the buildings at ground level. On page 20 of the EIS, it is stated with respect to operational noise and vibration that..."Noise and vibration in the tunnels will generally be mitigated by using the appropriate type of coupling used to connect train carriages together, and by installing a layer of rubber between the rail and the tunnel floor". If this system was used on the airport line, it didn't work. Further, the statement that this measure will "generally" mitigate the noise and vibration leaves me with no confidence that there is any definite evidence that quiet enjoyment of my home and those around me will preserved. I am deeply concerned about my ability to live peacefully and sleep at night with trains running constantly underneath me based on my experience as stated above.

Impact on property generally

While I see that page 20 also refers to a property condition survey, I am very concerned that the tunnelling underneath my home will have an adverse impact on the foundations of the building. Not enough information about this has been provided and I object to the project proceeding until all home owners have been consulted and informed with respect to what is actually going to be done and what the real impact will be on individual dwellings.

Traffic impacts

The corner of Cope and Raglan streets is already a bottleneck during peak periods. In my opinion, the proposed positioning of the station entry point is ill informed and does not take account of the roundabout on the corner of Cope and Raglan streets, which already suffers from substantial queuing on weekday mornings and afternoons. It is submitted that the EIS fails to take into account specific traffic concerns that are current and will only be exacerbated by the construction work and the removal of already limited parking places.

Demolition of 18 buildings

Assuming that these buildings are all on the block between Raglan and Wellington streets, I do not think that it is necessary to demolish these buildings, especially as it is clearly possible to retain the Waterloo Congregational Church. Some of these buildings have been in existence for many decades and the destruction of these will be another degradation of the character of the area. I am strongly opposed to the demolition of the buildings on this block, which includes a very popular doctors surgery and pharmacist. These professionals are important and popular members of the community and the demolition of their premises cannot be supported.

Location of the Waterloo Station

The location of the Waterloo Station itself is questionable. The most developed part of Waterloo, in the Danks and Lachlan street areas, are also traffic gridlocks and do not have enough transport infrastructure to support the number of people who live there. Surely, the station would have been better positioned close to that end of Waterloo. The current position is quite close to Redfern, which also brings the rationale for the position into question.

Public housing redevelopment

It is my understanding that the redevelopment of public housing in Cope Street will coincide with the construction of the railway station. The EIS condiders the metro project in isolation without considering the impact of all of the proposed development in the area, which seems to have been planned simultaneously. There has been very little community consultation with respect to the redevelopment of the public housing sites and this must occur before any further steps are taken with respect to the Sydney metro project as residents should be informed of everything that is planned and the real impact upon their homes and their personal lives.

Content: Please see attached Sydney Metro Environmental Impact Statement Application number: SSI15_7400

We generally support the proposal but are concerned a number of important details have not been included in the main document of the Environmental Impact Statement (EIS) or potentially not assessed. These include:

- Idling trucks location for standing time has not been identified. If trucks idle on Blues Point Road and surrounding streets waiting to be filled or tip material, this would potentially impact local traffic and parking and also have air quality and noise implications to surrounding sensitive receivers. Staging of the movement of trucks should be addressed in the submissions report, safeguards, and needs to be covered in the CEMP and sub-plans.
- Noise increase on haulage routes the noise increase as a result of the haulage of material is considered in the EIS, however the main document doesn't have enough detail about what the noise levels are based on. Truck numbers and movements can change significantly during construction if not strictly planned and controlled and methods to control truck movements are not considered in the safeguards. It is acknowledged that it is difficult to include this type of detail, however the conditions of approval should include a similar condition to Condition D18 of the NorthConnex Instrument of Approval (SSI-6136) to mitigate the potential noise impact.
- Construction noise at temporary Blues Point Road site -
 - Details of the noise impact from the extraction of the TBM cutter heads are not included in the main document of the EIS. Has this been considered? If so, this should have been included in the main document.
 - A sleep disturbance assessment for construction traffic noise along Blues Point Road is also not included in the main document of the EIS, however the periods of TBM cutter head extraction could be up to a month of 24 hour work and may have an impact on sensitive receivers.
- **Cumulative traffic impacts –** The main document of the EIS does not discuss the cumulative impact of local and construction traffic from the different metro construction sites as there is no detail of haulage routes beyond the closest arterial road. There is potential overlap of traffic from nearby Sydney Metro construction sites (for example sites at McMahons Point, North Sydney and Crows Nest may all use the Pacific Highway), as well as other major construction projects in Sydney.
- **Construction worker parking** Section 8.4.4 discusses construction worker parking however does not consider the potential impacts on local parking. The statements are very broad and needs more detail on specific areas. We strongly encourage Park and shuttle services be considered for already congested parking areas like McMahons Point.
- **Restrictions to local parking** Restrictions to local parking due to construction worker parking or construction vehicles will have an impact on already congested roads and could have impacts on the local businesses along Blues Point Road.

All issues raised above need to be addressed in the submissions report and safeguards. Mitigation measures should also be outlined in the CEMP and sub-plans. We look forward to a response to these concerns along with the development of this important piece of infrastructure in Sydney.

Kind Regards

Content: Please see attached submission

26th June 2016

Major Projects Assessment Attention: Director, Infrastructure Projects Department of Planning and Environment GPO Box 39 Sydney NSW 2001

Metro Station Development at Crows Nest, Application number: SSI 15 7400

I am an owner and resident of Clarke St Crows Nest since purchasing the property **Construction**. I am very concerned about the proposed construction of the Metro line and station at Crows Nest. It is imperative that the concerns of those immediately affected are addressed.

The Lyall is a:-

- mixed-use Strata,
- with 30 apartments and 5 retail/commercial lots,
- housing over 60 residents,
- 4 businesses,
- Is the only residential building in Clarke Lane/Street, and
- Over 90% of bedrooms located in our building overlook Clarke Lane and will back directly onto the construction site.
- Bedrooms and living areas are only 5 meters away for the main construction area.

My main bedroom and second bedroom overlook Clarke Lane and I would personally be sleeping approximately 5 metres from the construction site.

The total construction time of nearly 8 years of which includes four years of constant construction, 24 hours a day, means it will be impossible for me to live in my apartment and in all probability impossible to let the apartment. Over the next 3-4 years I had been planning to retire and lease out the apartment which would cover my retirement expenses. Instead, I now am faced with <u>severe financial hardship and challenges that will affect my mental health.</u>

I request that the following points be considered:-

- Double glazing be provided for all windows in the The Lyall that face Clarke Lane at the cost of the Metro project,
- Build a sound proof wall on the western side of Clarke Lane, before excavation commences,
- Consider using other types of construction similar to be that being used for other stations, ie not cut-and-cover,
- Installing a layer of rubber between the rail and the tunnel floor, similar to that being provided at Chatswood Station,
- The depth of the station be increased,
- An engineer's report is provided to all owners of The Lyall on a regular basis, or as requested. For example every 6 months and should a resident be selling that a report is provided when requested. All costs to be borne by the Metro Project,
- Change the location of the Taxi rank and kiss and ride to be elsewhere instead of directly in front of our residential building,
- Building of a turning circle at the Hume street end of Clarke Lane during the period that it is 2 way.
- The Metro project to fund regular cleaning of the windows and exterior of the building.
- The Infrastructure Project provide assurance and insurance that any damages or loss caused by the construction are "made as new".

The following outlines my strong objection:-

- a) Inadequate protection for residents with regards to night works;
- b) The difficulties and danger of creating a two way thoroughfare in Clarke Lane for construction traffic
- c) The extensive period of construction noise and vibration.
- d) The effect of construction on our building's stability
- e) The ongoing impact of increased noise and disruption from train and station operations

A) Inadequate protection for residents with regards to night works

The current plans demonstrates a complete disregard for the residents of The Lyall. The environmental impact statement itself documents the acceptable noise levels for a bedroom as 30 decibels, yet the NSW Government and State Transit will carry out construction and excavation work throughout the night with operational noise levels of 90 decibels.

This excavation will be through blasting, the noise impact of which will not be at all deadened. Further, the acoustic shed will barely cover the width of our residential building and have massive openings at either end and will not be built until after the excavation.

B) Impact of construction traffic

- Clarke Lane is very narrow, we experience traffic issues when the commercial lots on the Pacific Highway and Clarke Street receive deliveries or have garbage pickups. There is currently insufficient space to allow a car to pass trucks.
- Clarke Lane is identified as a local laneway used by pedestrians, having two-way traffic and pedestrians will be extremely dangerous.
- Our driveway does not have clear visibility of traffic entering Clarke Lane via Oxley St making the laneway two way will also make it dangerous for residents and visitors.
- We currently have rubbish collections/deliveries occurring outside of the permitted times, ie 6am to 10pm. Blocking off of Clarke Lane at Hume St and making it two way will subject residents to trucks passing under my bedroom windows twice, or as is more likely, its beeping as the truck attempts to reverse out of the laneway.
- It would appear that there is no proposed turning circle allowing trucks to turn around instead of needing to reverse. Heavy trucks utilised for the construction will also increase the noise levels. Rather than the trucks passing once, we will be subjected to the noise of them attempting to turn in an incredibly narrow lane or reversing back down the lane way.

C) Extended period of construction noise and vibration.

The environmental impact assessment provides for four years of construction noise and traffic for 24 hours a day. The predicted airborne noise levels for Crows Nest Station indicate that our building will in most cases have airborne noise exceeding what is considered normal and is for some undefined period of construction predicted to be High.

Further residents will be subjected to ongoing building vibration for four years. Again here the impact on Clarke Lane is not mentioned, however, it is stated that "During excavation, vibration levels are anticipated to exceed the cosmetic damage vibration screening criteria at three buildings adjacent to the site (one building located to the east on Clarke Street and two building located to the south of the Pacific Highway)." This is unacceptable for many reasons.

D) Building stability and resident's safety

The impact of tunnel blasting on the stability of surrounding buildings has not been adequately addressed. Construction of the tunnel is to be through blasting with a tunnel corridor at least 30 metres either side of the tunnel centre line and around all stations. The proposed Crows Nest station and metro tunnel will be positioned across a very narrow Clarke Lane. Our building's 2 level garage runs underneath the footpath of Clarke Lane. There is insufficient space to ensure ongoing building stability with a 30 metre tunnel corridor. Indeed, the 30 metre tunnel corridor will encroach on the existing garage.

In addition, the establishment of storage for dangerous goods within one building's width of our residential block places us all in danger.

E) Ongoing impact on quality of residents' lives

The peaceful enjoyment of our property will be impacted in an ongoing manner due to the following:

- We will be subjected to ongoing vibration noise from train operation. "Sydney Metro plans to keep stations as shallow as possible to minimise customer travel time from the street to the platform". In the case of the Crows Nest station it is planned to be a mere 25 metres below the ground thus providing very little distance for the ongoing vibrations from train operations to be deadened. Further, whilst rubber is to be laid underneath the track at tunnel exit points such as Chatswood it is not planned to be laid to insulate the noise of train operations to surrounding residential buildings in Crows Nest.
- Increased traffic and reduced street parking with kiss and ride and taxi bays placed outside our building on Clarke St.
- Noise from increased pedestrian/commuter traffic.
- Increased dust and grime on the exterior of our building.

Given the extended period of construction it is also highly unlikely that I will be able to rent my unit or sell it and recoup what would reasonably be determined a fair price in today's and during the next 8 years. On 25 June 2016 an apartment, that is comparable in size and configuration as my own, sold at auction for **\$1,710,000**. Even so this is not as high was what I would have thought would have been a fair price in the current market conditions.

Thank you for the opportunity to enable the public to make submissions and trust that my points will be considered.

Regards,



Name: David Workman Organisation: Knight Frank Town Planning (Manager Planning)

Sydney, NSW 2000

Content: See attached PDF Submission



23rd June 2016

Director Transport Assessments Planning Services Department of Planning and Environment Application number SSI 15_7400 GPO Box 39 Sydney NSW 2001

Dear Sir/Madam

RE: SSI 15_7400 – Sydney Metro City and Southwest – Chatswood to Sydenham: Environmental Impact Statement.

We refer to the *Sydney Metro City and Southwest – Chatswood to Sydenham Environmental Impact Statement* (EIS) that is currently on exhibition.

On behalf of our clients', we thank you for the opportunity to make a submission. Knight Frank Town Planning was engaged to prepare this submission on behalf of the following land owners and will be collectively referred to in this submission as "the subject sites'":

	Owner:	Property:
1	Pemika Pty Ltd	13-21 Mandible Street (Lot 2 DP 803412) and 27-41 Hiles Street
		(Lot 1 DP 803412)
2	Murrays Coaches	33-39 Mandible Street (Lot 41 DP 789768) and 30 Mandible Street
		(Lot 1 DP 225391)
3	Rex Holdings Pty Ltd	7-11 Mandible Street (Lot 2 DP 604380)

We note that our clients' offer their in principle support to the overall Sydney Metro project and the new rail station at Waterloo in particular. However, according to the EIS the subject sites' will be directly impacted by the project via the underground alignment of the tunnel between Waterloo Station and Sydenham Station. The location of the subject sites in relation to the underground tunnel alignment is illustrated in Figure 1 below.

Issues of Concern:

Our clients' have serious concerns with regards to the alignment of the tunnel and potential impacts both during the construction and operational phase of the metro line.

T +61 2 6230 7855 PO Box 248, Civic Square ACT 2608 Level 12, 221 London Circuit Canberra ACT 2600 T +61 2 9036 6666 GPO Box 187, Sydney NSW 2001 Level 22, Angel Place, 123 Pitt Street Sydney NSW 2000





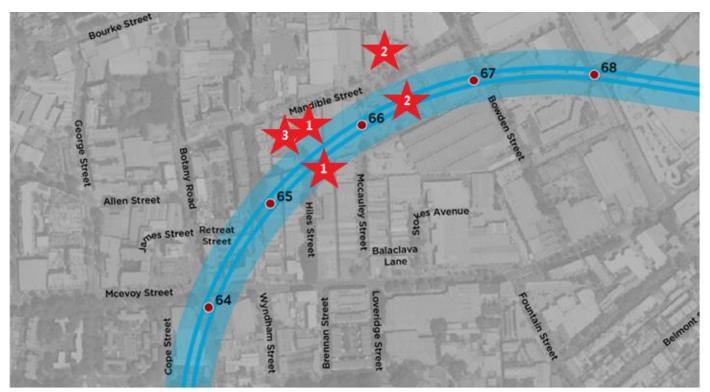


Figure 1. Location of subject sites in relation to the proposed tunnel alignment and corridor.

Accordingly they wish to lodge their objection to the proposal as currently exhibited for the following reasons:

Inadequate Notification/Land Owner Engagement

1. As noted above, our clients' properties will be directly impacted by the proposed rail tunnel however they were not individually notified and only recently learnt of the EIS exhibition through Knight Frank Town Planning. Accordingly, they have had insufficient time to properly review and consider the exhibited document.

Given the scale of the proposed works and potential impacts upon the affected lands, it is of concern our clients were not notified in writing. They therefore request for an extension of time to make further submissions and for any future decisions with regards to the EIS, release of supplementary information and/or re-exhibition to be the subject of written notification.

Impact of Tunnel and Uncertainty Regarding Final Alignment

2. We understand that there will be a future statutory corridor for the project established under *State Environmental Planning Policy (Infrastructure) 2007* and any future development in this corridor would require referral to Transport for NSW for concurrence. The EIS indicates that the project corridor would extend 30 metres either side of the tunnel alignment. Of concern to our clients' is that the alignment is marked as indicative only and we assume therefore the alignment could vary.

It is noted that chapter 12 of the EIS documents potential impacts upon land-use and property, however this chapter is primarily focused on impacts in and around the proposed station locations, as



opposed to the remainder of the tunnel. Section 12.4.2 of the EIS states the following in relation to tunnel stratum:

It would also be necessary to acquire stratum below the surface of properties for the construction of the project. Under the Transport Administration Act 1988, compensation is not payable where stratum is required for the development of underground infrastructure.

This subsurface stratum would be a stratum acquisition envelope around the tunnel, including any tunnel anchors required. The introduction of the subsurface stratum, and the tunnel itself, has the potential to limit development above the alignment. The project alignment is generally shallowest at stations and at tunnel portals (at stations tunnel depths are typically greater than 20 metres) and between stations tunnel depth increases to typically between 25 and greater than 40 metres. Based on proposed tunnel depths there would be a minor impact with respect to limiting future development potential above project infrastructure.

Development applications within the project corridor would be referred to Transport for NSW for concurrence and to ensure that project infrastructure is not impacted by proposed developments.

Having regard to the above, the proposed tunnel alignment, associated corridor and stratum acquisition may directly and adversely impact and place unreasonable constraints on the identified development potential of these lands.

Insufficient Information Regarding Impact on Development Potential

3. The subject sites are located within the southern employment lands in the City of Sydney (the City) Local Government Area (LGA). These sites are also in an area the City has identified as "investigation areas". Refer Figure 2.

These "investigation areas" are not currently zoned for market housing however the City has indicated (by way of site specific planning guidelines) that they will consider planning proposal requests to rezone sites and allow mixed used (residential) development in these areas at significantly increased densities. In short, the subject sites are considered to have significant residential redevelopment potential.

Based on the information provided in the EIS, and in particular Section 12.4.2, the extent of impact upon future development potential is not quantified and remains uncertain. It states for example 'The introduction of the subsurface stratum, and the tunnel itself, has the <u>potential</u> to limit development above the alignment'. And also, 'based on proposed tunnel depths there would be a <u>minor impact</u> with respect to limiting future development potential above project infrastructure' (our underlining). There appears to be no discussion with regards to the impact upon future excavation, foundations, piering depths and density of development that could be supported above the tunnel alignment/corridor.

There is also no proposed mitigation to limit any such impacts, nor adequate compensatory measures to account for any reduction in future development potential.



This lack of information is considered a serious omission from a document that purports to determine environmental impacts upon existing and future land use. Further clarification of these likely constraints and impact on development potential is requested to be made available for further comment prior to the finalisation and endorsement of the EIS.

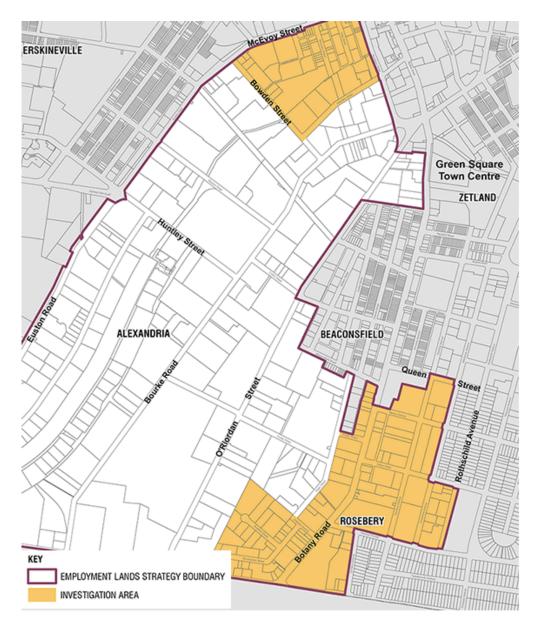


Figure 2. Extract from City of Sydney's Guideline to Preparing Site Specific Planning Proposal Requests in the City of Sydney Employment Lands Investigation Areas 2015

Request for Proponent to Realign Tunnel

4. On behalf of our clients', we request the proponent also realign the tunnel and associated corridor between Waterloo Station and Sydenham Station away from the "investigation areas" and the subject sites to ensure the future development potential of their site is not unreasonably impacted. In our view, the tunnel alignment and corridor would be better located under properties outside of the



"investigation areas" in the southern employment lands where rezoning of land to allow for a wider range of uses including residential is unlikely to occur. Alternatively, the alignment of the tunnel should (as far as practicable) align with existing road reserves.

Recommended Actions:

In summary, our clients have serious concerns with regards to the current alignment and potential impacts not only in terms of vibration and noise during the construction and operational phase, but also in terms of future development potential.

Impacts and limitations on future development is not quantified by the EIS and remains uncertain. Compensation for any such impacts also is not documented. They request for this additional information to be provided, for affected landowners to be individually notified and given sufficient time to properly review and consider the information.

Further they also request that proponent realigns the tunnel between Waterloo and Sydenham away from the subject sites.

Thank you again for the opportunity to comment and we trust that careful consideration will be given the comments made. Alternatively our clients would be pleased to discuss these matters in more detail with the proponent.

It would be appreciated if our clients' were notified of the proponent's response to the matters raised in this submission prior to finalisation of the EIS.

Please note we have not made any reportable political donations in the previous two years.

Should you have any queries or require any additional information regarding this submission please do not hesitate to contact me.

Yours sincerely,

David Workman Manager Town Planning NSW T: +61 2 9036 6635 M: 0418 116 379 David.Workman@au.knightfrank.com

Name: Grainne King

Alexandria, NSW 2015

Content: See Document Attached

Sydney Metro City & Southwest Chatswood to Sydenham Environmental Impact Statement Exhibition

Grainne King

85 Renwick St Alexandria NSW 2015

26/06/2016

METRO EIS OBJECTION

This objection relates to the EIS SSI 7400 (Sydney Metro City & Southwest Chatswood to Sydenham)

I object to this proposal on the grounds that I feel that the project should provide additional Metro stations at Alexandria and St Peters. The objection is based on inadequate traffic and transport capacity modelling as well as an inadequate public consultation process.

Further detail supporting this objection and the demand for immediate reconsideration and provision of additional Metro stations for Alexandria and St Peters follows.

1. Inadequate transport capacity modelling

The current Metro station selection process was undertaken before several recent infrastructure decisions and therefore requires immediate revision. These decisions significantly bear on the transport requirements of the inner-city. They include the ATP Commonwealth Bank project (11,000 workers, 1,600 cars), the Waterloo Public Housing redevelopment (20,000 residents), the Alexandria Super School (2,200 students), the Ashmore Estate development (6,000 additional residents) and Green Square as a high-job-growth area. Collectively these developments will swamp local road networks, limiting the ability of bus services to scale up to service growing transport needs.

2. Inadequate public consultation

Inadequate public consultation has been undertaken with residents of Alexandria, St Peters and Erskineville now that the Metro route from Central to Sydenham has been finalised.

3. Additional (Alexandria and St Peters) Metro stations

I urge an immediate reconsideration of the provision of additional Metro stations for Alexandria and St Peters. I petition that adding these Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport). It would provide mass-transit systems for the areas' doubled population, reduce chronic over-crowding on Erskineville station and reduces inner-city car congestion.

Yours Faithfully,

Grainne King

Name: Margaret Yuen

Chatswood, NSW 2067

Content: Please see uploaded PDF letter for our objection to the application

OBJECTION SUBMISSION

Sydney Metro City & Southwest Chatswood to Sydenham Section State Significant Infrastructure Application SSI 15_7400

Application Name:Sydney Metro City & Southwest Chatswood to Sydenham SectionApplication Number:SSI 15_7400

Objection Submission Details

Name:	Margaret Yuen
Street Address:	12/1-3 Gordon Avenue Chatswood NSW 2067
Postal Address:	PO Box 206 Chatswood NSW 2057
Email Address:	jon@jonyuen.com.au
Telephone:	0411 550 222

Summary of Objection

I object to Sydney Metro Project specifically in respect of construction of the Chatswood Metro tunnel dive site and heavy rail works immediately adjacent to our home at 1-3 Gordon Avenue, due to the lengthy excessive noise and vibration during construction and also excessive noise and vibration at our home during operation of the rail networks on completion.

The EIS plans for dealing with construction noise have significant clauses which permit breaches without any penalty to the Contractor on the grounds of "unavoidable events or work" and "impractical to mitigate or avoid". Our review of the complaints reports for the Norwest Metro project reveal this excuse is used in almost every instance of breach, and that the mitigations are trivial or too late.

Similarly, the entire operational noise performance and criteria is referenced to the "Rail Infrastructure Noise Guideline (EPA, 2013)" which is a VOLUNTARY GUIDELINE, not mandatory. It also contains multiple exclusions / excuses to exceed noise and vibration levels without action or penalty. This was quoted to us by the operators and project management after the Chatswood to Epping project which caused frequent and intolerable excessive operational noise and vibration at 1-3 Gordon Avenue.

Detailed Reasons for Objection

- Excessive Rail Operation Noise and Vibration Existing
 - High levels of Train Noise of can be heard and vibration felt at 1-3 Gordon Avenue from the current railway, and is frequently intrusive and interrupts sleep of the residents. The noise is both direct and also regenerated ground borne noise.
 - The northbound rail line was already moved 3m closer to the unit block during the Chatswood to Epping rail project. At various times since that work many complaints have been lodged, but with little or no useful action by the operators. It is only in the last twelve months that there has been some improvement in the noise and vibration, for reasons unknown, and unpredictably. We cannot rely on this improvement based upon bitter past experience.
 - The existing high levels also create an excuse for the operators to base the new operational noise limits higher than otherwise defined as acceptable, based upon on the already intolerable high levels being pre-existing.

• Excessive Rail Operation Noise and Vibration – Post Completion

- It is proposed to move the northbound heavy rail line closer to 1-3 Gordon Avenue by another three meters, and elevate it by 2m on a bridge structure which will make the noise at our units much worse. This is on top of the existing 3m closer relocation carried out under the Chatswood to Epping project in 2006.
- 1-3 Gordon Avenue is specifically mentioned in the EIS as an address that will remain affected excessively by operational noise after completion of the work. It further states that it is impractical to create an adequate noise barrier.
- The is an inadequate and incomplete reference to "at site mitigation", which implies someone may attempt to make some token sound proofing at the building, but not until after operation commences, and on an "ad hoc" basis. It is unclear who will be responsible, and police the process. As stated earlier, the EPA Railway Noise document is only a non-compulsory and unenforceable "guideline". The operators may deem the situation is satisfactory or beyond their own definition of "reasonable" control.
 - 1. The very close proximity of the works, the ground structure and our building basement and stairwell arrangement will result in vibration being amplified within our premises to excessive levels.
 - 2. The realignment of the existing T1 northbound rail line to the temporary route requires heavy machinery and excavation work after hours with multiple rail corridor closure events that will cause severe disruption and noise fatigue effect to the life of all residents.
 - 3. T1 northbound track is closer to Gordon Avenue unit block increasing the noise and vibration impact.

- New Metro tracks will carry more traffic than the existing T1 tracks did. This volume is in addition to the T1 track traffic which will remain.
- 5. The T1 northbound track is raised in height due to being routed over the dive structure. However, in addition to this the dive structure itself finishes at Nelson Street which requires the T1 northbound track to be supported by a concrete bridge structure. This structure will generate significantly more noise than a closed structure and will also allow rail noise from the Metro tracks to pass through to the Gordon Avenue unit block.
- 6. For upper level units, the elevated T1 northbound trains and additional Metro trains will be noisier.
- 7. Ground vibration is a major concern with the increased volume of rail traffic on the T1 plus Metro lines. This vibration can potentially be amplified through the basement area of 1-3 Gordon Avenue.

• Excessive Construction Noise and Vibration at 1-3 Gordon Avenue

- The extensive and heavy construction the works associated with the tunnel dive site and existing rail realignment will generate excessive noise, vibration and dust at 1-3 Gordon Avenue that cannot be mitigated adequately because the rail line is too close to the block, and the upper floor units immediately overlook the works and cannot be screened visually or acoustically;
 - The very close proximity of the works, the ground structure and our building basement and stairwell arrangement will result in vibration being amplified within our premises to excessive levels.
 - The realignment of the existing T1 northbound rail line to the temporary route requires heavy machinery and excavation work after hours with multiple rail corridor closure events that will cause severe disruption and noise fatigue effect to the life of all residents.
 - The construction of the bridge to accommodate the new T1 northbound track over the new dive structure requires major rock excavation and piling works immediately adjacent to 1-3 Gordon Avenue, with probable excessive noise and even structural damage.
 - 4. Construction vehicles and material will continuously be moving in the track area adjacent to the 1-3 Gordon Avenue unit block. This construction traffic will occur when preparing the site for the new dive structure, bridge and track foundations for the new t1 northbound location.
 - 5. There is the potential for noise and vibration from existing rail traffic to increase due to the temporary nature of the relocated main northern line.
 - 6. While a noise barrier is planned for the Nelson St construction site, no such noise barrier is proposed between the Gordon Avenue unit block and the excavation area during the excavation work required

for the T1 northbound bridge, dive structure and tunnel. This noise barrier is required during the construction of the bridge over the dive structure for T1 northbound. In addition, a noise barrier is required during the building of new Metro tracks.

7. Potential 24x7 work during the construction phase of this project will severely adversely impact residence during and after work hours. There are significant afters hours large earth works, demolition, piling and track work proposed in the proximity of 1-3 Gordon Avenue unit block.

• Business Interruption Due to Construction and Operational Noise

 Some residence of 1-3 Gordon Avenue operate home business or work night shift work, requiring sleep, during the hours of 7am – 8 pm, the project will result in having a disruptive and high impact noise level unacceptably high for a work or daytime sleep environment. They will be forced to relocate at great personal expense. The adverse effects on these residents must be mitigated for this imposition by the project, by temporary or permanent relocation. Loss of income and rent must also be compensated for.

• Traffic Problems for residents of 1-3 Gordon Avenue

- The loss of the Nelson Street direct access to Chatswood is a major transport problem for the residents of Gordon Avenue, and hundreds of all other residents between Albert Avenue and Nelson St. We currently have direct easy road access to our local Chatswood retail, business, schools and community without traffic lights, without having to further congest the Pacific Highway and Mowbray Road, or Orchard Road intersections.
- The Mowbray Road southbound Pacific Highway intersection is already extremely congested at all times of the day, and particularly in morning and afternoon times. The location of the construction site entrances in Nelson Road and Mowbray Road mean that there will be continuous major truck "movements" through this intersection aggravating the situation to an unacceptable level. Trucks will invariably block this lane and make it nearly impossible for us to enter the Pacific Highway.
- Residents in Gordon Avenue will experience increased difficulty when joining onto Pacific Highway. Already there is major gridlock caused by cars blocking the exit from Gordon Avenue. Once truck start using the left lane to enter the Nelson Street site, causing increased congestion this problem will become much worse.
- On completion the traffic problems will remain with increased travel time and pollution.
- As a minimum mitigation we require that a DEDICATED LEFT TURN ONLY lane is established at the southbound Pacific Highway / Mowbray road intersection, without traffic light control and at the beginning of the project. There is plenty

of space on the southwest corner in the large construction site to allow this to be built immediately at the project start.

- We also require that the intersection of Gordon Avenue and Pacific Highway is line marked and signposted with "Do not Block this Intersection" and that this is policed.
- Traffic Noise During Construction for Residents of 1-3 Gordon Avenue
 - Trucks will use exhaust brakes to slow down to enter the Nelson St Site entry, particularly at night from high speed. This noise will affect ALL the residents including 1-3 Gordon Avenue because we have line of sight and reflectance of the Payless Tyres building façade.
 - A strict "no exhaust brakes" law, signage and enforcement is required, or alternatively ban construction traffic between 8pm and 7am.

Name: Ben Aveling

Alexandria, NSW 2015

Content:

This is neither a Metro, nor is it regular heavy rail - it is the worst of both worlds.

A normal metro spends about 25% of its time loading and unloading passengers, so having 3 doors instead of 2 is a significant saving. But a normal metro has stops between 400m and 800m apart. This so-called metro will have 2km between stops, and often more. It will spend perhaps 12% of its time waiting for passengers to load and unload. The time saving from the extra doors is therefore only a small percentage of the travel time, and it comes as the cost of capacity.

This matters, because normal metros run short distances. It is no great inconvenience to stand for a short period of time, and there are enough seats for those that can't. This so-called metro will have people standing for up to 40 minutes, after which they will have to change trains, and on a typical day, keep standing all the way in to the city. Many people won't, or indeed, physically cannot do that.

Double decker trains carry more people, in more comfort. The extra capacity is worth more than the marginal increase in dwell time.

While Metros can run with less headway than heavy rail, this so-called metro will not. It will run with a headway of 4 minutes. Several of Sydney's heavy rail lines already have headway less than that, and others could, with upgraded signaling and power.

The tunnels are planned to be just slightly too small for other Sydney trains. There is no justification for this. For not much extra cost, the tunnels could be just a bit bigger, giving the option to run regular trains, or perhaps to run larger metro trains, if that turns out to be the way of the future. This would avoid the need for passengers to interchange between lines, and would make the whole network more flexible.

There could have been and should have been an extra stop or two in Alexandria - 5km with no stops does not make sense for a metro. Further, the current stop location lacks logic. It is too far from Redfern station and Green Square station to serve as an interchange. But it is close so to both that a large part of its catchment area is already covered by Redfern or Green Square. The station should either have been close enough to Redfern that it could serve as an interchange, or it should have been in an area not already well covered, such as Dank St, or other more southern parts of Alexandria, or as proposed earlier, Sydney University.

Adding a new station to the Airport line would not be cheap, but this Metro (so called) will not be cheap either, and it is an inferior solution, as designed. A better investment would to add a new station to the Airport line, upgrade signaling and power supply to allow more trains to run on the existing lines, and perhaps add extra tracks out to Erskineville and beyond - there is land reserved, though there are apparently OH&S issues if that land is used for tracks.

I object to this proposal on the grounds that the project should provide additional Metro stations at Alexandria and St Peters. The objection is based on the project's flawed and inadequate traffic and transport capacity modelling viz.

1. Inadequate transport capacity modelling

The current Metro station selection process does not take into account recent infrastructure decisions such as the ATP Commonwealth Bank project (11,000 workers, 1,600 cars), the Waterloo Public Housing redevelopment (20,000 residents), the Alexandria Super School (2,200 students), the Ashmore Estate development (6,000 additional residents) and Green Square as a high-job-growth area. Collectively these developments will swamp local road networks, limiting the ability of bus services to scale up to service growing transport needs.

2. Inadequate traffic modelling

The Metro EIS does not model any relationship between the Metro (Waterloo to Sydenham) and Westconnex traffic , despite the Metro line running under McEvoy / Euston Road and St Peters. The EIS has no modelling of additional Metro stations (Alexandria and St Peters) ability to reduce cross-town car use or offset the impact of Westconnex traffic spilling onto the inner-city road network.

3. Additional (Alexandria and St Peters) Metro stations.

These additional Metro stations would provide a mass-transit inner-city transport system and cross-town interconnectivity to and from the high jobs growth corridor (Green Square / Airport), providing mass-transit systems for the areas' doubled population, reducing chronic over-crowding on Erskineville station and reducing inner-city car congestion.

Name: Roger Hadgraft

Erskineville, NSW 2043

Content:

I wish to urge the construction of further stations between Redfern and Sydenham, e.g. at Alexandria (to cater for the rapidly growing population in that area) and St Peters (to provide better linkages with the existing train network). I believe that budget restrictions have reduced the number of stations, which will be long regretted in the future. As a compromise, shell stations could be built and completed at a later date as further funding becomes available.

Name: Catherine Kennedy Organisation: FOE (Treasurer)

Erskineville, NSW 2043

Content:

Dear Planners,

I am objecting to the new Metro plans on several grounds:

1. Using single storey carriages instead of double storey not only reduces capacity but minimises stock for heavy rail and increases costs for the life of the project.

2. Double storey carriages would discourage passengers with prams, wheelchairs etc from using the Metro.

3. There should be more stops in Central Sydney such as Sydney University, Alexandria/ Erskineville where populations are increasing. The metro should not be just a means to get travellers in and out of The CBD but to move around the inner city more efficiently.

4. The Public has yet to be convinced of the wisdom of the Metro and the Planning of future high rise in the transport corridors which is far too dense and looks to be slums of the future.

5. There are too many simultaneous projects proposed by the State Government and perceived sweetheart deals between them and favoured developers.

6. In the light of economic aftershocks after Brexit, NSW should me thinking carefully and spending cautiously instead of squandering our money, resources and heritage.

Regards

Catherine Kennedy