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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: MICHELE MADIGAN

Address: 64 MELFORD ST HURLSTONE PARK 2193

Application number: SSI 17_8256

-☑ I consent to my name being published

-☐ I do not consent to my name being published

-☑ I have no reportable donations to disclose

I strongly object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time? This proposal is clearly ridiculous & ill-considered.

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.

- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plan to replace the existing, historic Sydenham-Bankstown rail line represent a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

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Signature.....M. Madyn

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Metro EIS Submission, DPE
GPO Box 39 Sydney 2001

PCU072850

Date 21/11/17

Tick applicable box:
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-☑ I have no reportable donations to disclose

Name: [redacted]
Address: [redacted]

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade
Application number: SSI 17_8256

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-Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

3. I challenge regional justifications based on growth and housing supply because high density replacement of garden suburbs along the corridor is destructive of the built environment and this corridor is already densely populated.

4. The Government has not considered other infrastructure options such as:
- Decentralisation, and rural investment
- a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system

5.The congestion caused by the temporary transport strategy will be unreasonably disruptive for commuters and cause stress for people trying to get to work and school. The construction noise and disruption will be unreasonable and many consequences are unknown, such as vibrational damage to dwellings:

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Date 21/10/17

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GPO Box 39 Sydney 2001

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Date 21/10/17

Metro EIS Submission, DPE
GPO Box 39 Sydney 2001

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Address: [redacted]

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Application number: SSI 17_8256

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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Mail to :

Major Projects – Metro EIS Submission
DPE
GPO Box 39
Sydnev. NSW. 2001

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

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-□- I have no reportable donations to disclose

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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Mail to :

Major Projects – Metro EIS Submission
DPE
GPO Box 39
Svdnev. NSW. 2001

Name: PATRICIA BRODERICK

Address: 28 CANTERTON ST
HURLSTONE PARK 2193

Application number: SSI 17_8256

☑ I consent to my name being published

☐ I do not consent to my name being published

☑ I have no reportable donations to disclose

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Signature .....

The heritage heavy duty rail line was built with vision + foresight.
Its destruction is vandalism by the NSW Government.

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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: GEOFF + SUE HUGHES

Address: 2/28 O'CONNOR ST. HABERFIELD.

Application number: SSI 17_8256

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-□- I have no reportable donations to disclose

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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: NOEL IRVING

Address: 4/8 BAYLEY STREET MARRICKVILLE

Application number: SSI 17_8256

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Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.

- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

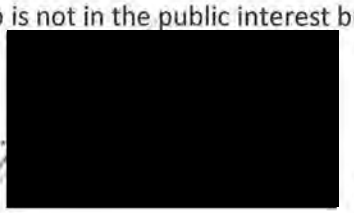
- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plan to replace the existing, historic Sydenham-Bankstown rail line represent a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.. 

DPESYDMET Scanned

From: [redacted]
Sent: Monday, 6 November 2017 7:12 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Denise deVreeze (object)
Attachments: 230679_submission to Banstown metro EIS_2017Nov06_1911.pdf

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From: system@accelo.comOn Behalf OfDenise deVreeze
Sent: 06 November 2017 19:11:21 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Denise deVreeze (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Denise deVreeze
[redacted]

[redacted]

DULWICH HILL, NSW
2203

Content:
see attached

[redacted]
Submission: Online Submission from Denise deVreeze (object)
https://majorprojects.accelo.com/?action=view_activity&id=230679

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Denise deVreeze

Address: 22 Dulwich St DULWICH HILL 2203

Application number: SSI 17_8256

- I consent to my name being published
- I do not consent to my name being published
- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

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- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

I have used a template to save time but this in no way detracts from my objection. The proposed "metro" cannot be looked at without considering proposed overdevelopment of the areas either side. The overdevelopment, while not the subject of this EIS, is poorly thought out and offers no solution to the affordable housing crisis. If the rail upgrade gets up, all of this basically unplanned development will surely go ahead – the financing of the two will eventually be shown to be intimately connected.

https://theconversation.com/sydney-metros-sydenham-to-bankstown-line-nirvana-or-nightmare-65247

Signature D. de Vreyer .

6/11/2017

DPESYDMET Scanned

From: [redacted]
Sent: Monday, 6 November 2017 8:37 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for company Hurlstone Park Association (org_object)
Attachments: 230691_HPA_ Submission EIS Metro Nov 2017_pdf_2017Nov06_2034.pdf

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From: system@accelo.comOn Behalf OfKathryn Lumley
Sent: 06 November 2017 20:35:25 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for company Hurlstone Park Association (org_object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Kathryn Lumley
Organisation: Hurlstone Park Association (President)
Govt. Agency: No
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
The Hurlstone Park Association's submission is uploaded.

[redacted]
Submission: Online Submission from company Hurlstone Park Association (org_object)
https://majorprojects.accelo.com/?action=view_activity&id=230691

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Submission on the Sydenham to Bankstown Environmental Impact Statement for the Sydney Metro City and Southwest

from

the Hurlstone Park Association (HPA) Inc. 141095

6 November 2017

Summary points of the HPA submission:

General points

- The HPA does not agree that the Metro is in the public interest for reasons detailed within this submission and suggests in the alternative, should the Government proceed with the Metro, that the Metro not extend beyond Sydenham. Timetabling and signalling changes to the current network between Sydenham and Bankstown can resolve congestion and capacity issues.
- The HPA suggests that alternatives to resolving the bottleneck around the city circle have not been adequately explored. For example, the 2009 independent Christie inquiry[1] showed that investment in the Sydney Trains network can resolve congestion and capacity issues. Specifically, the current train line can be sunk underground from Marrickville via new lines to terminate at Martin Place. Trains can shuttle from Bankstown to Martin Place and back.
- Should the Metro proceed, the HPA suggests that the existing rail gauge be used, i.e. to be interoperable with the current Sydney Trains network. This will maintain the interoperability of the network and obviate the massive disruption to commuters along the Sydenham to Bankstown corridor that a Metro conversion will cause.

Specific points provided within the submission

- The business case and justifications for the Metro project are inadequate and inconsistent.

[1] Herald Inquiry chaired by Ron Christie, *Independent Public Inquiry into Long-Term Public Transport Plan for Sydney*, 2009

- The project has the potential to have short and long-term negative consequences locally, regionally and for the state of NSW.
- The benefits of the project, especially for the local communities, have not been convincingly demonstrated.
- Options and alternatives have not been adequately considered or addressed.
- Heritage impacts are unacceptable and the project shows a disregard for heritage and community values.
- Design and public domain concepts are unacceptable, do not reflect best practice, and do not meet the stated objectives.
- Environmental impacts are unacceptable and have not been fully addressed.
- Construction impacts including congestion, noise and vibration are unacceptable and in some cases unknown.
- Community consultation has been inadequate, one-sided and lacking in transparency as to the negatives that will be created by the Metro and needs to genuinely engage with residents in the policy development phase.
- The Metro project does not adequately demonstrate customer focus.
- The Metro project should only proceed if it has bipartisan and community support
- The Metro project is not in the public interest.

Closing points

- The preferred option to meet local, regional and State expectations is the retention of the existing, functional, heavy rail line and its heritage, upgrading of stations for access, safety and facility, and addressing congestion and capacity issues through signalling and timetable upgrades, along with consideration of tunnelling alternatives around bottle-necks.

  Billions of dollars could then address areas of Sydney that currently lack good public transport options, and encourage decentralisation through investment in rural areas and outer Sydney.

- This is an opportunity for the NSW government to improve public transport options across Sydney and NSW, to celebrate and enhance our short-lived and finite stock of built heritage for posterity, and to engage with communities in planning for the good of all

Background to the HPA

The Hurlstone Park Association (HPA) was formed in 2014 in response to growing community concerns about over-development impacting residential areas full of heritage homes and streetscapes. Our association builds on, and complements, community spirit in our small, village-like suburb. We represent a diverse and growing cross section of our local community with a reach of in excess of 800 people through membership, email and social media.

Hurlstone Park is a small suburb of 1km². Built and social heritage is important to the residents of Hurlstone Park, and there has been great community support for the establishment of Heritage Conservation Areas within the suburb, as recommended in the Hurlstone Park Heritage Assessment Study conducted for the Canterbury Bankstown Council.[2] The Hurlstone Park railway station, already listed locally with Rail Corp and under the Canterbury LEP 2012, was recommended for inclusion on the State Heritage Register in 2016.

[2] Hurlstone Park Heritage Assessment Study, Stage 2 Report, September 2016, Paul Davies Architects.

HPA submission

The business case for the Metro project is not justified

Transport for NSW (TfNSW) suggests:

"the project is needed to further progress implementation of Sydney's Rail Future and Sydney Metro City and Southwest" (Executive summary, Volume 1A, main Environmental Impact Statement).

Similarly, the Metro is justified on the basis of population growth, but in fact, a key objective is to act as a catalyst for, and to stimulate growth.

The transport benefits used to justify the project are not convincing.

The age of the line, and its "varying quality" is used as a justification, but this does not demand a metro conversion, rather improved maintenance. It is a solid line that has functioned for 120 years; it has not passed its use-by date.

The Chatswood to Epping rail line was only opened in 2009, at a cost of $2.4 billion. Marrickville and Sydenham stations have only recently been upgraded. The NSW government's plan to convert this line to a privately operated Metro has justifiably been questioned.

The HPA suggests, after significant consultation with transport experts, that capacity and congestion issues are better resolved through an upgrade of the signalling system, timetable changes and tunnelling options around bottlenecks. We know that capacity can be increased, as timetable changes recently announced will increase a number of services across the network from early November 2017. We understand that double-deckers trains can run every 3 minutes currently, the same as claimed for the Metro but with significantly greater carriage passenger capacity. The main capacity problems occur in peak hours and thus it is essential to engage the business, retail and education sectors to look at options for spreading commuter movement across the day. Such peak shifting in major services such as water and electricity has been used as a powerful intervention to assist in optimisation of assets and helped save millions of dollars in system augmentation costs. Far more peak shifting optimization is feasible within the current rail network.

The full costs of the Metro have not been released. The HPA is not reassured that the Metro will deliver any real improvements to public transport. The HPA notes that currently peak hours service of 10 trains per hour means a train every 6 minutes however less than 50% of available trains stop at Hurlstone Park. Timetable changes will negate the claimed extra movements for the Metro of trains every 4 minutes. It is noted that the Metro carriages have a capacity of 1,133 passengers per service whereas the current capacity for the Waratah trains are higher at 1,144 passengers per service for an 8 car train. The Metro carriages have fewer seats which will mean 756 standing passengers per service whereas current Waratah trains have only 204 standing passengers per 8 car trains.

According to Dr Merheen Faruqi MLC, the Greens NSW Transport spokesperson (SMH July 7th 2016) a fact check by the ABC revealed a single-deck system would not have more capacity, and the Metro made the "least sense" in suburban areas such as the north-west

and south-west corridors; in addition, the government had inappropriately favourably compared it with London's Crossrail, which is in fact a heavy rail line.

An improved "customer experience" and "door-to-door", "seamless" travel is not likely to be accomplished by the loss of the most popular destinations along this current line (ie Redfern and the City Circle stations). Commuters from Bankstown and beyond will have several changes instead of a single trip to the city. People will now need to change trains or walk to previously handy, direct destinations. With reduced seating capacity, there will be many more people standing for longer periods along the 33km line.

At Hurlstone Park, TfNSW has shown little interest in improving rail services. In 2013, two trains were cut from our station in the morning peak, and a further one will be cut with the new timetable coming into effect in November 2017 (with eight instead of nine trains stopping at Hurlstone Park between 7.40 and 9.40am). This is despite Hurlstone Park being a popular commuter stop.

A metro conversion is not required to address accessibility issues. Five out of the ten stations along the line already have lifts, and lifts can be installed at other stations without a metro conversion.

A commitment to safety should occur across the rail network and does not depend on a metro.

The crash-worthiness of the significantly more light-weight metro trains has not been addressed, especially when running close to goods trains. The narrowness of walkways in tunnels, in case evacuations are required, has similarly not been addressed.[3]

Automated trains, without drivers or guards, present new safety issues, especially when electrical systems fail or evacuations are needed. The lack of guards trained in evacuation and safety procedures is likely to impact more greatly on people with disabilities and mobility issues.

A major justification for the Metro is to increase development (intensification) around stations. Planning for infrastructure and amenity should be in anticipation of growth, not a mechanism to force growth. While encouraging the use of public transport is in everyone's interest, the flawed assumptions and mechanisms of the Draft Urban Renewal Strategy for the corridor and the draft South District Plan have been embraced by developers and investors but not by the community. A high volume of negative submissions to these draft proposals were generated from residents, community organisations and councils. It appears that millions of dollars in advertising and promotional material have failed to convince communities of the merits of these plans, as re-zoning has been prioritised over liveability criteria. The identification of Priority Precincts is underpinned by developer-led planning which is contrary to the interests of current residents and potential owner-occupiers, and to the principles of good urban design. The recent Canterbury Road review by the Canterbury-Bankstown council highlights some of the problems that arise when development is allowed without community control or attention to liveability and amenity[4].

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[3]http://www.catalyst.com.au/Public_files/Fixing_the_trains_in_Sydney_1855_revisited_Sandy_Thomas_August_2013_landscape_format.pdf

[4] Canterbury Road review, Canterbury Bankstown Council, July 2017

The Sydenham-Bankstown corridor is already one of the most densely populated in Sydney (draft Urban Renewal Strategy, DPE, 2016). It is essential that growth is encouraged in a fair and sustainable way, that benefits all communities and residents across Sydney, and is not concentrated in areas that have already borne much of the brunt of development in recent years.

A major justification is that the Metro responds to housing demand. While demand from investors has been high, and this directly benefits developers and investors, and indirectly government through stamp duty revenue, this has a negative impact on the social fabric of local communities and further exacerbates affordability issues for young people and families in lower socio-economic areas.

A recent analysis by Credit Swisse of NSW revenue revealed that at least 25% of new residential property was being purchased by overseas investors[5]. The City Futures Research Centre UNSW identified, in 2016, 90,000 vacant properties in Sydney, a situation driven by tax incentives, such as negative gearing.

The economic justifications of the project are not convincing. The full business case has not been released. Metros are the most expensive of any urban transport systems.[6] The economic benefits have not been compared with those that could be realised if alternative strategies were adopted, such as a fast train to the Central Coast, a rapid bus transport option down Parramatta Rd, or a new rail service to Sydney's outer South-western suburbs. In addition, the inherent value of social and built heritage has not been considered. Real Estate agents, and developers certainly consider local character as a selling point.

The HPA does not support billions of dollars being spent converting a fully operational rail line, as this will divert this money away from investment into projects which should be prioritized in Sydney and regional NSW.

Cost blow-outs on the City light rail and Newcastle light rail link, and the lack of transparency and accountability related to these projects do not instil confidence in the economic modelling of the Sydenham to Bankstown Metro conversion.

We disagree that this extension of the Metro will assist in meeting the demand for public transport. In addition, the service will be run privately, a model which was a failure in Melbourne, with the private train/tram operator abandoning the task in 2002, only 3 years into a long-term contact[7]. Private-public partnerships in NSW have been costly, with tax-payers carrying the burden when things go wrong.

Disability access at stations is a justification of the Metro, yet many elderly people in Hurlstone Park catch buses, and these services are being down-graded and privatization

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http://haveyoursay.cbcity.nsw.gov.au/29794/documents/62458

[5] Financial review 11th October 2017, accessed 19th October 2017 http://www.afr.com/real-estate/chinese-buy-1-in-4-new-properties-in-nsw-credit-suisse-20171010-gyy7nd

[6] United Nations Human Settlements Program publications. Accessed 19th October 2017. https://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.03.pdf

[7] 2004 Australia and New Zealand School of Government, www.casestudies.anzsog.edu.au. Version 12-06-06.

Flindershttps://flo.flinders.edu.au/pluginfile.php/1127286/mod_book/chapter/57805/Melbourne%20PT%20A%20(1).pdf

considered.

The project has the potential to have short and long-term negative consequences locally, regionally and for the state of NSW.

The multiple negative effects of this project outweigh any possible benefits and include, but are not restricted to:

1. Irreversible direct heritage destruction - demolition of historic rare, exceptional and high value rail items along the line, having significance locally, regionally and for the state rail network; a reduction in the heritage values and appearances of all stations. Many of the heritage items along the corridor are of State significance, or were recommended for listing in recent assessments.
2. Indirect heritage destruction of suburbs due to re-zoning to higher-densities.
3. The loss of station and neighbourhood character and identity.
4. Increased densification of the corridor without any benefits to established residents.
5. Increased congestion on already congested roads (Canterbury Rd in our area).
6. Long periods of construction leading to unmanageable road congestion along with noise and vibration forces, the effects of which have not been clearly assessed.
7. The loss of popular direct connections including Redfern and stations on the City Circle.
8. Reduced comfort associated with longer periods of standing for commuters on the smaller carriages with less seating.
9. Funnelling of money away from projects of a higher priority such as investment in rural areas and Sydney regions currently lacking public transport.

The benefits of the project, especially for the local communities, have not been convincingly demonstrated.

The stated benefits are refuted as follows:

1. Improving access to jobs - this can be achieved without a metro conversion past Sydenham; the local community would like to see investment in local hospitals and schools, and improvements to Canterbury Rd, before growth is forced onto the area by a combined Metro/Urban Renewal Strategy.
2. Reducing congestion and changing commuter movements - popular direct connections will be lost, and the extra pressure on roads and bus services, due to growth triggered by the Metro, will negate any possible congestion and capacity benefits, which are questionable at any rate.

   Residents in these suburbs already enjoy the benefits of a rail service, a bus service, and in Dulwich Hill, the light rail.
3. Housing and employment growth - Hurlstone Park residents value their heritage, as do residents in similarly historic suburbs such as Dulwich Hill, Marrickville and Belmore.

   Enabling housing growth, as previously mentioned, will benefit developers and investors

while reducing the quality of life for existing residents. There is no guarantee it will address affordability issues.

4. Commercial development and job growth - can be achieved without a metro conversion.
5. Flow-on economic benefits - this is refuted as the billions spent on the conversion could be used to address rural and urban public transport deficiencies.
6. The key operational benefits for Hurlstone Park are stated as follows in the Executive Summary of the EIS:

The *"provision of an enlarged station forecourt for safer gathering and interaction, and new pedestrian crossings to facilitate access to surrounding areas"*

We believe an enlarged station forecourt and new pedestrian crossing is not adequate benefit for the loss of the heritage station building at Hurlstone Park.

Options and alternatives have not been adequately considered or addressed.

There is much discussion in the EIS about options considered, but the options have been selective and have not been appropriately prioritised.

1. The need for a comprehensive decentralisation policy, and rural investment, in the context of population growth, has not been discussed. Instead of forcing growth onto one of the most densely populated corridors in Sydney, a fairer and more even approach to urban growth should occur, along with rural revitalisation. Many rural areas are struggling and would welcome growth, investment and infrastructure. A rapid rail option for the Central Coast, or Blue Mountains, would have multiple economic and social benefits.
2. Parramatta Rd is in need of revitalisation, with blocks of empty and run-down shops, especially west of Burwood. The Inner West Council has looked into public transport options, and the HPA fully supports a rapid bus system or light rail for the road. With heritage restoration of Victorian, Federation and Art Deco shop fronts, tree plantings, and well-designed residential dwellings, the road could be restored to a welcoming boulevard.
3. The SMH obtained TfNSW planning documents which detailed a light rail down Parramatta Rd, which would have improved already congested public transport in the Inner West. At a fraction of the cost of the Metro conversion, this would have had multiple benefits without community condemnation. Apparently the plans were "never considered by government."[8] A rapid bus system for the over-crowded Victoria Rd was also investigated but not advanced[9]. One can only surmise that the unpopular West Connex was given precedence above improved public transport options for Inner West residents.

The Metro from Parramatta, which will be a new service, mainly underground, and providing new connections, is a much higher priority than the conversion of the existing line to Bankstown.

Improving public transport to areas that currently lack it is a much higher priority than converting a functioning rail system.

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[8] SMH 21st July 2017; accessed 22nd Oct 2017

http://www.smh.com.au/nsw/parramatta-road-tram-plans-developed--then-scrapped-20170720-gxfb1p.html

[9] SMH 21st July 2017; accessed 22nd Oct 2017 http://www.smh.com.au/nsw/rapid-bus-system-for-victoria-road-and-malabar-trams-also-considered-by-tnsw-20170721-gxg3aa.html

Heritage impacts are unacceptable and the project shows a disregard for heritage and community values.

The heritage assessment of the EIS sums up the impacts for Hurlstone Park as follows:

"The project would remove all original elements at Hurlstone Park Railway station apart from the Platform 2 building, the brick abutments of the Duntroon Street overbridge and sandstone wall on Platform 2. This would significantly impact the integrity, aesthetics, and representative significance (sic) of the station. The removal of most original elements would severely impact the legibility (sic) of the historical values of the place as one of the original railway stations on the Sydenham to Bankstown line."

The justification for this heritage destruction at Hurlstone Park is the need to straighten the platforms for the Metro. However at Dulwich Hill, where there will also be major heritage impacts, the platforms will not be straightened due to cost and technical factors. We therefore question the need to destroy original elements at the Hurlstone Park station and ask for a reconsideration of the need to straighten the platforms.

The proposed heritage protections for the suburb of Hurlstone Park have been all but ignored.

Unlike Europe that has layers of heritage (that are valued and celebrated), Australia has a short history of built, non-Aboriginal heritage. Very little remains from the colonial era, and so there is only a limited stock of buildings and items that date from the mid 1800's to the mid 1900's. These historical structures, such as Federation houses, are celebrated and acknowledged through architectural and historical texts, television documentaries, real estate circles and local and state legislation. They feature in period television dramas and films. The irreplaceable value of these post-colonial buildings is being disregarded by current planners.

The intention of heritage laws is to identify, protect, maintain and enhance these heritage items. The HPA requests that the NSW government re-prioritize heritage protection in its design for the Metro conversion and retain the heritage elements of the stations along the corridor.

The Design summary of the EIS claims the project will "*Protect and promote heritage through appropriate design, planning, and management controls*" (p9.) and that the project will "*Conserve and re-use heritage fabric wherever possible.*"

A stated principle is to "*Ensure elements and items of heritage significance are appropriately managed and respected. Identify opportunities for heritage conservation to contribute to the celebration of local identity in station design.*" (p 71, Design summary)

In the Heritage Assessment it is stated that the station design has sought "*to retain and conserve, wherever possible, elements of heritage significance.*" (5.3.8 p 148)

There is no evidence in the EIS to support the above statements:

- The initial plans included the total demolition of both platform buildings at Marrickville and Canterbury (Heritage Assessment, Table 21,149-151). These two stations are some of

the most significant along the line and the platform buildings are exceptional. They are listed on the State Heritage Register as well as locally (like all stations along the line) under the council LEPs and Rail Corp.

- Hurlstone Park Station group was recommended for State Heritage listing in 2016. Loss of most of the heritage items at Hurlstone Park will therefore have state as well as local significance.
- 2 stations (Wiley Park and Punchbowl) will be totally demolished which will result in their de-listing as heritage items. Wiley Park station has "social and rarity values".
- The overhead booking office at Dulwich Hill is rare and will be demolished against expert advice.
- TfNSW has ignored the advice of many experts, and heritage laws, and opted for heritage destruction and diminution over preservation.
- Contrary to statements in the EIS, heritage items will not be rendered more visible for greater appreciation. At Marrickville, ribbon canopies will obscure the heritage platform buildings. Canopies at Canterbury will have visual impacts, and the only remaining platform building at Hurlstone Park will be less visible.
- The function of many of the heritage buildings will be removed instead of enhanced. The Hurlstone Park platform buildings have functional toilets, an attractive original waiting room and shading canopies, for instance.

The heritage impacts will be felt locally, regionally and across the historical NSW rail network. We question the methodology underpinning the heritage assessment. There was no overall heritage analysis conducted:

"Unlisted built heritage items were not assessed as part of this investigation as it was assumed existing heritage studies which informed inclusion on LEP schedules and the s170 register would have captured all relevant items." (Section2.1.2 Heritage Impact Assessment)

This is a flawed assumption, as the state, councils and organisations have showed considerable inertia in identifying and retaining heritage items.

As a local example, the former Canterbury Council failed to endorse a heritage study some years ago that identified several potential items and possible Heritage Conservation Areas (HCAs) in the locality. More recently, new items were recommended though the 2016 Hurlstone Park Heritage Assessment Study.

The Metro Heritage Impact Assessment also basically ignores draft or potential heritage items and conservation areas for Marrickville and Canterbury areas. (point 1.6 "limitations"). This is a further inconsistency in the EIS, as draft heritage proposals are ignored, while the draft Urban Renewal Strategy is deemed a strategic context.

Heritage "mitigation" measures are out of touch with community expectations. A photo, a rescued brick, or a mural, ("heritage interpretation") will not compensate for the heritage destruction of our historical buildings.

It is contradictory that the heritage architects who undertook the Impact Assessment,

conclude, after describing the "major" heritage impacts along the line, that the outcome will be entirely satisfactory:

"*Despite these impacts, the assessment concluded that the T3 Bankstown Line would continue to retain some of its heritage values and demonstrate the historical phases of development of the line.*"(Executive Summary EIS).

This is contradicted by the following statement:

"Of the 10 stations from Marrickville to Bankstown, five have not had major upgrades and remain largely as they were built early last century." (Chapter 5, Volume 1A, EIS). That is to say, there have been few historical phases along the line, and none so destructive as is planned with the Metro conversion.

Independent heritage advice to support the HPA's concerns about heritage loss in this project:

The HPA's concerns are supported by Dr Bronwyn Hanna, PhD (Australian architectural history, UNSW), who has expertise in NSW heritage listings (for 12 years at the Heritage Office), works as a heritage consultant, and has been widely published in the area of the history of the built environment in Australia.

Dr Hanna points out that the Burra Charter of heritage principles, widely accepted as an industry standard across Australia, should be guiding the heritage management of the Metro, but this does not appear to be the case.

Dr Hanna states:

> ***"while little of the land around these stations is heritage-listed, all of it should be professionally assessed for potential heritage significance before any of it is rezoned. Although heritage legislation is turned off for state significant projects such as the Metro, the developing authorities are still required to address heritage concerns as part of their responsible management of projects, even when there are no formal requirements for approvals from the Heritage Council or NSW or the need to follow heritage rules in LEPs."***

Dr Hanna states further that:

> ***"the plans displayed in this EIS are sadly lacking in appropriate measures: firstly for assessing the heritage significance of affected land not already heritage listed; and secondly for conserving the fabric, appearance and historic significance of those railway stations which are heritage listed."***

Dr Hanna is also concerned about the design quality of the planned precincts as they are out of character and not well considered:

> ***"Perhaps the key statement for everyday heritage practice in the Burra Charter when managing change to heritage places is to do "as much as necessary, as little as possible." Yet the plans for the railway stations seem motivated by the opposite principle - to make as many changes as conceivable and to keep as little of the historic fabric and atmosphere of these place as possible. Instead of using expert advice to conserve the heritage significance of the Sydenham to Bankstown railway stations, there seems to be a desire to renew and modernise the appearance of all these places.***

In conclusion there does not yet appear to be much serious heritage expertise involved in the Metro plans. The historic stations are beautifully built, and they are heritage listed and remain in good condition. They deserve to be properly managed and top quality heritage consultants need to be appointed to help with this task. Conserving heritage significance should be seen as a core aspect of project management of the Metro project."

Design and public domain concepts are unacceptable, do not reflect best practice and do not meet stated objectives

The architectural design strategy of the Metro is to provide a "coherent identity" and *"introduce elegant, contemporary structures that complement the earlier station buildings (but) distinguishable from the earlier heritage fabric."* (Technical Paper 3; 5.3.7)

According to the EIS (Executive Summary and Design principles) the overarching design principle is to *"create welcoming, secure and well-maintained public domain spaces and station buildings with an attractive sense of place that responds to the distinct cultures of each station precinct."*

The designs aim *"to contribute to healthy, cohesive and inclusive communities"*, and

"Identify opportunities for heritage conservation to contribute to the celebration of local identity in station design."

"The design process also involved recognising the important place-making role of the stations, and consideration of a range of options for the design of key elements at each station to respond to local place, the surrounding urban context, the functioning of local town centres and input from the community."

Building design

The HPA appreciates that Sydney Metro met with several of our members earlier this year to discuss design options at Hurlstone Park station. An outcome of these meetings was the retention of the existing entry location rather than Sydney Metro's earlier design concept that showed entries from Duntroon Street and the Floss Street car park.

We support the retention of the existing entry on the overhead bridge and the creation of a new plaza fronting the roadway. This new public space would function well as a bus/train interchange area and has the potential of creating a new hub in Hurlstone Park.

The EIS proposes a modular kit of parts design approach for new station buildings which is inconsistent with other statements in the EIS stating that there is a need for the new metro stations to reflect local character. Whilst the design of the new structures should be contemporary, we believe that the design should be clearly differentiated from new buildings at say Campsie or Bankstown. Branding of the Metro should not be done at the expense of local character, in this case Hurlstone Park shops.

Designs do not follow heritage principles. While new work near or adjacent to heritage items should not mimic those items, there are design principles that aim to reduce heritage impacts; good design can in fact complement and enhance heritage items.

Under heritage recommendations, new work:

- should be of the same design and materials if attached to heritage items

- should be *"of a minimal size and simple contemporary design that is sympathetic to the character of the precinct. They should not imitate the original design details; however it is preferred that similar building materials are used in the external finishes where appropriate."* (EIS)
- colours should be dark so not to detract from heritage items, orientation should reflect the original alignment and geometry

The designs for the Metro offer clashing colours (especially lots of blue and white), clashing materials and forms, such as "pods", inappropriately large foot-prints and ribbon canopies and other obtrusive structures. All of these design elements will further negatively impact the station precincts and local character.

Hurlstone Park should have a more low key design approach than the metro stations at the larger centres. In particular, the footprint of the new structures at Hurlstone Park is extensive, with the platforms, stairs and entry all being roofed. Whilst this may mean that someone can get from the train to the station entry without getting wet, that person would get wet once they leave the station, so the benefit of the roofing is questionable. The visual impact of the structures would be minimised if the roofing was not as extensive.

Four lifts are proposed at Hurlstone Park. There will be more patronage at Marrickville and Dulwich Hill and yet only two lifts are proposed at these much busier stations. The effect of the two extra lifts is to make the building footprint much larger than necessary. Hence, the need for four lifts at Hurlstone Park should be reassessed.

Pedestrian crossings

We support the new pedestrian crossings on Crinan Street and Duntroon Street (south). However, the crossing on Duntroon Street should be in the same location as the existing traffic island as this location provides a direct pedestrian connection between the station and the shops, in particular the bottle shop. Fig 8.6 (Vol 1A) shows that the proposed crossing is further south and skewed to the geometry of the street making it further for people to walk and possibly more dangerous.

Disabled parking spaces

Currently there are three disabled parking spaces in Hurlstone Park shops – two in the Floss Street car park and one outside the barber shop on Duntroon Street. Fig 8.6 shows that the two spaces in the car park are retained and a new disabled space is provided in the residential area in Duntroon Street. We note that this new disabled space is located at a considerable distance from the station entry. Fig 8.6 does not show the current disabled space in front of the barber shop. It would be preferable to retain this existing space on Duntroon Street (north) and delete the proposed space in Duntroon Street (south) as it is closer to the station.

Loss of heritage

The attractive heritage buildings along the line are in good condition and have stood for over 100 years. The buildings to replace them will have a much reduced life-span and will look run down and out-dated within a few decades. The HPA requests that the design be modified so that existing heritage buildings be retained. If Dulwich Hill does not require line straightening, then surely the design for Hurlstone Park can be modified.

Mitigation measures are again inadequate." Heritage interpretations" will in no way compensate for the heritage destruction planned.

"To reflect local conditions and heritage values, heritage interpretations, public art, and landscaping would be incorporated into the design of each station, in accordance with the design guidelines, and based on consultation with local stakeholders." (EIS) The HPA requests that this is properly carried out.

Removal of commuter car park

In Hurlstone Park, the removal of the commuter car park and demolition of the station will have significant impacts during construction. Construction compounds, equipment and workers will impact quality of life, parking and views.

The "sense of place" will be irreversibly altered around the station, and houses close to the station will have amenity views negatively impacted.

Unsightly security fences (up to 2.4m in height) will be erected along the length of the line, and potentially 13.8 hectares of vegetation, including mature trees, will be removed. With the impact of climate change being felt, the HPA requests that there be no removal of mature trees and suggests that it is irresponsible were this to occur.

Environmental impacts are unacceptable and have not been fully addressed

The Executive Summary of the EIS states:

"The greenhouse gas assessment concluded that the operation and maintenance of the project would result in increased emissions of greenhouse gas through increased electricity use. However, the project has the potential to reduce greenhouse gas emissions by providing a reliable and efficient alternative to private car travel."

The Metro's intention is to trigger growth, and more people means more cars, despite public transport options. Canterbury Rd will be more congested, noisy and lead to more local air pollution.

The Executive Summary also states:

"*Transport for NSW will work with the Department of Planning and Environment to support the development of an active transport corridor, including walking and cycling infrastructure.*"

The DPE, in the revised Urban Renewal Strategy, made no commitment to new green spaces, in fact it aims to use existing school grounds as communal "open space" due to the lack of available green space, and the option of a walking/cycling track was considered only if surplus land became available.

The environmental costs of the demolition of solid, long-standing buildings, and the use of new materials and construction has not been acknowledged.

Construction impacts including congestion, noise and vibration are unacceptable and in some cases unknown

The congestion caused by the temporary transport strategy will be unreasonably disruptive for commuters and has the potential to cause extreme and unreasonable stress for people trying to get to work and school.

Construction noise and disruption will be unreasonable and many consequences are unknown, such as vibrational damage to dwellings, many of historical value. The HPA

requests that adequate community consultation occurs to advise residents of the construction timetable and when the most severe impacts will be felt.

Properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by very noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The child care centre in Garnet Street Dulwich Hill will experience severe noise disruption. The HPA requests that noise abatement measures are put in place for this centre and residences which will be severely impacted.

According to the Executive Summary of the EIS, noise and vibration will be an issue, especially during night and weekend construction.

Some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the historic Sugar Mill and the new units backing onto Canterbury Rd. This has not been fully assessed. The HPA requested that a detailed register of potential vibration damage is kept in order for residents to be able to claim vibration damage expenses directly caused by the Metro project.
Streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods. The HPA requests that dust is kept to a minimum through hosing and advising residents when the most severe impacts will be felt.

There is no clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months. The HPA requests that before any construction commences, a workable Temporary Transport Strategy be developed and released so commuters can adequately prepare for their alternative journeys.

Canterbury Rd is already considered "*noisy, polluted (and) harsh*" (Canterbury Rd review, Canterbury Bankstown Council). It is congested at peak times and it will not be possible to accommodate all the extra buses required during railway possession periods. There will be similar issues along main roads near most of the stations along the line.

It is expected that about "*100,000 customer journeys*" a day would be impacted.

According to the EIS (Executive Summary), there will be expected periods of disruption on weekends, during school holidays, and also completely closed "*for about 3 to 6 months.*" Sydney's experience with unreasonable delays on the Sydney Light Rail project do not provide any reassurance.

The former Canterbury "bowlo" in Close St will be closed for use as a site office. This is currently used by several community groups. The HPA requests that the metro project finds an alternative venue for their site office so that community groups are not impacted.

Community consultation has been inadequate, misleading and lacking in good will and transparency and needs to genuinely engage with residents in the policy development phase

The Executive Summary of the EIS states:

"The consultation strategy has been designed to inform the community and key stakeholders about the project, and encourage participation."

The HPA proposes, going forward, that active community engagement occurs with residents when government announces major infrastructure projects. For communities to have a sense of agency and to be brought along with major projects that have significant impacts on people's lives, consultation and information provided has to be genuine, meaningful and inform the design process to justify the business case for major capital investment. The current community consultation process for the metro project has been minimal, selective, one-sided and more focused on glossy marketing than substance. It has been more akin to "information" sessions on a pre-defined option then genuine "consultation" with the public in which a full spectrum of options is considered, costed and the environmental impacts assessed.

"Push polls" have been just one of several mechanisms for stifling democratic debate and pushing an ideological agenda, with on-line and phone surveys presenting one-sided closed and biased questions and information to enable the government to present the desired response back to the community.[10]

Several drop-in community sessions and stations have been arranged, and have had the following characteristics:

- poorly attended, reflecting a community not "engaging" with the process. We have observed that staff at these events have out-numbered visitors at any time (this compares to "alternative" community-run forums that have been over-subscribed)
- no useful exchange of information. Community members often appear better informed about the project than many staff members.
- biased and simplistic information provided -- "picture boards" depicting new Metro trains, simple flow charts and so on. No information offered about the negative impacts apart from those expected during construction and the "story" and the associated "history" of these impacts has changed during the more than two years the community has been white washed with marketing spiel.

The NSW government has also released multiple glossy "Project updates" which again present a one-sided view of the Metro, while failing to describe any of the devastating short and long-term impacts related to heritage destruction, costs, increased local traffic, disruption to commuters and so on. In fact the government have commissioned numerous contracts costing millions of dollars to help "sell" the Metro, even to school children as part of the curriculum[11].

The EIS is itself basically inaccessible to the public due to its length, complexity and the short time allowed for feedback (only 2 months). Going forward, the HPA requests that exhibition periods be much longer, the EIS be accessible in community languages and the major negative impacts be clearly identified.

The Metro project does not adequately demonstrate customer focus

This project claims to put the customer first, and improve their travel "experience."

"The customer is at the centre of everything we do in transport" (TfNSW mission statement).

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[10] SMH 6th Feb 2017 News p 3 "Rail Survey 'Half-truths' in questionnaire."

[11] SMH 26th June 2016 "Baird Government spends millions to win public support after rail, road disruption" http://www.smh.com.au/nsw/baird-government-spends-millions-to-win-public-support-after-rail-road-disruption-20160625-gprrls.html

It also aims, with station designs to "*create public spaces that promote people's health, happiness and well-being.*" Chapter 7 Volume 1A)

This project is not overwhelmingly supported by the community.

If customers were important:

- peak hour services to Hurlstone Park would be increasing, not decreasing; the capacity is there.
- disability access could have been installed at all stations years ago, the toilets and waiting rooms opened up, and the heritage buildings maintained to provide a pleasant aesthetic and rich travel experience.

The HPA requests that the current fleet of Waratah trains be increased by an additional 8-12 above the currently planned 78 trains. These additional trains will allow the network to operate entirely with air conditioned trains; without them it will instead have to operate some of the older S-Set trains.
(Posted: October 23, 2013 in Transport: "Transport Sydney Blog")

"More choice" for customers is not offered with a Metro conversion. The loss of popular stops will hinder preferred travel movements, and reduce transport options for those in the Inner West.

"Sydney Metro Easy Customer Principles" are easily achieved without a Metro conversion.

An Opal ticketing system is not a benefit - it already exists.

The Metro strategy should only proceed if it has bipartisan and community support

A major infrastructure project costed at billions of dollars should have bipartisan and community support before it is approved.

The strategic context is informed by the DPE's draft Urban Renewal Strategy and Priority Precincts, the draft District Plans by the Greater Sydney Commission and Sydney's Rail Future. Almost every strategy that has an influential relationship with the Metro has been developed by this government to deliver its agenda for high-rise development along this corridor. This project will benefit developers and investors at the expense of the existing local community, many of whom have lived in the area for decades and who often have extended family close by thus amplifying the negative impact of the Metro which is directly linked to the DPE land up-zoning enabling the conversion of existing single storey detached homes to multi-storey towers.

The Metro is not in the public interest.

The direct and indirect effects on social and built heritage will be long-term and irreversible. Instead of improving public transport, this project will siphon funds away from urgently-needed transport strategies at a local, regional and state level.

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represent a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

Submission electronically signed by Kathryn Lumley, President, Hurlstone Park Association, 6 November 2017

DPESYDMET Scanned

From: [redacted]
Sent: Monday, 6 November 2017 9:48 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Judith Sinclair (object)
Attachments: 230699_Personal Submission EIS Sydney Metro Sydenham to Bankstown_ Judith Sinclair_ 2017Nov06_2146.pdf

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From: system@accelo.comOn Behalf OfJudith Sinclair
Sent: 06 November 2017 21:47:20 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Judith Sinclair (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Judith Sinclair
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
I have attached my submission via pdf document.

[redacted]
Submission: Online Submission from Judith Sinclair (object)
https://majorprojects.accelo.com/?action=view_activity&id=230699

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: JUDITH SINCLAIR.

Address: 20A FERNHILL ST HURLSTONE PARK

Application number: SSI 17_8256

-☑ I consent to my name being published

-☐ I do not consent to my name being published

-☑ I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.

- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.....

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 12:05 AM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 00:04:15 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
Sydney Metro Proposed works at Randall Street / Albermarle Street

I am making this submission as a resident/co-owner of a property on Albermarle Street, Marrickville. We have good reason to believe that our property as well as our personal well-being would be seriously impacted should Sydney Metro's proposal for an electricity sub-station planned for railway land behind our house (Albermarle and Randall Streets, Marrickville) be approved.
We live in a heritage zone, and an exceptionally quiet suburban area, supported by the fact that rail line is set in a cutting, well below the level of land that our houses back onto. Our quality of life in this respect would radically deteriorate, given that, as has been revealed a sub-station would emit a humming noise continuously, that is, 24hours a day. This would mean there would not be a moment in the day when we would be able to relax at peace in our back gardens. Neither have we been given any assurances that there are no possible additional health hazards associated with the functioning of such a sub-station so close to residential properties.
The sheer ugliness of the proposed construction and the size, which would rise well over twice the height of our back fences, would seriously undermine the value of our property, and jeopardize our quality of life. At a recent Town Hall meeting residents were told the construction would be 56 m long x 6 m wide x 4.5 high, but very worryingly, no one is confirming or providing plans, images, or specifications. The proposed construction would destroy the functionality of our garden and back of house, including the continued viability of a productive vegetable garden, which would be denied essential morning sunlight. This would also apply to the back of our house designed to provide crucial winter sunlight into the interior.
I make a few final points that support my view that RailCorp has given very little consideration if any for how their proposal would impact on residents. We have a wonderful community of resident owners that back onto the railway land proposed as the site for a sub-station. For many years we jointly cared for the land, providing important weed control that was not provided by RailCorp, and together we created a community garden. When RailCorp first sent in a team of surveyors over 12 months ago, we were assured that they had no plans for doing more with the land, and were simply testing soil and surveying boundaries. We were even praised for the way we had cared for the land. Some several months later we received notice that any garden beds, compost bins, or whatsoever left on the land at the end of 4 weeks would be destroyed. They ripped everything out including a large old macadamia not tree that was at a boundary near our back fences. I wonder whether council approval was sought and obtained for this act, which in my view verged on vandalism. Since that was done we now once again have a massive weed problem intruding over our back fences.

I hope that the views of the community will be taken seriously in this review process.

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230705

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 6:41 AM
To: DPESYDMET Email
Subject: FW: Submission Details for Sally Pertsinidis (object)

From: system@accelo.comOn Behalf OfSally Pertsinidis
Sent: 07 November 2017 06:41:14 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Sally Pertsinidis (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Sally Pertsinidis
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
I object to the Sydney Metro. It is expensive, will be very inconvenient to residents for years whilst under construction and appears to be being used to justify massive overdevelopment along the Sydenham to Bankstown line, which I also object to. The T3 Bankstown line is perfectly good, and all that is needed is upgraded stations and surrounds, and greater frequency of trains. I am also concerned that there is a huge gap in the line after Sydenham, which seems inefficient. People will have to change trains to join the City Circle, decreasing convenience. Also, please don't wreck heritage railway stations and their precincts with this folly.

[redacted]
Submission: Online Submission from Sally Pertsinidis (object)
https://majorprojects.accelo.com/?action=view_activity&id=230708

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 7:41 AM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 07:40:15 (UTC+10:00) Canberra, Melbourne, Sydney
To:[redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name:[redacted]
Email:[redacted]

Address:
[redacted]

[redacted]

Content:
The project is wasteful, destructive and risks urban amenity, quality of life and may well lead to the creation of a string of hub-ghettos along the proposed line as there is no detail on community infrastructure traffic and other important elements of a complex hub system. The recent Marrickville station upgrade is totally compromised, the proposed peak training seating under performs the new timetable, accountability is reduced through partial privatization.

IP Address:[redacted]
Submission: Online Submission from[redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230710

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 8:32 AM
To: DPESYDMET Email
Subject: FW: Submission Details for Fran Peaston (object)

From: system@accelo.comOn Behalf OfFran Peaston
Sent: 07 November 2017 08:32:11 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Fran Peaston (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Fran Peaston
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
Sydney Metro

I am a regular commuter on the Bankstown-Sydenham railway line. The trains on this line are often crowded and the journey time from my stop, Hurlstone Park, to the city is excessive. Therefore, I welcome government initiatives to improve the service.

I do not believe, however, that the proposed Metro is the best option to deliver a better service.

It simply defies logic and plain old common sense to build a bespoke track for a bespoke train. It's impossible to believe that the business case for the Metro is more favourable than upgrading existing rail track and stock. The Metro means two sets of rolling stock which, in turn, means separate drivers and driver training programs, separate parts and maintenance, and total lack of interoperability. It's hard to avoid the conclusion that The Metro will become a financial burden on NSW tax-payers.

Then there is the cost of building the Metro. The disruption to existing services while the new track is being built will hugely inconvenience commuters. The resultant noise and traffic congestion will be absolutely intolerable for local residents. The families that will lose their homes will be dislocated and struggle to find affordable replacement housing.

And who will be the winners? The property developers aided and abetted by the government who will erect high rise apartments that rob neighbours of light and amenity, and destroy the charm of the local community.

I want to register my strong objection to the proposed Metro. I urge the government to seek alternate solutions and spend my tax dollar in a more responsible way.

[redacted]
Submission: Online Submission from Fran Peaston (object)
https://majorprojects.accelo.com/?action=view_activity&id=230716

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade

https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Mail to :

Major Projects – Metro EIS Submission
DPE
GPO Box 39
Svdnev. NSW. 2001

Name: Fran Pearston

Address: 76 Crinan St, Hurlstone Park, 2193

Application number: SSI 17_8256

-☑ I consent to my name being published

-☐ I do not consent to my name being published

-☑ I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings

- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage-listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to highlight the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature .....

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 10:08 AM
To: DPESYDMET Email
Subject: FW: Submission Details for Marie Wickens (object)

From: system@accelo.comOn Behalf OfMarie Wickens
Sent: 07 November 2017 10:07:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Marie Wickens (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Marie Wickens
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
I wish to express my deep concerns about the proposed Sydenham to Bankstown Metro.

The anticipated disruption to the the residents and business owners along this corridor has been seriously underestimated in the EIS. Roads in and around Marrickville are already congested and the addition and constant movement of numerous construction vehicles and workers will only make matters worse. The hundreds of extra buses required daily to transport thousands of commuters to work and school (for at least a year) while the existing very efficient passenger service is withdrawn for track, station and bridge modifications can only make movement around the area even more difficult than at present. Commutes and incidental journeys will be slower and much more stressful than at present.

There is no indication in the planning for additional educational and health services to cater for the addition of the thousands of new residents to be housed in these new apartments. There will be children - lots and lots of them. They will need to be schooled locally because the traffic and bus services will be too slow for schooling at any distance from their homes. Hospital services in the west are already stretched, so where are these additional residents to go when they need medical attention.?

The destruction of numerous heritage buildings (public and private) is detrimental to the local area. There will be a huge discord between the traditional and the modern, often poorly designed and constructed, with little care for outdoor recreational space - a need often neglected but very necessary when thousands of people will be living in apartment tower blocks. Residents will need additional parks ....where are they?

The loss of thousands of trees along this corridor will be detrimental to the environment in many ways . Tree lined streets assist in cooling the city by protecting hard surfaced roads and footpaths from reradiating the sun's heat back into the atmosphere. Even if trees are replaced they will takes years to reach maturity and provide protection. The destruction of backyard trees in all those houses being resumed wil not help the environment. Swathes of hard surfaces will ensure that what rain we do get in the area will be lost to stormwater drains.

A much more sensible and practical use of taxpayer funds would be to build a rail link to Badgery's Creek to service the new airport. The existing Sydenham to Bankstown line works.

[redacted]
Submission: Online Submission from Marie Wickens (object)
https://majorprojects.accelo.com/?action=view_activity&id=230739

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 10:53 AM
To: DPESYDMET Email
Subject: FW: Submission Details for Julie Rudnicka of Community member (object)

From: system@accelo.comOn Behalf OfJulie Rudnicka
Sent: 07 November 2017 10:53:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Julie Rudnicka of Community member (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Julie Rudnicka
Organisation: Community member ()
[redacted]

Address:
[redacted]

Belfield, NSW
2191

Content:
Submission for Sydenham to Bankstown Upgrade EIS

During construction of the Metro the EIS indicates that there will be significant disruption in the corridor. This will be caused by rail possessions, full and partial road closures, increased traffic from replacement buses, project related haulage, works compounds and infrastructure reconfiguration. This disruption will be amplified by the commencement and completion of residential construction works, related to the Urban Renewal Corridor, between 2019 and 2024. Additionally, the Metro Project will result in the extensive loss of heritage and other infrastructure across the entire area.

The conversion of the Sydenham to Bankstown rail line is opposed, for reasons including the following -
· This is a lost opportunity to extend Sydney's rail network to parts of Sydney that don't currently have a rail service,
· the decoupling of the Sydenham to Bankstown line from the Sydney heavy rail network & the city circle,
· the reduction in seating per train from 896 to 378,
· the rail service being leased to a private operator and reducing the public interest & the reinvestment in NSW,
· and the residential over development associated with the introduction of the Metro line.

The response of the Greens NSW Transport Spokesperson, Mehreen Faruqi to the Metro EIS, as follows, is agreed with:
"People living on the Bankstown line should not be subjected to daily chaos while the Liberal-National Government spends billions on a privately-run Metro that they cannot show offers any benefit to the people of Sydney. The Government should go back to the drawing board and invest in expanding the public transport network, not handing it over to corporations."

Recommendations
That:
· The Sydenham to Bankstown rail service not be converted to a Metro service
· Any extension of the Metro line beyond Sydenham be to suburbs not currently serviced by rail
· Station upgrades and other necessary works be carried out as part of the works schedule for City Rail

That should the Metro construction between Sydenham to Bankstown proceed:

· An embargo be placed on planning "upzonings" in the Sydenham to Bankstown Urban Renewal Corridor (SBURC) until after the proposed completion of the of the Metro Line
· Any residents affected by vibration, noise, light and dust during the construction period be appropriately compensated and facilities made available to ensure they can maintain healthy lives
· Dilapidation reports be done for all properties possibly affected by construction works

Conclusion
Public infrastructure is a good thing that should be encouraged and sustained. Generally, the community is supportive even when there will be significant imposts. However, the proposed Metro line is not such a case.

The Metro will not be a new rail line. Rather it is the conversion of an existing world class service that will miss the opportunity to extend Sydney's rail network.
This conversion will come at a price. That price includes disruption, chaos and loss due the nature and impact of the works, from road bridge removal and congested streets to rail line possessions to loss of built heritage.

Coupled with the massive proposed overdevelopment promoted by the Sydenham to Bankstown Urban Renewal Corridor it is no wonder that that many residents along the Sydenham to Bankstown Corridor do not think that the pain of this project is worth the gain to the community.

There are better places to build rail lines & more equitable distribution of increased development & population density!

Julie Rudnicka November 2017

[redacted]
Submission: Online Submission from Julie Rudnicka of Community member (object)
https://majorprojects.accelo.com/?action=view_activity&id=230744

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 11:11 AM
To: DPESYDMET Email
Subject: FW: Submission Details for Sally Mair (object)

From: system@accelo.comOn Behalf OfSally Mair
Sent: 07 November 2017 11:10:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Sally Mair (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Sally Mair
[redacted]

Address:
[redacted]

HURLSTONE PARK, NSW
2193

Content:
I believe we need to see a complete plan with cost benefit analyses for the proposed residential developments in our area together with the proposed changes to transport.

The trains are crowded now, and we will see how the new timetables help. The roads are so congested buses don't have much chance, but it would be good to see a plan assisting with co-ordinated bus/rail/light rail timetables for our commuting residents. People want to use public transport, and we are not buying the suggestions that the new "metro" will do anything more than look different.

The changes in our very successful railway system seem to be prioritised above building new comparatively short, new lines that would help make the whole network more efficient. It would also help get some cars off the roads.

If the money that's going into West Connex had been more thoughtfully allocated we might have had some chance to consider the future. It will be very different. I have just come back from Japan and note how calm and uncongested Tokyo is: people do not drive SUVs. The cars are tiny, and are all that's needed by most of the 68 million who live there.

This State Govt's approach is reactionary not forward thinking. The promises never come true.I walk down George Street every day and am angry at the lack of apology from the Govt for the disruption to our lives. They have shown a disregard for what we care about - and the cutting down of tress has been a brutal example of this.

I do not believe that the approved developments - now built in our region - have shown concern for any of the evidence-based conclusions on what constitutes a liveable, peaceful and environmentally sound lifestyle. Clover Moore was right when she described our city as a series of unique villages and we need to celebrate the unique character and heritage where possible to preserve the soul of each area: as we are a country of immigrants gives us our home and history.

This State Govt shows no sign of meaningful future planning. Building Westconnex is an outstanding example. Roads will be used very differently in the near future. Let's look at increasing public transport where it is needed, and reducing care ownership. Offer cheap travel to those on lower incomes who probably use the toll roads more that

those living in :the harbour city".

Rather than concrete, and unbridled cost increases, I would like to see how green space is preserved, and increased if possible, as the green space becomes even more vital for people living in apartments. Why aren't environmental new developments including mandatory future proofing e.g. solar panels, grey water recycling etc?

The fact that this is not in place indicates to me how easy the Sate Govt makes it for developers, and I regard the proposed structural changes with resulting chaos for the residents, and commuters, as more evidence of this.

Please show us the cost benefit analyses, and also show us considered future planning for discussion, and implementation in an orderly non-disruptive manner.

[redacted]
Submission: Online Submission from Sally Mair (object)
https://majorprojects.accelo.com/?action=view_activity&id=230754

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 12:07 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Lynne Phillips (comments)

From: system@accelo.comOn Behalf OfLynne Phillips
Sent: 07 November 2017 12:06:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Lynne Phillips (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Lynne Phillips
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
This submission is area specific. It relates to the area from Kays Avenue East to Randall Street Marrickville and takes in to account the Albermarle Street over rail bridge replacement. Specifically, the area referred to in page 185 of the Summary of the Environmental Impact Statement (EIS).

The EIS has set out details as to what is expected to occur within this area and in particular, the proposals regarding the mature vegetation within this area.

Protection before and during construction

It appears from the EIS that it is contemplated that any vegetation remotely inhibiting the construction will be removed. It is noted that Construction compounds and worksites are to be installed mainly on the southern side of the railway corridor and that these proposals will have an impact on that area.
There are simply too few mature trees within this area now for this not to be a significantly negative impact. What is less clear from the published document is that the area already suffers from a significant loss of habitat for animals and birds. The proposals do not in any way assist in this regard. For example, within the area from Kays Avenue East to Albermarle Street overbridge there are only three trees of any real size. There are two Grevillea Robusta and a Camphor Laurel. Regardless that one of these trees is not a native the loss of these trees during the construction process would be devastating on the local bird and animal life as they are the only trees providing shade, nesting habitat and shelter for the wildlife in that side of the corridor. The bird life in the railway corridor is substantial, including such species as wrens, honey eaters, thornbills etc. These bird species themselves may not be endangered but their local environment is very much threatened and the removal of vegetation within this area will devastate the already struggling population. Some priority must be given to retaining the existing vegetation in this area wherever possible - this priority must be recognised and addressed before construction commences and variations made where necessary.

Shrubby heath plants such as Kunzea ambigua & Lomandra longifolia are located in this area and are believed to be the remnant of indigenous plants of the area. These will be lost if no protection is offered.

It is clear that for the Albermarle Street bridge extension trees will need to be removed from the northern boundary of the bridge extension site. These include Callistemon and a large Grevillea Robusta. What is again less clear is how far such tree removal will go. The removal of any mature trees should be restricted to the bare minimum to ensure

that the amenity of the locality is not lost. There is no point in removing 80 year old trees and replacing them with month old plants. There must be a commitment to replace with these trees with similar species and with plants of a substantial size as well as an ongoing arrangement to see them established.

Similarly, with the proposals for the Randall Street area it appears that the existing Camphor Laurel trees will be removed to enable trucks to access to location. Again, these trees are the only mature trees in the immediate area and provide nesting and shelter for animals and birds alike. This is also a small residential street, so consideration must be given to the impact these proposals have on these areas. The area for the proposed substation has already been cleared of any trees- including trees that may have been able to provide shelter for construction huts and privacy for the adjoining owners.

Maintenance during construction

Similarly, during construction there needs to be a commitment to maintain the environment so far as it is possible- this should be a priority rather than an afterthought or by product of some other activity.

It is understood that circumstances will change once construction commences but a proposal that includes the maintenance and protection of what little vegetation is there now will enhance the area and the ongoing relationships with the adjoining community.

Remediation following construction

The proposal that the southern area of the corridor be returfed at the end of construction is a negative one. The turf will not grow without ongoing maintenance and that includes regular mowing and a large use of water. A better approach for the environment would be to have the area remediated by the planting of native species suitable to the area. These could be intense plantings of bushes and ground covers which would have the effect of retaining the soil, stabilising the area and providing the habitat necessary for the local wildlife. This benefits the residents and would likely also reduce any noise from the railway and, once established, would be more cost effective as ongoing maintenance would be reduced. The Development Control plan devised by the Inner West Council lists the relevant species of plants that are preferred for this area, so the information and skill base for deciding what to plant is available already.

Our community has many groups willing to work with the Government and independent contractors to better improve our bushland. The technology and skill base is readily available to advise the Department and the Contractors on the best ways of joining both the proposed construction with the immediate environment and the remediation of the railway corridor as a whole. This area appears to be an overlooked opportunity for restoration of a lot of habitats for plants and animals - with such restoration benefiting locals and all residents of the inner west alike.

This an opportunity. We get one go at this - the area after the installation of the railway needs to be enhanced, not left in a worse state than it is now. There is an obligation on all of us to do better, to see that improvements are made and to generally progress the area, not just in the provision of updated transport, but the general remediation and reinstatement of the nature habitat for wildlife in general. This cannot fail to have a beneficial effect on all Sydney residents.
It is unrealistic to approach the development of the Sydney Metro Sydenham to Bankstown upgrade as if it was a series of unrelated events, all the works relate to each other and the use of the corridor has to take into account that it is currently a natural habitat, albeit a degraded one, for many plants and animals. The will be no way to regain what is lost if the issues are not addressed at the commencement of construction phase and with a remediation commitment at the end of construction.

As referred to above there are community groups and individuals willing to work with the contractors to achieve these results.

Albermarle Street Bridge extension

In addition to the above as Albermarle Street is a small residential street the bridge design must be of a low impact design. The approaches to the bridge should not be so large as to deflect from the heritage conservation area that it is located in but blend into the surroundings as much as possible. The design of this bridge cannot have the same visual impact as would be required for a bridge located on a major road. There can be no `one design fits all' concept.

Due to the difficult nature of the approaches to both sides of the bridge traffic calming measures may be required in the approaches on both sides.

[redacted]
Submission: Online Submission from Lynne Phillips (comments)

https://majorprojects.accelo.com/?action=view_activity&id=230765

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 12:18 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 12:18:10 (UTC+10:00) Canberra, Melbourne, Sydney
To:[redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name:[redacted]
Email:[redacted]

Address:
[redacted]

[redacted]

Content:
I object

IP Address:[redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230771

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 12:32 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Malcolm Fraser of Personal (comments)

From: system@accelo.comOn Behalf OfMalcolm Fraser
Sent: 07 November 2017 12:31:12 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Malcolm Fraser of Personal (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Malcolm Fraser
Organisation: Personal (Not Applicable)
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
This submission relates to Marrickville Station

Could there be car parking provisions. At present car parking is not provided in contrast to Sydenham & Tempe stations whose car parks are always well patronised.

Could there be provisions to set down & pick up both at the lower street level & the Illawarra Rd level

[redacted]
Submission: Online Submission from Malcolm Fraser of Personal (comments)
https://majorprojects.accelo.com/?action=view_activity&id=230781

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 2:24 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Katie Hendry (object)

From: system@accelo.comOn Behalf OfKatie Hendry
Sent: 07 November 2017 14:23:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Katie Hendry (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Katie Hendry
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
The Metro conversion of this line is not justified because: Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.
The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham
In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility. The metro is not in the public interest but is enabling the over-development of the corridor.

[redacted]
Submission: Online Submission from Katie Hendry (object)
https://majorprojects.accelo.com/?action=view_activity&id=230840

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 4:17 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Kevin Cheng (object)

From: system@accelo.comOn Behalf OfKevin Cheng
Sent: 07 November 2017 16:17:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Kevin Cheng (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Kevin Cheng
[redacted]

Address:
[redacted]

Campsie, NSW
2194

Content:
As the chairperson of the Owner's Corporation of 49-51 Anglo Rd, Campsie, we object to the location of the substation on Lilian St. It is in close proximity to our properties and others.

We believe the substation should be relocated further along Lilian St towards Campsie RSL, as there are no residential properties impacted by it. This would make the most sense.

Another suggestion would be to build it to the east of the "access to services building", so it is directly opposite the RSL carpark. Then the two buildings "access to substation" and "access to services building" would be "swapped".

As for the design of the substation, we believe it should be appropriately fenced off and covered, with neutral colours. Size (especially height) should be minimised so it is not able to be seen from the street. Landscaping, including trees, shrubs and grass, should also be a priority in that area.

As residents, we understand that the substation must be placed somewhere but it doesn't make sense for it to be built so close to residential homes.

As Lilian Lane, Campsie is already a crowded area with no clear pathway for pedestrians, I'd like to see the "shared path" be clearly marked for pedestrian and cyclist use.

In terms of construction and impacts, we disagree with the construction hours during possessions. To have 24-hour construction periods during this time (which are usually weekends) are not appropriate. It should be limited to the same times as standard hours. This will minimise impacts on residents.

Furthermore, 18 truck movements per hour between 6pm-7am is totally unacceptable.

[redacted]
Submission: Online Submission from Kevin Cheng (object)
https://majorprojects.accelo.com/?action=view_activity&id=230853

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade

https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 5:54 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Peter Manning (comments)

From: system@accelo.comOn Behalf OfPeter Manning
Sent: 07 November 2017 17:53:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Peter Manning (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Peter Manning
[redacted]

Address:
[redacted]

Dulwich Hill, NSW
2203

Content:
When I bought in to Dulwich Hill eight years ago, the close availability of public transport was a key factor that attracted me to the suburb, along with the cottage typed of housing, the backyards, local heritage values and the multicultural community.

I have been served extremely well by the existing Bankstown line. It is a pleasure to travel on. It saves me time and money, whether I am going to work at UTS or to the Opera House for a concert. The regularity and reliability of the line is a feature and there is never a need to wait longer than 20 minutes for a train, usually much less.

I could not believe it when I heard that the State Government declared that they would replace the existing line with a new one that would cut waiting times further. There is, in my opinion, no demand for changing this line in my district.

To understand the rational behind this decision I attended community consultation sessions devoted to the gains to be had from the new Metro line. i was extremely underwhelmed. I heard of replacing the historic Dulwich Hill station with something that looked like Chatswood! I saw stupid drawings of people mixing happily on a hill and no-one could show me the data that showed community demands for change. I was appalled and wondered why the government was wasting its money on replacing a perfectly good train line.

The tone of the meeting was also "fait accompli" - this was what was coming whether you liked it or not but "we" would consider amendments to the proposal if they fitted "our" vision. This made a mockery of community consultation.

Finally, I saw leaflets and the exhibition of the line. Again, I saw inaccuracies, false promises and contradictions - for example, a denial that the line would be privatised in the near future, the alleged 66 kilometres of new track (a lie) and the claim of trains every 10 minutes (it could simply be done now).

Then came the late revelation in an official leaflet to end any possibility of support for this "Metro" line: Dulwich Hill residents would be the worst affected by construction companies for the line, would suffer the greatest decibel volumes throughout the days and nights of works, buses and trucks would be racing through our streets at double the current capacity and the carpark near the station would be halved. ALL THIS FOR FIVE YEARS in to the future!

I find it extraordinary, even politically, that any government could try this project on with the people of south west

Sydney. Are they trying to lose the next election, destroy the inner city or both?

I am yet to see the figures on the cost of building this white elephant. I am sure the funds could be better spent in areas of Sydney that are desperate for cheap, public, train travel. Save the money and spend it where its needed!

[redacted]

Submission: Online Submission from Peter Manning (comments)
https://majorprojects.accelo.com/?action=view_activity&id=230889

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 6:15 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Vivienne Martin (object)

From: system@accelo.comOn Behalf OfVivienne Martin
Sent: 07 November 2017 18:15:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Vivienne Martin (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Vivienne Martin
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
I wish to make a submission about the Sydenham to Bankstown corridor. I believe there has not been adequate thought given to infrastructure such as traffic, schools, health services if the private transport developer is also the developer for up to 25 story appartment blocks.

As an early childhood educator I am particularly concerned about outdoor space for children to play. As we know there is an epidemic of obesity. I am worried that although Lakemba, Bankstown and Belmore may not have the same 'voice' as Dulwich Hill, Marrickville and Hurlstone Park ends, that the more disadvantaged areas will be further disadvantaged.

I am also worried about public assets put in private hands. We know that planning that has a monetary motive is rarely in the public interest. We have a well functioning railway line that take commuters to and from the city on double decker trains on a good railway line. Why disrupt life for 100,000's of residence for 2 years in order to downgrade a service?

All this goes to make Sydney a more and more unattractive and unlivable city. Its such a shame.

[redacted]
Submission: Online Submission from Vivienne Martin (object)
https://majorprojects.accelo.com/?action=view_activity&id=230891

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 6:31 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Jeannie Messer (comments)

From: system@accelo.comOn Behalf OfJeannie Messer
Sent: 07 November 2017 18:31:15 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Jeannie Messer (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Jeannie Messer
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
I am making a submission about the substation to be built behind Albermarle and Randall Streets in Marrickville. I have the following concerns about this facility:

The proposed height of 4.5 metres is too high. 3 Metres is more in keeping with the surrounding buildings.

I also have concerns about the noise - both during construction and during its operation after construction when, I believe, it will make a constant humming noise which will have a considerable negative impact on the residents.

To mitigate these above issues, I request that a screen of trees be planted to minimise the visual impact and absorb some of the noise.

[redacted]
Submission: Online Submission from Jeannie Messer (comments)
https://majorprojects.accelo.com/?action=view_activity&id=230895

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 6:55 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 18:55:11 (UTC+10:00) Canberra, Melbourne, Sydney
To:[redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name:[redacted]
Email:[redacted]

Address:
[redacted]

Content:
Why waste money, time and resources on fixing something that isn't broken!
The ensuring disruption is a disaster!
The resulted transport will be worse and privitisation spells more cost to the travellers now forced to stand.

IP Address:[redacted]
Submission: Online Submission from[redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230897

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 8:20 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Maggie Galley (comments)

From: system@accelo.comOn Behalf OfMaggie Galley
Sent: 07 November 2017 20:20:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Maggie Galley (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Maggie Galley
[redacted]

Address:
[redacted]

Dulwich Hill, NSW
2203

Content:
My concerns are below:
- Access to each of the stations
- Alternative Energy infrastructure
- During the build
- Timetable beyond the peak hour

1. Access to the the station
I don't believe that access has been dealt with appropriately. The very flashy document says that all stations will be fully accessible however I cannot see in any of the development plans of each of the stations that will be upgraded adequate access. I have noticed that underground stations have escalators but travelators take everyone including elderly and mothers with children.
If the number of commuters are increasing then one lift to go up to street level and down to the station in my view is in adequate. I believe travelators should be installed at each of the stations that are being upgraded. This would clearly take the transport system into the future.
2 Alternative Energy
There is no mention of a plan for alternative energy. Why is this so? Do we not need to plan for the next 20 years?? Surely Solar Panels could be installed now on each of the stations with planning to add battery technology when that technology is more advanced. In the meantime the solar energy from the solar panels could be directed at the very least for use on the station.
3. During the build
I understand that to build and develop such a plan will mean inconvenience. I am unclear just how this will be managed I am hoping the disruption will not happen on work days as this will add quite significant travel time to some commuters that probably can ill afford the additional time for their travel on their work days.
4. The information says that there will be trains every 4 minutes however I curious to know what will be the train timetable at other times?

[redacted]
Submission: Online Submission from Maggie Galley (comments)
https://majorprojects.accelo.com/?action=view_activity&id=230900

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 8:27 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Horst Thiele (object)

From: system@accelo.comOn Behalf OfHorst Thiele
Sent: 07 November 2017 20:27:12 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Horst Thiele (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Horst Thiele
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade
Name: Horst Thiele
Address: 17 Hurstone Ave Hurlstone Park 2193
Application number: SSI 17_8256
I consent to my name being published
I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.
The Metro conversion of this line is not justified because:
Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunneling for short lengths in the existing system, and improving (not privatising) bus services.
Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.
Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?
The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:
 potential vibrational damage to dwellings
 properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
 some properties, including heritage listed properties, close to the project may suffer damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
 streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and

Melford Streets will have heavy truck traffic, noise and dust during construction periods.

 The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.
Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.
The environmental impacts are unacceptable, including:
 increased greenhouse gas emissions
 the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.
The planned heritage destruction and diminution along the line is reckless:
 the demolition of rare, exceptional and high-value heritage-listed items is wasteful
 station designs do not represent local character and reflect a branding exercise by the NSW Government

The Bankstown Line is a functioning rail line, which can easily be removed from the City Circle by means other than disconnecting it from the Sydney Trains network., e.g. the Bankstown Line could terminate in Redfern or Central (easy change options in all directions in Redfern (Redfern could be converted to a major interchange, offloading the passengers from the Bankstown Line to the Northern Line, Western Line, Inner West and South Line, Eastern Subs and Illawarra Line and City Circle), then the Bankstown Line could terminate at one of the superfluous 'country' platforms at Central Station).

Creating capacity as described above would allow increased services on the City Circle by the Inner West and East Hills Lines AND would allow to increase the capacity of the Bankstown Line, which is only constrained by the City Circle. The Bankstown Line could be split in half like the East Hills Line with 10min interval all station services to say Belmore and 10min interval services not stopping until Belmore - creating REAL time savings for travellers from suburbs west of Campsie. AT PRESENT the proposed services ARE WORSE than those currently enjoyed by commuters (The glossy brochure is misleading declaring current travel times as 'up to' - meaning the 'all stations' train - and claiming a 'up to 7 minute' gain for Bankstown - there is actually no gain to the current express services and the aim should be to provide ALL DAY and FASTER express services by splitting the line as suggested above a la the East Hills model 'all stations to Revesby' and 'first stop Revesby' and the Illawarra line's 'all stations to Hurstville' and 'frist stop Hurstville'.

There are many districts under-serviced by fast public transport in Sydney - the Sydenham to Bankstown corridor is not one of them. It is a waste of public funds, which could be much better used to extend the metro into an area without current train connection and to keep the Bankstown Line unchanged. This would be a much better return for taxpayer funds.
In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.
The metro is not in the public interest but is enabling the over development of the corridor.

[redacted]
Submission: Online Submission from Horst Thiele (object)
https://majorprojects.accelo.com/?action=view_activity&id=230904

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 8:34 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Martin Thiele (object)

From: system@accelo.comOn Behalf OfMartin Thiele
Sent: 07 November 2017 20:34:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Martin Thiele (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Martin Thiele
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade
Name: Martin Thiele
Address: 17 Hurstone Ave Hurlstone Park 2193
Application number: SSI 17_8256
I consent to my name being published
I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.
The Metro conversion of this line is not justified because:
Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunneling for short lengths in the existing system, and improving (not privatising) bus services.
Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.
Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?
The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:
potential vibrational damage to dwellings
properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
some properties, including heritage listed properties, close to the project may suffer damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets

will have heavy truck traffic, noise and dust during
construction periods.

The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.
Community consultation has been inadequate and information biased and misleading. The
brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been
poorly attended, reflective of a lack of community engagement.
The environmental impacts are unacceptable, including:
increased greenhouse gas emissions
the environmental cost of demolition of structures that have stood for more than 100 years,
and new construction with a significantly reduced life-span and aesthetic.
The planned heritage destruction and diminution along the line is reckless:
the demolition of rare, exceptional and high-value heritage-listed items is wasteful
station designs do not represent local character and reflect a branding exercise by the NSW Government

The Bankstown Line is a functioning rail line, which can easily be removed from the City Circle by means other than disconnecting it from the Sydney Trains network., e.g. the Bankstown Line could terminate in Redfern or Central (easy change options in all directions in Redfern (Redfern could be converted to a major interchange, offloading the passengers from the Bankstown Line to the Northern Line, Western Line, Inner West and South Line, Eastern Subs and Illawarra Line and City Circle), then the Bankstown Line could terminate at one of the superfluous 'country' platforms at Central Station).

Creating capacity as described above would allow increased services on the City Circle by the Inner West and East Hills Lines AND would allow to increase the capacity of the Bankstown Line, which is only constrained by the City Circle. The Bankstown Line could be split in half like the East Hills Line with 10min interval all station services to say Belmore and 10min interval services not stopping until Belmore - creating REAL time savings for travellers from suburbs west of Campsie. AT PRESENT the proposed services ARE WORSE than those currently enjoyed by commuters (The glossy brochure is misleading declaring current travel times as 'up to' - meaning the 'all stations' train - and claiming a 'up to 7 minute' gain for Bankstown - there is actually no gain to the current express services and the aim should be to provide ALL DAY and FASTER express services by splitting the line as suggested above a la the East Hills model 'all stations to Revesby' and 'first stop Revesby' and the Illawarra line's 'all stations to Hurstville' and 'frist stop Hurstville'.

There are many districts under-serviced by fast public transport in Sydney - the Sydenham to Bankstown corridor is not one of them. It is a waste of public funds, which could be much better used to extend the metro into an area without current train connection and to keep the Bankstown Line unchanged. This would be a much better return for taxpayer funds.
In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a
missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and
develop public transport options in other areas lacking this facility.
The metro is not in the public interest but is enabling the over development of the corridor.

[redacted]

Submission: Online Submission from Martin Thiele (object)
https://majorprojects.accelo.com/?action=view_activity&id=230910

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 8:51 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Genevieve Fyfe (object)

From: system@accelo.comOn Behalf OfGenevieve Fyfe
Sent: 07 November 2017 20:51:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Genevieve Fyfe (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Genevieve Fyfe
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
Re: The Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade
I object to the proposal to for the "Metro" upgrade to the Bankstown Line from Sydenham to Bankstown.
The Metro conversion of this line is not justified. There are other ways to resolve the capacity and congestion issues such as signalling and timetable upgrades, tunnelling for short lengths in the existing system, and by improving light rail, and bus services. We have beautiful heritage buildings on our stations that should not be destroyed. The government of the 1960s short-sightedly destroyed the tram network in Sydney and 50 years later, it seems the government is again making short-sighted and irreversible decisions that will impact the liveability of the city by, for example, burdening a small part of Sydney with an unfair increase in population, and by privatising the bus system in the misguided belief that a private operator will be able to make their way faster through congested streets.
The justifications based on population growth and the need for increased housing supply is nonsense. This corridor is already densely populated and lacks adequate green space for healthy living. Numerous objections have been raised in response to draft plans to increase the population density of the Sydenham to Bankstown corridor and this has not been resolved. There are no plans for increased green space and parks, no plans to improve the capacity of Canterbury Road, and the only way to increase the capacity of schools is to build towers in the tiny patch of open space that we called playgrounds in the public schools of these suburbs. There is no master planning to control design and green space, outcomes are in the hands of developers motivated by profit and not by the enhancement of the liveability of this part of Sydney.
In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line is a poor decision that needs to be reconsidered.
The metro is not in the public interest but is enabling the over development of the corridor.

[redacted]
Submission: Online Submission from Genevieve Fyfe (object)
https://majorprojects.accelo.com/?action=view_activity&id=230914

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 8:52 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 20:51:11 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
I object to the Sydenham to Bankstown Metro project because:
1. There was no or inadequate consultation on the proposed Metro at the strategic planning stage. The community has not been asked whether a Metro line should be built. The decision to build the line has already been made and is a fait accompli. This is not meaningful consultation, it is only window dressing about car parks and station designs. It is insulting to the community to consult like this when the major decisions to replace the existing line have already been made.

The investment in a new Metro line should be done where train services are needed in Sydney eg. Fast train to Parramatta, or Moore Park and UNSW. This proposal is a massive waste of money and is not a priority for rail transport for Sydney.

An upgrade in the service on this train line is needed but it can be accommodated within the heavy rail system and signalling upgrade. I support a much smaller investment in upgrading the existing rail system to improve services on the Bankstown line and city circle.

I object to removing this line from the heavy rail system. This proposal is designed to serve the over development agenda for the Sydenham to Bankstown urban renewal plans. Those plans are flawed and the Metro is being offered as solution. The Metro cannot solve many of the problems thrown up by those plans.

I object to the major inconvenience that will be caused to commuters by the shut down of the rail line over a five year period.

I object to the destruction of heritage of the existing Dulwich Hill station ticket selling building at the top of the stairs at the Wardell road level. This must not be destroyed it is part of the character of the area. It must be retained for shops or cafe.

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230916

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:08 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 21:08:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade
Name: [redacted]
Address: [redacted]
Application number: SSI 17_8256
-□ We do not consent to our names being published
-□- We have no reportable donations to disclose

We object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards for a number of reasons including:

*Noise impacts of proposed new trains - There is no clear information on how the noise of the proposed Sydney Metro trains will impact residents along the corridor in the future. The proposal will see an up to 4 fold increase in frequency of trains than is current, an enormous increased noise impact on residents that is not clearly addressed in the EIS. This substantial increase in noise pollution and decrease in resident amenity is not warranted given the negligible increase to the carrying capacity of the existing rail service provided by the proposed new service. Additionally even the Metro's noise expert (who we asked at a Sydney Metro exhibition) could not tell us whether the proposed new Metro trains will be quieter than the existing ones when passing residential houses at such an increased frequency. No comparative information based on real facts of noise levels is provided (surely the NSW Government hasn't bought a fleet of untested trains that have never been of reliable service elsewhere in the world?). Another dismaying fact from the noise expert was that the noise comparisons between the current trains and the new Sydney Metro trains which will determine if an acceptable change of levels has occurred will include readings from freight trains, these are infrequent on this line but substantially noisier than the urban trains. So this could lead to the situation of the Sydney Metro trains being as noisy as a freight train and passing by houses every 2-4 minutes in peak times. There is even scant information in the EIS as to how the Sydney Metro will operate. Around the clock? Or will there be serenity in the early hours of the morning as is currently the case.

*Proposed new substation impacts - Five new substation placements have been identified along the corridor although no explanation as to why the identified locations have been chosen. It is apparent that little investigation has been done to the suitability of siting in visual and audible terms: the proposed siting location for one of the substations (along Hutton St, Hurlstone Park) is on a geographical rise and will be both visually and audibly apparent to the residential houses it sits across from - both to the north, and particularly the south. The EIS ignores the fact that there

is already an existing substation housing further to the west in a much appropriate site as it is screened by trees, is opposite a parking lot to the south and a park to the north and is geographically set down from residential houses. Again no modelling or information on the location, size, built characteristics and impacts of the proposed substation has been provided in the EIS.

*Vibration effects from new service - Currently residents along the existing corridor `feel' when a train passes via its vibration effects in passing. Where we live, at most this is every 15 minutes, as both up & down lines tend to pass each other at the same time. What are the vibration impacts of the new train? We will have trains vibrating past our house every 4 minutes, possibly every 2 minutes if they are not synced in front of our house. Once again there is no clear discussion on significantly increased vibration effects of the proposed new trains to residential properties (and resident sanity) along the corridor.

*Fencing - The EIS mentions installation of fencing along the corridor, but there is no further explanation on this subject. Where is this new fencing to be located? What is wrong with existing fencing? What height and characteristics will proposed new fencing have? Will the existing low fencing - where present - be replaced by tall eyesores with the visual amenity of a detention centre? In addition, will existing screening vegetation and cover be destroyed in this process? No information is provided on fencing impacts to suggest otherwise.

*Worksites - a worksite is planned for opposite our house but the actual reality of what that will entail is not detailed in the EIS i.e. it is described in vague terms....there may be this done to the area or may be that done....which makes it hard to comment on!

For these above reasons and more we believe the EIS is poorly developed and inadequate for this advanced stage of public consultation.

Why replace the existing line? - As an existing user, capacity and congestion issues appear over-stated and could be resolved by alternative means including signalling and timetable upgrades and improving (not privatising) bus services. We believe the Metro conversion of this line is also not justified overall because:
* Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion.
* Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.
* The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd with a rapid bus transit system.
* The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?
* The environmental impacts are unacceptable, including increased greenhouse gas emissions and the environmental cost of demolition of structures that have stood for more than 100 years, and new constructions with a significantly reduced life-span and aesthetic.
* The planned heritage destruction and diminution along the line is reckless because of its wasteful demolition of rare, exceptional and high-value heritage-listed items and station designs do not represent local character and reflect a branding exercise by the NSW Government

Locally the Metro construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:
● potential vibration damage to dwellings from construction processes.
● properties close to the railway line will be impacted by extra noise during construction, sometimes at night. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
● streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
● The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to clearly explain the short and long-term negative impacts of the Metro on residents and how mitigation will actually counteract these. The EIS looks pretty but is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation.

The Sydney Metro is not in the public interest as it politically enables the over development of the Bankstown corridor.

[redacted]

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230918

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:15 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 21:14:15 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
We already have a functioning heavy rail line, and there will be serious interruptions to commuters and local residents during the construction of the Metro. I will personally be inconvenienced by the extra traffic that upgrading the underpass at Charlotte St will cause. The upgrade is far more pain to the local residents than any benefit they will receive, as well as being an unnecessary burden on NSW residents who have to pay for this.

IP Address: [redacted]
Submission: Online Submission from[redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230920

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:19 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Kate Dally (object)

From: system@accelo.comOn Behalf OfKate Dally
Sent: 07 November 2017 21:19:16 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Kate Dally (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Kate Dally
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
I can not understand why the existing rail line is being replaced at considerable expense and disruption. It is not as if the current system is not working. The inner western suburbs of Sydney are suffering from development fatigue. It never seems to stop - the noise, the traffic issues during and after development, the loss of community, heritage and green spaces is relentless. I have friends who live on the North side of Sydney - they seem not to suffer what we do in the Canterbury area. I though the elected government was meant to act for all not just where their majority lives. This is negligent behavior and spending of taxpayers (so mine) money!

[redacted]
Submission: Online Submission from Kate Dally (object)
https://majorprojects.accelo.com/?action=view_activity&id=230924

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:19 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 21:19:11 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name:[redacted]
Email:[redacted]

Address:
[redacted]

[redacted]

Content:
There is no need to replace a well functioning heavy rail line with a different rail line. The Metro is being used as a pretext to upzone and overdevelop areas near railway stations.

The change-over from our current railway line to the metro will involve massive and unwarranted disruption to rail services and traffic as the new line, new stations and new bridges are built.

The possessions of the line during 10 school holiday periods plus an unspecificed time for final possession is extremely disruptive to all communities along the line.

The new line will no longer stop directly at St Peters, Erskineville and Redfern stations decreasing access to these areas including Newtown's entertainment and restaurant district. This is a reduction in our current services.

The heritage of our railway stations needs to be respected and preserved. No loss of historic railway stations is acceptable.

We are concerned about the traffic congestion, traffic delays, diversion, access and parking restrictions during construction and possession. It will be very difficult to navigate Marrickville when the Illawarra Rd railway bridge and the Charlotte St underpass are being upgraded.

We are concerned about the impact on the commercial businesses on Illawarra Rd as well as the closure of a significant portion of McNeilly Park during construction.

IP Address: -[redacted]
Submission: Online Submission from[redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230922

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown

https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:20 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 21:20:13 (UTC+10:00) Canberra, Melbourne, Sydney
To:[redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
There is no need to replace a well functioning heavy rail line with a different rail line. The Metro is being used as a pretext to upzone and overdevelop areas near railway stations.

The change-over from our current railway line to the metro will involve massive and unwarranted disruption to rail services and traffic as the new line, new stations and new bridges are built.

The possessions of the line during 10 school holiday periods plus an unspecificed time for final possession is extremely disruptive to all communities along the line.

The new line will no longer stop directly at St Peters, Erskineville and Redfern stations decreasing access to these areas including Newtown's entertainment and restaurant district. This is a reduction in our current services.

The heritage of our railway stations needs to be respected and preserved. No loss of historic railway stations is acceptable.

We are concerned about the traffic congestion, traffic delays, diversion, access and parking restrictions during construction and possession. It will be very difficult to navigate Marrickville when the Illawarra Rd railway bridge and the Charlotte St underpass are being upgraded.

We are concerned about the impact on the commercial businesses on Illawarra Rd as well as the closure of a significant portion of McNeilly Park during construction.

IP Address: -[redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230926

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown

https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:28 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Rehana Azhar (support)

From: system@accelo.comOn Behalf OfRehana Azhar
Sent: 07 November 2017 21:28:12 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Rehana Azhar (support)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Rehana Azhar
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade
Name: Rehana Azhar
Address: 36 Canterton Street, Hurlstone Park NSW 2193
Application number: SSI 17_8256

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.
The Metro conversion of this line is not justified because:
Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.
Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.
Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.
The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.
The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?
The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:
* potential vibrational damage to dwellings
* properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
* some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
* streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
* The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.
The environmental impacts are unacceptable, including:
* increased greenhouse gas emissions
* the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.
The planned heritage destruction and diminution along the line is reckless:
* the demolition of rare, exceptional and high-value heritage-listed items is wasteful
* station designs do not represent local character and reflect a branding exercise by the NSW Government
In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.
The metro is not in the public interest but is enabling the over development of the corridor.

Signature ...Rehana Azhar.....

[redacted]
Submission: Online Submission from Rehana Azhar (support)
https://majorprojects.accelo.com/?action=view_activity&id=230928

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:34 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 21:34:12 (UTC+10:00) Canberra, Melbourne, Sydney
To:[redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name:[redacted]
Email:[redacted]

Address:
[redacted]

[redacted]

Content:
The proposed Metro system will in real term reduce the capacity during rush hours while potentially double the population along the rail corridor.

The extensive works involved to modify the system from Sydenham to Bankstown could take years rather than 6 months as state government suggested.This will create extraordinary hardship for those who have to travel to and from works during rush hours.

This is not a thought through or innovative proposal. It is driven by the desire for privatising a functional train system to private operator and handover our future quality of life style to money driven property developers.

It is a total visionless proposal which will not improve the public transportation system but quite contrary.

The party that against this proposal will get my vote in the next state election.

I against the proposal in its entirety.

IP Address: [redacted]
Submission: Online Submission from[redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230930

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:35 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Mary Nikolakopoulos (object)

From: system@accelo.comOn Behalf OfMary Nikolakopoulos
Sent: 07 November 2017 21:35:09 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Mary Nikolakopoulos (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Mary Nikolakopoulos
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
Strongly disagree building already oversupplied units is want we need .. far too many unoccupied units in Sydney already ..bedrooms far to small as developers trying tk squeeze more units intto limited space ..some just about unlivable especially fod families illawarra rd already showing signs of cracks, strain from current units being built without adding more ...

Overshadowing also a major issue ..my mum is legally blind ..has become increasingly difficult for her to freely walk (been doing so for over 45 years) with units already on illawarra rd ..shadows from buildings casting bark patches..feels gloomy with skylinew blocking sun etc...

Proposal also has units on corner Illawarra Rd & Renwick St..why punishing residents...black spot so no right turn towards illawarra rd ..Renwick Street basically single storey houses why forcing visual pollution of units on a dangerous Street on an incline..what do we get for all the noise & traffic?

NO benefits to residents, just more traffic, reduced sunlight, noise ..major disruptions ..only winners are developers ...need to stop & swing support for any proposal to the residents not just developers ... stop ruining our area for selfish developers $$$ ..yes need peogle need housing ..how about actually asking the types people want Eg townhouses etc keep in line with character of neighbourhood...weren't downtown Hong Kong..

[redacted]

Submission: Online Submission from Mary Nikolakopoulos (object)
https://majorprojects.accelo.com/?action=view_activity&id=230932

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 9:52 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 21:52:15 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
Overall, I support upgrades to the rail system. Parts of the proposal that I'm in favour of include:
* Increased capacity
* More frequent services
* Better carriage layout
* Commitment to keep fares in line with the rest of the network

My concerns:

Active transport:
The EIS talks about the project delivering walking and cycling connections to each station. Yet the map of the works around Marrickville Station (Figure 8.2) show the active transport to be delivered is an existing path. This is not delivering active transport. It's difficult not to be sceptical of the talk of active transport. Resurfacing an existing path and putting a few dotted lines showing routes to be delivered in the future is rubbish. Where are links to the Cooks River, the Greenway or routes to the CBD. While we are going to experience huge disruption, why not include actual active transport infrastructure?

Haulage routes:
The road network isn't great around some stations and some traffic impacts are inevitable but is Warren Road, Marrickville really a viable haulage route. Two cars can't pass on the road as it stands, how will this work with trucks?

Tree impacts:
The EIS states that replacement trees will be planted for the ones removed. These should be replaced in the area (eg in the same suburb) where the tree removal occurred. Offsetting them somewhere else in the city is no good to the local communities.

Temporary transport arrangements:
Is it possible for more services to stop at Tempe Station during possessions? This could service the Marrickville area.

Over development around train stations:
While the EIS is only for the metro line and not for any residential development around stations, the EIS states that the proposal would facilitate realisation of urban renewal priorities and objectives under the Sydenham to Bankstown

Urban Renewal Corridor Strategy.
I am opposed to very high density residential developments around stations. The density proposed will have a huge negative impact on local communities:
* The roads won't cope with the increased traffic
* Lack of services, eg schools and green spaces
* Loss of industrial/commercial area and local jobs
* Development of retail areas away from town centres will negatively impact the existing town centres

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230934

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 10:25 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Jane Bardell (object)

From: system@accelo.comOn Behalf OfJane Bardell
Sent: 07 November 2017 22:25:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Jane Bardell (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Jane Bardell
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
There is no need to replace a well functioning heavy rail line with a different rail line. The Metro is being used as a pretext to upzone and overdevelop areas near railway stations.
I am certain the cost of building the new line will outweigh the benefits. The journey from marrickville into the city is set to decrease by a maximum of 4 minutes, which will have little effect on our lives.
I would much prefer to see the money put towards improving high speed long distance public transport options to encourage the population growth in less built up and more affordable areas.
The new line will no longer stop directly at St Peters, Erskineville and Redfern stations decreasing access to these areas including Newtown's entertainment and restaurant district. This is a reduction in our current services.
I am concerned about the incompatability of all these new trains with existing lines increasing the nees to change trains and thereby delay cross city journeys.
I strongly disagree with the privatisation of the operation of the Metro .
The heritage of our railway stations needs to be respected and preserved. No loss of historic railway stations is acceptable.
I am concerned about the impact on the commercial businesses on Illawarra Rd
I am concerned about the closure of a significant portion and disruption to the rest of McNeilly Park during construction. It is an important greenspace for an already densely populated area.

[redacted]
Submission: Online Submission from Jane Bardell (object)
https://majorprojects.accelo.com/?action=view_activity&id=230940

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 11:06 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Andrey Fedoseev (object)

From: system@accelo.comOn Behalf OfAndrey Fedoseev
Sent: 07 November 2017 23:05:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Andrey Fedoseev (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Andrey Fedoseev
[redacted]

Address:
[redacted]

Waverton, NSW
2060

Content:
The Metro project is being used as a pretext to and overdevelop areas near railway stations. The proposed change affects the least busy T3 train line, which does not require capacity increase.
The change-over from the current railway line to the metro will involve massive and unwarranted disruption to rail services and traffic as the new line, new stations and new bridges are built.
The possessions of the line during 10 school holiday periods plus an unspecified time for final possession is extremely disruptive to all communities along the line.
The new line will no longer stop directly at St Peters, Erskineville and Redfern stations decreasing access to these areas including Newtown's entertainment and restaurant district. This is a reduction in our current services.
The Alexandria / Erskineville station between proposed Sydenham and Waterloo stations is missing - currently there is a 5km gap between stations which is never the case in the cities with metro systems in place.
I am concerned about the traffic congestion, traffic delays, diversion, access and parking restrictions during construction and possession. It will be very difficult to navigate Marrickville when the Illawarra Rd railway bridge and the Charlotte St underpass are being upgraded.
I am concerned about the impact on the commercial businesses on Illawarra Rd as well as the closure of a significant portion of McNeilly Park during construction.

[redacted]
Submission: Online Submission from Andrey Fedoseev (object)
https://majorprojects.accelo.com/?action=view_activity&id=230948

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 11:14 PM
To: DPESYDMET Email
Subject: FW: Submission Details

From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 23:14:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to a metro conversion.

The Metro conversion is not justified when we have a perfectly adequate line in existence which could be improved through signalling and timetabelling upgrades.

The accessibility issues can be addressed with the installation of lifts without a Metro conversion. This has already been achieved at Marrickville.

This corridor has already seen huge growth and is already densely populated and further growth would put a huge strain on other infrastructures such as roads, hospitals and schools.

The planned construction will cause huge disruption to commuters. Planned buses will cause massive congestion on already congested roads. Travel times will be greatly increased.

Heritage stations are to be demolished when with greater foresight and planning our existing line can be improved and our valuable heritage stations retained. The newly planned stations do not represent the character of the local surrounds, particularly at Dulwich Hill and Hurlstone Park.

Community consultation has been inadequate and the information biased and misleading.

The planned Metro conversion is a waste of money when a lesser amount can be spent in improving the existing line. The metro is not in the public interest but is enabling the overdevelopment of an already overdeveloped area.

IP Address: -[redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230954

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 11:20 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Fiona Rimes (object)

From: system@accelo.comOn Behalf OfFiona Rimes
Sent: 07 November 2017 23:20:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Fiona Rimes (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Fiona Rimes
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
Attention, Director Transport Assessments
I object to the conversion of the current railway line from Sydenham to Bankstown to a Metro Line.

The current Railway Line can be maintained without the conversion by allowing trains to terminate at Sydenham and passengers transferring to the Sydney/ Northwest Metro. This is an unwarranted conversion that is expensive and will have a negative environmental impact for the residents living along the rail corridor. As a resident of Marrickville I will focus my arguments on this Suburb.

During construction of the Metro there will be significant disruption in Marrickville. This will be caused by rail possessions, full and partial road closures, increased traffic from replacement buses, project related haulage, works compounds, construction noise til 10pm at night and infrastructure reconfiguration. This disruption will be amplified by the commencement and completion of residential construction works, related to the Urban Renewal Corridor, between 2019 and 2024.
The Metro Project will result in the extensive loss of heritage and other infrastructure.
There is no confidence that the 2024 deadline will be met. This concern is justified given the delays on the City to Eastern Suburbs Light Rail and WestConnex and the complexity of the conversion works. There are similar concerns regarding the project's ability to meet its forecast budget.

The concerns with the EIS as presented are as follows:
1. Proposed Works Compounds
Residents in Marrickville will be severely inconvenienced due to the works compound. Buildings from 2 to 12 Station Street and 1 Leofrene Street, Marrickville will be demolished and used as a long term compound for the Metro construction . Long term use means between 18 months and the entire construction period. The works compound will also include Station Street.
Access to this compound - either via Schwebel St or Illawarra Rd will be difficult, if not impossible for equipment such as semi trailers or cranes.

2. Bike parking at the Station
Already exists and appears to be a marketing ploy rather than an EIS. This is insulting to residents as it is presented that we are gaining something by having the Metro. Not the case.

3. The Metro will relieve congestion.
The justification for the upgrade is the congestion with the City Circle. The extension of the Metro from Sydenham to Bankstown will has nothing to do with the City Circle. Stop the Metro at Sydenham.

4. Flooding
Will cease in the Marrickville Station area once the Metro is built??. Is this through some miracle or an actual building technique not disclosed in the EIS.

5. Noise levels
Appear to be unacceptable as they will be often at night in a dense residential area. Rock breaking and ballast temping til 10pm or sometimes all night is not acceptable.

6. Tree removal.
This is hard to comment on as 'the final number of trees is not known.' Again this is not an EIS but a marketing ploy to sell the Metro. The number of trees to be removed should be known at this point, or at least where and why.

7. Landscaping at Stations.
Artist's impression of Marrickville Station are false and very misleading. It shows a taxi, two lanes that are as wide as the lane the taxi is on, a garden with trees and then space before the retail area. In reality, the width of the space here is 9 metres approx. There is simply not enough space here for what is drawn.

8. Better access to education .
It would have if it went to Sydney University as planned

9. More job opportunities
After 5 years of rail disruptions, buses in gridlock I doubt whether many people will still be able to access their current jobs rather than more jobs!

10. Economic productivity
Again will be reduced to residents not being able to move around their suburb

11. Health Benefits
How on earth can there be health benefits when there is noise, dust, pollution and traffic gridlock?

12. Temporary Bus Services
In the EiS it states that these will keep customers moving but the EIS doesn't state how. How will they do it when roads are already choked now. Only the Princes Highway has multiple lanes and this is already gridlocked in peak hours.

13. Possessions
Dont hide reality - they are closures not possessions.

Conclusion
Public infrastructure is a good thing that should be encouraged and sustained. Generally, the community is supportive even when there will be significant imposts. However, the proposed Metro line is not such a case. The Metro will not be a new rail line. Rather it is the conversion of an existing world class service that will miss the opportunity to extend Sydney's rail network. This conversion will come at a price. That price includes disruption, chaos and loss due the nature and impact of the works, from road bridge removal and congested streets to rail line possessions to loss of built heritage. Coupled with the massive proposed overdevelopment promoted by the SBURC it is no wonder that that many residents along the Sydenham to Bankstown Corridor do not think that the pain of this project is worth the gain to the community. There are better places to build rail lines!

[redacted]
Submission: Online Submission from Fiona Rimes (object)
https://majorprojects.accelo.com/?action=view_activity&id=230956

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 11:46 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Susan Aujard (object)

From: system@accelo.comOn Behalf OfSusan Aujard
Sent: 07 November 2017 23:46:11 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Susan Aujard (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Susan Aujard
[redacted]

Address:
[redacted]

ASHBURY, NSW
2193

Content:
-x I do not consent to my name being published
-x- I have no reportable donations to disclose
I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.
The Metro conversion of this line is not justified because:
Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.
Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.
Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.
The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.
The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?
The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:
* potential vibrational damage to dwellings
* properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
* some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
* streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
* Congested traffic around Canterbury Station which is already at capacity with the addition of several hundred units.
* The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.
Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible

to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months.
Community information sessions have been poorly attended, reflective of a lack of community engagement.
The environmental impacts are unacceptable, including:
* increased greenhouse gas emissions
* the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.
The planned heritage destruction and diminution along the line is reckless:
* the demolition of rare, exceptional and high-value heritage-listed items is wasteful
* station designs do not represent local character and reflect a branding exercise by the NSW Government
In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.
The metro is not in the public interest but is enabling the over development of the corridor.
In addition it is not creating any new rail corridors to service other areas of Sydney.

Signature.....

[redacted]

Submission: Online Submission from Susan Aujard (object)
https://majorprojects.accelo.com/?action=view_activity&id=230958

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 1:48 PM
To: DPESYDMET Scanned
Subject: Submission
Attachments: Vincent, Michael_07-11-2017_Sydneham to Bankstown Environmental Impact - SSI 17- 8256._.pdf

[redacted]

NSW GOVERNMENT | Planning & Environment

Major Projects Assessment.

Department of Planning and Environment

G. P. O. Box 39, Sydney. N. S. W. 2001.

Re- Sydneham to Bankstown Environmental Impact

Statement Overview. September. 2017.

Name; Michael Vincent.

Address; 12 Myall Street, Punchbowl. N.S.W. 2196.

Name of Application; Upgrade of Punchbowl Station.

Application No; SS 117- 8256.

Non support of the above proposal.

I do not support the above punchbowl station development. There is a once in a lifetime Opportunity to create a usable improvement blueprint to drag the punchbowl C.B.D. out of The stagnant backwater it has become.

The most obvious issue is the lack of commuter access to this proposal. By design/ intent, it is To move vast numbers of people in the most effective method possible. Given, the planners Must be aware of the massive high rise developments approved along this rail corridor including That of the punchbowl C.B.D. which is landlocked by the rail corridor and a major arterial road. The station should be moved north towards the broadway commercial area and an off street Bus interchange be constructed each side of the rail line. There must be provision for multi level Vehicle parking stations for the present and future demands. The proposal to construct a signal Controlled pedestrian crossing between the major traffic pinchpoint of punchbowl road,the Boulevard and the intersection of punchbowl road and acacia avenue on a regular gridlocked Major arterial road is insane. Congestion at this level should be avoided not increased.

Recommendation.

North side of punchbowl station.

The main entrance to the station should be alongside the baby health centre area and Warren reserve. There is an existing traffic light controlled intersection at punchbowl road Acacia/ Rickard street with a wide access to Urunga parade where adequate space is available To construct a bus / transport facility interchange that would be removed from the main arterial Punchbowl road. (removing bus stops from the inside lane of punchbowl road at the lights, Punchbowl road and the boulevard).

East side of punchbowl station.

The main entrance to the station should be in the area of Mathews street. And a bus/ transport Facility be constructed off road and not taking a traffic lane of the boulevard through road which At present is congested to a single lane most of the time. This road is the main C.B.D. artery Of punchbowl. There is a chronic shortage of vehicular parking to serve both the commercial And commuter needs and requirements for the present and future.

The station should be developed around the needs and requirements of the commuters and Passengers. And that means providing access and vehicular parking, 24/7.

It would appear that no planning personnel has tried driving to this station at peak and off peak Times and tried to park to catch a train or to simply shop in this restricted parking C.B.D.

Michael Vincent.

12 Myall Street. Punchbowl. N.S.W. 2196.

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 8:43 AM
To: DPESYDMET Scanned
Subject: FW: Submission Details for ALAN MEATS of INDIVIDUAL (comments)
Attachments: 230718_ Inner West and the Metro_2017Nov07_0841.pdf

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From: system@accelo.comOn Behalf OfAlan Meats
Sent: 07 November 2017 08:42:27 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for ALAN MEATS of INDIVIDUAL (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: ALAN MEATS
Organisation: INDIVIDUAL (PERSONAL SUBMISSION)
[redacted]

Address:
[redacted]

Canterbury-Bankstown, NSW
2193

Content:
The present plan is to provide a long-distance `all stops' metro service from the northwest, which will be slow and unattractive as users on the periphery of the London metro network would attest. In addition, most passengers would have to transfer to Sydney Trains or other carriers to reach their destinations. However, it has never been established how many northwest metro users would have in mind any destinations along the Bankstown line. Thus the case for extending the metro from Central to Bankstown has not been made and it is likely that such a plan would not compensate for the original strategic mistake and would involve even more transfers to and from Sydney trains, this time by the inner west commuters who never asked for all that. The only other justification for chopping up the Bankstown line into a chimera of metro and Sydney Trains is that it would free up some of the latter's rolling stock for use on other lines. This is dubious because the frenzy of infrastructure spending on the chimera could equal if not exceed the cost of rolling stock. Which brings us to wasteful spending.

Wasteful spending

It appears that the metro conversion of the inner west stations is wasteful and out of character with the Federation style of building along that part of the line. We welcome modern styles at points where previously there has been no station (as on the light rail line) or where it would compliment the prevailing style of the surrounding development (such as at Rhodes). We do not advocate fake heritage styling but we do object to wasteful spending in replacing essentially functional and well preserved heritage infrastructure just because new items such as ramps and lifts are desirable when the latter can be installed as modern items with little disruption and without any visual detriment.

Expensive and disruptive re-alignment of platform edges can be avoided by installing adjustable ramps for prams, wheelchairs and disabled pedestrians. These would be required at the only one or two points that would be needed for smooth and timely boarding and disembarking at those train doors that would be aligned with those points.

Some new access infrastructure such as car and bike parking has just been installed at some stations and does need not demolishing and re-building.

The need for costly re-building of road bridges along the route of the chimera is obviously an essential consequence of it. On the other hand such re-building would not be needed if the chimera were not built.

[redacted]
Submission: Online Submission from ALAN MEATS of INDIVIDUAL (comments)
https://majorprojects.accelo.com/?action=view_activity&id=230718

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Inner West and the Metro

Attention: Director, Transport Assessments

www.majorprojects.planning.nsw.gov.au
and follow the 'on exhibition' links

Strategic confusion

The present plan is to provide a long-distance 'all stops' metro service from the northwest, which will be slow and unattractive as users on the periphery of the London metro network would attest. In addition, most passengers would have to transfer to Sydney Trains or other carriers to reach their destinations. However, it has never been established how many northwest metro users would have in mind any destinations along the Bankstown line. Thus the case for extending the metro from Central to Bankstown has not been made and it is likely that such a plan would not compensate for the original strategic mistake and would involve even more transfers to and from Sydney trains, this time by the inner west commuters who never asked for all that. The only other justification for chopping up the Bankstown line into a chimera of metro and Sydney Trains is that it would free up some of the latter's rolling stock for use on other lines. This is dubious because the frenzy of infrastructure spending on the chimera could equal if not exceed the cost of rolling stock. Which brings us to wasteful spending.

Wasteful spending

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Expensive and disruptive re-alignment of platform edges can be avoided by installing adjustable ramps for prams, wheelchairs and disabled pedestrians. These would be required at the only one or two points that would be needed for smooth and timely boarding and disembarking at those train doors that would be aligned with those points.

Some new access infrastructure such as car and bike parking has just been installed at some stations and does need not demolishing and re-building.

The need for costly re-building of road bridges along the route of the chimera is obviously an essential consequence of it. On the other hand such re-building would not be needed if the chimera were not built.

Wasteful infrastructure and the NSW economy.

The current orgy of simultaneous spending on multiple motorways and railways tunnels and interchanges will no doubt boost the NSW GDP and will appear to improve its economic performance. However, this is being bought at the cost of an enormous blow-out in the debt-to- GDP ratio. If we do not keep this as low as possible, we could all be worse off.

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 8:47 AM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230720_Metro_HPA shortsubmission_Oct2017_2017Nov07_0845.pdf

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From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 08:46:18 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
As attached

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230720

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

-x□ I do not consent to my name being published

-x□- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature 

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 9:55 AM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Patrick Durkin (object)
Attachments: 230737_HP Submission Page1_2017Nov07_0951.pdf; 230737_HP Submission Page2_2017Nov07_0951.pdf

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From: system@accelo.comOn Behalf OfPatrick Durkin
Sent: 07 November 2017 09:52:37 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Patrick Durkin (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Patrick Durkin
[redacted]

Address:
[redacted]

Hurlstone Park,, NSW
2193

Content:
Please see 2 pages PDF attachment as my submission.

Thank You.

P J Durkin.

[redacted]
Submission: Online Submission from Patrick Durkin (object)
https://majorprojects.accelo.com/?action=view_activity&id=230737

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Patrick J Durkin

Address: 79 Duntroon St, Hurlstone Park, NSW 2193.

Application number: SSI 17_8256

I do not consent to my name being published

I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.....

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 11:15 AM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Anne Tiedemann (object)
Attachments: 230756_Metro_HPA shortsubmission_Oct2017_TIED_2017Nov07_1113.pdf

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From: system@accelo.comOn Behalf OfAnne Tiedemann
Sent: 07 November 2017 11:14:21 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Anne Tiedemann (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Anne Tiedemann
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
see attachment

[redacted]
Submission: Online Submission from Anne Tiedemann (object)
https://majorprojects.accelo.com/?action=view_activity&id=230756

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: A/Prof Anne Tiedemann

Address: 29 Kilbride St Hurlstone Park

Application number: SSI 17_8256

-X I consent to my name being published

-□ I do not consent to my name being published

-X- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, improving (not privatising) bus services and most importantly building a separate bicycle pathway along the rail corridor to not only reduce train congestion but to have a significant public health impact.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro. This is extremely important as the proportion of people living with disabilities is increasing and public transport should be accessible to all.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system. Again, a dedicated bicycle path would be a sensible solution to both the stretched public transport service and to the public health crisis that is looming due to 50% of the population being inactive.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school and to participate in the community in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties that are close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours. What is the likely mental health impact of this infringement on residents rights to a good night's sleep?

- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd.
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods. How will the health and safety of residents, and importantly children who play in these areas, be guaranteed?
- The lack of a clear strategy for the already congested Canterbury Rd, which will be rendered almost impassable for many months. Will the businesses currently operating in that area be compensated for their lost earnings?

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters and the possible threat to health and safety. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor. As a resident of Hurlstone Park and as a public health academic I would urge the Department to please reconsider this approach and extend the consultation on this very significant change to the Bankstown train line.

Yours sincerely,

Anne Tiedemann

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 11:25 AM
To: DPESYDMET Scanned
Subject: FW: Submission Details for company Sydney Airport (org_comments)
Attachments: 230758_171107 Sydney Airport submission re Sydney Metro_ Sydenham to Bankstown EIS_ 2017Nov07_1121.pdf; 230758_Political donations disclosure statement_ Sydney Metro_ Sydenham to Bankstown EIS_2017Nov07_1121.pdf; 230758_Sydney Airport submission re Infrastructure Priority List_ Oct 2017_2017Nov07_1121.pdf

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From: system@accelo.comOn Behalf OfRobin Schuck
Sent: 07 November 2017 11:22:37 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for company Sydney Airport (org_comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: yes

Name: Robin Schuck
Organisation: Sydney Airport (Manager Government Relations and Major Projects)
Govt. Agency: No
[redacted]

Address:
[redacted]

Sydney International Airport, NSW
2020

Content:
As per attached PDF submission and attachment.

[redacted]
Submission: Online Submission from company Sydney Airport (org_comments)
https://majorprojects.accelo.com/?action=view_activity&id=230758

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Sydney Airport

7 November 2017

Director, Transport Assessments
Major Project Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Via email: sydneymetro@transport.nsw.gov.au

Dear Sir/ Madam

Re: Sydney Metro – Sydenham to Bankstown EIS (SSI 17_8256)

Thank you for the opportunity to comment on the Environmental Impact Statement (EIS) for the Sydenham to Bankstown component of the Sydney Metro City and Southwest project.

Sydney Airport welcomes the development of the Sydney Metro as a means to improve public transport connectivity throughout large parts of Sydney, including around Sydney Airport. The increased capacity on the T8 Airport and South Line created by the Sydney Metro will allow a quicker journey for passengers and employees travelling to the airport. The new metro system will help reduce road traffic congestion, and will make it easier for tourists and other visitors to move around Sydney generally.

The urban renewal projects made possible by the metro are also supported, as they increase the quantity and diversity of housing close to the city, while growing the number of job opportunities in Sydney. We see these projects as serving to further enhance Sydney as a great place to live, work and visit, by providing new public spaces for the community to enjoy, with increased access to education, transport and cultural activities.

While beyond the scope of this EIS, we note that consideration is being given to the future extension of the metro network. We strongly urge that a connection to Sydney Airport be considered as an integral part of that project, as a solution to a rapidly increasing residential population in close proximity to Sydney Airport, as well as the growth the airport and Port Botany.

Impact on prescribed airspace

As Sydney Airport has raised in previous submissions to the State Government, it is of vital importance that neither construction activities, nor proposed new developments around the proposed upgraded stations, particularly at Sydenham, Marrickville and Dulwich Hill (and to lesser degrees at Hurlstone Park and Canterbury), compromise aviation safety or reduce the efficiency of Sydney Airport by intruding into its prescribed airspace.

While we are not suggesting that the project as proposed will penetrate prescribed airspace, this is an important issue to be aware of throughout the planning process, and one on which we encourage early engagement with Sydney Airport.

The Obstacle Limitation Surface (OLS) and the Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) surfaces are the major components of Sydney Airport's prescribed airspace relevant to this EIS. The charts that collectively comprise Sydney Airport's prescribed airspace can be found at: https://www.sydneyairport.com.au/corporate/community-environment-and-planning/planning/airspace-protection.aspx.

Any future development of land around new stations in general would need to have regard to airspace-related issues, with developments in the areas around Sydenham, Marrickville and Dulwich Hill stations very likely to be affected. Consideration should be given to both the heights of any proposed buildings, as well as temporary structures that may intrude into prescribed airspace such as cranes and other construction equipment.

At the site around Sydenham Station, the OLS and PANS-OPS surfaces are approximately 30 metres above sea level (AHD), while at Marrickville and Dulwich Hill stations, the OLS is at 51 metres AHD and PANS-OPS at approximately 126.4 metres AHD. Therefore, if buildings constructed as part of the urban redevelopment of this area are built to these maximum heights, they may penetrate the OLS.

This same issue would apply to any construction equipment, such as a crane, that could potentially intrude into this prescribed airspace, even if only temporarily. While a structure (including a building or crane) that penetrates the OLS is not automatically prohibited, approval from the Department of Infrastructure and Regional Development is required. However, permanent intrusions of PANS-OPS are prohibited by Commonwealth law. Sydney Airport's website outlines the assessment process in more detail.

We would be pleased to provide you with more definitive advice in the future concerning proposed building height limits, and to work with you to reach a positive resolution to the benefit of this proposal.

Temporary Transport Strategy

The EIS includes a Temporary Transport Strategy to cover the closure of the existing train line between Sydenham and Bankstown. This Temporary Transport Strategy proposes the use of buses along the existing Sydenham to Bankstown line, as well as bussing some commuters to stations between Revesby and Bardwell Park on the T8 Airport and South Line.

As this Strategy is implemented, great care must be taken to ensure that the existing capacity between Sydney Airport stations and the city is not adversely impacted. The mode share of the Airport Rail Link for passengers using Sydney Airport has been growing by one percentage point each year and is currently 21% of all journeys to and from the airport, with this figure higher at certain times during the morning peak period. With crowding already occurring on train services using this line, additional services will be required to adequately serve those proposed additional users of this line.

Therefore, Sydney Airport would like to request that project managers and representatives of the Sydney Metro project team liaise closely with the Ground Transport team at Sydney Airport

throughout construction of the metro to ensure these impacts are minimised and can be well communicated to stakeholders.

Future expansion of Metro Rail through Sydney Airport

Sydney Airport has recently identified the construction of a metro rail line linking Sydney Airport with Maroubra Junction and the Sydney CBD as a priority, perhaps undertaken as part of Stage Two of the Sydney Metro West. While future mass transit links to Sydney Airport are identified to occur by 2056 in the recently released *Future Transport Strategy*, it is important that a metro rail link is developed as soon as is practicably possible and certainly before 2030. The development of a metro rail link to Sydney Airport will help improve ground transport connectivity to Sydney Airport into the future, as well as supporting the growth of nearby residential areas and Port Botany by removing non-airport bound traffic from local roads.

Currently, around 160,000 people travel to Sydney Airport each day, comprising passengers, staff and people meeting friends and family. With passenger numbers using the airport forecast to continue their strong growth, additional ground transport connectivity will be needed to the airport in the future. Furthermore, significant residential growth in areas around the airport is already underway, with a target of a further 10,150 dwellings to be constructed in the Bayside Council area by 2021, while the NSW freight task is forecast to double by 2031, with Port Botany expected to handle a significant proportion of that freight.

Sydney Airport and the NSW Government have already been investing in road upgrades around the airport, with a jointly funded $500 million package of works. The NSW Government has also announced additional train services on the existing Airport Link rail line, due to come into effect later this month. However, additional capacity will be needed to cater for longer term demand.

While the proposed development of the Sydney Gateway project will provide a further upgrade to the road network to and around the airport, public transport solutions must form a key component of longer term transport planning. Metro rail has the ability to link the airport with key centres, such as Maroubra Junction, the University of New South Wales and the Sydney CBD, providing vital linkages and serving strategic planning purposes. The rolling stock used by metro rail is ideally suited for passengers travelling with luggage, and may allow for longer term initiatives such as passengers checking in 'downtown' and having their luggage transported to the airport for them, such as currently occurs in Hong Kong.

Sydney Airport recently made a submission to Infrastructure Australia advocating for consideration of a metro rail link to the airport to be a part of the next Infrastructure Priority List, which discusses this proposal at greater length. I have attached a copy of this submission for your information.

Conclusion

Sydney Airport supports the construction of the Sydney Metro as a means to improve public transport throughout Sydney. We encourage the Sydney Metro project team to engage early with the relevant Sydney Airport personnel to ensure that any issues that may arise relating to

prescribed airspace or impacting on ground transport linkages to the airport are resolved quickly.

Thank you once again for the opportunity to comment on the EIS for this component of the Sydney Metro. If you would like further information, please feel free to contact Sydney Airport's Manager, Government Relations and Major Projects, Mr Robin Schuck, on (02) 9667 9288 or robin.schuck@syd.com.au.

Yours sincerely

Kerrie Mather
Managing Director and Chief Executive Officer

Enc: Sydney Airport submission to Infrastructure Australia (October 2017)

Political donations disclosure statement

NSW GOVERNMENT
Department of Planning

Office use only:

Date received: ____/____/____ Planning application no. _____

This form may be used to make a political donations disclosure under section 147(3) of the *Environmental Planning Assessment Act 1979* for applications or public submissions to the Minister or the Director-General.

Please read the following information before filling out the Disclosure Statement on pages 3 and 4 of this form. Also refer to the 'Glossary of terms' provided overleaf (for definitions of terms in *italics* below). Once completed, please attach the completed declaration to your planning application or submission.

Explanatory information

Making a planning application or a public submission to the Minister or the Director-General
Under section 147(3) of the Environmental Planning and Assessment Act 1979 ('the Act') a person:

(a) who makes a *relevant planning application* to the Minister or the Director-General is required to disclose all *reportable political donations* (if any) made within the *relevant period* to anyone by any *person with a financial interest* in the application, or

(b) who makes a *relevant public submission* to the Minister or the Director-General in relation to the application is required to disclose all *reportable political donations* (if any) made within the *relevant period* to anyone by the person making the submission or any *associate of that person*.

How and when do you make a disclosure?
The disclosure to the Minister or the Director-General of a *reportable political donation* under section 147 of the Act is to be made:

(a) in, or in a statement accompanying, the relevant planning application or submission if the donation is made before the application or submission is made, or

(b) if the donation is made afterwards, in a statement of the person to whom the relevant planning application or submission was made within 7 days after the donation is made.

What information needs to be included in a disclosure?
The information requirements of a disclosure of reportable political donations are outlined in section 147(9) of the Act.

Pages 3 and 4 of this document include a Disclosure Statement Template which outlines the information requirements for disclosures to the Minister or to the Director-General of the Department of Planning.

Note: A separate Disclosure Statement Template is available for disclosures to councils.

Warning: A person is guilty of an offence under section 125 of the *Environmental Planning and Assessment Act 1979* in connection with the obligations under section 147 only if the person fails to make a disclosure of a political donation or gift in accordance with section 147 that the person knows, or ought reasonably to know, was made and is required to be disclosed under section 147.

The maximum penalty for any such offence is the maximum penalty under Part 6 of the *Election Funding and Disclosures Act 1981* for making a false statement in a declaration of disclosures lodged under that Part.

Note: The maximum penalty is currently 200 penalty units (currently $22,000) or imprisonment for 12 months, or both.

Glossary of terms (under section 147 of the *Environmental Planning and Assessment Act 1979*)

gift means a gift within the meaning of Part 6 of the *Election Funding and Disclosures Act 1981*. Note. A gift includes a gift of money or the provision of any other valuable thing or service for no consideration or inadequate consideration.

Note: Under section 84(1) of *the Election Funding and Disclosures Act 1981* gift is defined as follows:

gift means any disposition of property made by a person to another person, otherwise than by will, being a disposition made without consideration in money or money's worth or with inadequate consideration, and includes the provision of a service (other than volunteer labour) for no consideration or for inadequate consideration.

local councillor means a councillor (including the mayor) of the council of a local government area.

relevant planning application means:

a) a formal request to the Minister, a council or the Director-General to initiate the making of an environmental planning instrument or development control plan in relation to development on a particular site, or
b) a formal request to the Minister or the Director-General for development on a particular site to be made State significant development or declared a project to which Part 3A applies, or
c) an application for approval of a concept plan or project under Part 3A (or for the modification of a concept plan or of the approval for a project), or
d) an application for development consent under Part 4 (or for the modification of a development consent), or
e) any other application or request under or for the purposes of this Act that is prescribed by the regulations as a relevant planning application,

but does not include:

f) an application for (or for the modification of) a complying development certificate, or
g) an application or request made by a public authority on its own behalf or made on behalf of a public authority, or
h) any other application or request that is excluded from this definition by the regulations.

relevant period is the period commencing 2 years before the application or submission is made and ending when the application is determined.

relevant public submission means a written submission made by a person objecting to or supporting a relevant planning application or any development that would be authorised by the granting of the application.

reportable political donation means a reportable political donation within the meaning of Part 6 of the *Election Funding and Disclosures Act 1981* that is required to be disclosed under that Part. Note. Reportable political donations include those of or above $1,000.

Note: Under section 86 of *the Election Funding and Disclosures Act 1981* reportable political donation is defined as follows:

86 Meaning of "reportable political donation"

(1) For the purposes of this Act, a reportable political donation is:
  (a) in the case of disclosures under this Part by a party, elected member, group or candidate—a political donation of or exceeding $1,000 made to or for the benefit of the party, elected member, group or candidate, or
  (b) in the case of disclosures under this Part by a major political donor—a political donation of or exceeding $1,000:
    (i) made by the major political donor to or for the benefit of a party, elected member, group or candidate, or
    (ii) made to the major political donor.

(2) A political donation of less than an amount specified in subsection (1) made by an entity or other person is to be treated as a reportable political donation if that and other separate political donations made by that entity or other person to the same party, elected member, group, candidate or person within the same financial year (ending 30 June) would, if aggregated, constitute a reportable political donation under subsection (1).

(3) A political donation of less than an amount specified in subsection (1) made by an entity or other person to a party is to be treated as a reportable political donation if that and other separate political donations made by that entity or person to an associated party within the same financial year (ending 30 June) would, if aggregated, constitute a reportable political donation under subsection (1). This subsection does not apply in connection with disclosures of political donations by parties.

(4) For the purposes of subsection (3), parties are associated parties if endorsed candidates of both parties were included in the same group in the last periodic Council election or are to be included in the same group in the next periodic Council election.

a person has a financial interest in a relevant planning application if:

a) the person is the applicant or the person on whose behalf the application is made, or
b) the person is an owner of the site to which the application relates or has entered into an agreement to acquire the site or any part of it, or
c) the person is associated with a person referred to in paragraph (a) or (b) and is likely to obtain a financial gain if development that would be authorised by the application is authorised or carried out (other than a gain merely as a shareholder in a company listed on a stock exchange), or
d) the person has any other interest relating to the application, the site or the owner of the site that is prescribed by the regulations.

persons are associated with each other if:

a) they carry on a business together in connection with the relevant planning application (in the case of the making of any such application) or they carry on a business together that may be affected by the granting of the application (in the case of a relevant planning submission), or
b) they are related bodies corporate under the *Corporations Act 2001* of the Commonwealth, or
c) one is a director of a corporation and the other is any such related corporation or a director of any such related corporation, or
d) they have any other relationship prescribed by the regulations.

Political Donations Disclosure Statement to Minister or the Director-General

If you are required under section 147(3) of the Environmental Planning and Assessment Act 1979 *to disclose any political donations (see Page 1 for details), please fill in this form and sign below.*

Disclosure statement details

Name of person making this disclosure	Planning application reference (e.g. DA number, planning application title or reference, property address or other description)
SYDNEY AIRPORT (ROBIN SCHUCK)	SYDNEY METRO SYDENHAM - BANKSTOWN (SSI 17_8256)

Your interest in the planning application (circle relevant option below)

You are the APPLICANT **YES** / (**NO**) OR You are a PERSON MAKING A SUBMISSION IN RELATION TO AN APPLICATION (**YES**) / **NO**

Reportable political donations made by person making this declaration or by other relevant persons

** State below any reportable political donations **you have made** over the 'relevant period' (see glossary on page 2). If the donation was made by an entity (and not by you as an individual) include the Australian Business Number (ABN).*

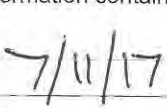
** If you are the **applicant** of a relevant planning application state below any reportable political donations that you know, or ought reasonably to know, were made by any persons with a financial interest in the planning application, OR*

** If you are a **person making a submission** in relation to an application, state below any reportable political donations that you know, or ought reasonably to know, were made by an associate.*

Name of donor (or ABN if an entity)	Donor's residential address or entity's registered address or other official office of the donor	Name of party or person for whose benefit the donation was made	Date donation made	Amount/ value of donation
ABN 18165056360	Central Terrace Building 10 Arrivals Court Sydney International Airport NSW 2020	NSW Nationals (Annual Conference Package)	30/3/17	$4500
"		Federal ALP Business Exchange	11/5/17	$10,000
"		Liberal Party (Bradfield FEC)	15/5/17	$100

Please list all reportable political donations—additional space is provided overleaf if required.

By signing below, I/we hereby declare that all information contained within this statement is accurate at the time of signing.

Signature(s) and Date  7/11/17

Name(s) ROBIN SCHUCK

Sydney Airport

1 November 2017

Mr Philip Davies
Chief Executive Officer
Infrastructure Australia
GPO Box 5417
Sydney NSW 2001

Via email: mail@infrastructureaustralia.gov.au

Dear Mr Davies

Re: Project for inclusion on Infrastructure Australia priority list

Thank you for the opportunity to comment on the development of the next version of Infrastructure Australia's Priority List.

Sydney Airport proposes that the construction of a metro rail line linking Sydney Airport with Maroubra Junction and the Sydney CBD is a long-term priority, perhaps undertaken as Stage Two in the development of Sydney Metro West. The development of a metro rail link to Sydney Airport will help improve ground transport connectivity to Sydney Airport into the future, as the number of passengers, staff and other visitors to the airport continue to grow. It will also play a vital role in removing non-airport bound traffic originating from nearby residential centres off surrounding roads in close proximity to the airport, while Port Botany's growth plans will also benefit from a mass transit linkage.

Forecast growth at and around Sydney Airport

Sydney Airport is Australia's international gateway, with nearly 43 million passengers passing through the airport in the year to August 2017, including 41 percent of international visitors to Australia, and nearly half of all international air freight. A 2014 Deloitte report estimated that Sydney Airport contributes $30.8 billion per year, or 6.4% of Gross State Product to the NSW Economy, generating 307,000 direct and indirect jobs including more than 29,000 employees working at the airport across 800 businesses.

With the number of passengers using Sydney Airport forecast to continue their strong growth, these figures and their significance to the NSW and Australian economy are only going to grow. Indeed, this has been recognised by Transport for NSW, who forecast that by 2031, Sydney Airport would be the fifth largest employment centre in Sydney, following the CBD and Parramatta, with comparable employment numbers to North Sydney and Macquarie Park[1].

Between the passengers using the airport, staff travelling to the airport, and additional people travelling to the airport to meet and greet friends and family, already around 160,000 people travel to Sydney Airport each day. This is the equivalent in numbers to the crowd of two

[1] NSW Government (2012), *Sydney's Rail Future* at p5

National Rugby League grand finals each day. Passenger numbers will continue to grow significantly over the coming years, with growth forecast figures in aviation over the next 20 years to be included in our next Masterplan, due for release in 2019.

The Greater Sydney Commission's recently released *Revised Draft Eastern City District Plan* found that over the five years to June 2017, 8570 dwellings were completed in the Bayside Council area[2]. In addition, 'Priority Precincts' have already been identified at Turella, Bardwell Park and along Anzac Parade as having additional capacity for housing supply. Furthermore, urban renewal opportunities have already been identified to "leverage potential future mass transit at Malabar, Maroubra, La Perouse and Port Botany"[3].

Over the five years to 2021, Bayside Council has a housing target of 10,150 additional dwellings to be constructed, with Kogarah identified as a 'Strategic Centre' and other local centres located at Wolli Creek, Brighton Le-Sands, Rockdale, Ramsgate and Botany[4]. These identified precincts are all in close proximity to Sydney Airport, and the associated population growth will create significant additional demand on the local roads and transport network.

Meanwhile, the *NSW Freight and Ports Strategy* has forecast that the total freight task in NSW will double to 794 tonnes by 2031[5]. With Port Botany uncapped in its ability to grow and the development of the Moorebank Intermodal Terminal under way, a significant proportion of that additional freight could be expected to be handled through Port Botany.

Between the forecast growth of Sydney Airport, Port Botany and nearby residential populations, there is a clear imperative for enhanced transport connections to the airport precinct.

Improving ground transport connectivity to Sydney Airport

The ever-increasing number of people travelling to the airport, combined with the economic importance of the efficient operations of both Sydney Airport and Port Botany, and the large volume of non-airport related traffic travelling past the precinct, all mean that optimal ground transport connectivity to the airport precinct is imperative.

In recent years, the road network around Sydney Airport has been increasingly congested, with highly variable travel times during peak periods. For example, the Roads and Maritime Services (RMS) Key Roads Report[6] covering the June to August 2017 Quarter found that:

- The road corridor along Stoney Creek Road and Marsh Street that leads to the International Terminal experiences an average speed of 36.2 kilometres per hour (62% of the speed limit), dropping as low as 23.7 kilometres per hour during the morning peak;
- Traffic on O'Riordan Street in Mascot experiences an average speed of 28.9 kilometres per hour (50% of the speed limit), dropping as low as 22.8 kilometres per hour during the morning peak, and 18.5 kilometres per hour in the afternoon peak;

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[2] Greater Sydney Commission (2017) *Revised Draft Eastern City District Plan*, at p38
[3] *Revised Draft Eastern City District Plan* at p39
[4] *Revised Draft Eastern City District Plan* at pp41-42
[5] See https://www.transport.nsw.gov.au/sites/default/files/media/documents/2017/NSW-Freight-and-Ports-Strategy-Understanding-the-Current-and-Future-Freight-Task.pdf
[6] See http://www.rms.nsw.gov.au/about/corporate-publications/roads-report.html

- Botany Rd traffic experiences an average speed of 19.2 kilometres per hour (41% of the speed limit) in the morning peak, dropping as low as 15.2 kilometres per hour in the afternoon peak; and
- Speeds during the morning peak along General Holmes Drive drop as low as 23.3 kilometres per hour.

It should be noted that congestion around the airport precinct is a problem throughout the day, rather than solely during peak periods, which was acknowledged in the 2016 Australian Infrastructure Plan Priority List[7].

Congestion on the road network around Sydney Airport is particularly problematic, given the precinct's role as a transport gateway to Australia. Traffic delays impact passengers travelling to the airport, potentially impacting the 'on time performance' of airlines, which is important to the efficiency of the national aviation network. The transport of freight to and from Sydney Airport and Port Botany is also negatively impacted by road congestion, creating inefficiencies to the logistics sector. Meanwhile, when employees working at the airport or surrounding employment areas are delayed in their travel to work, there will also be a negative impact upon productivity. With the cost of avoidable traffic congestion in Sydney forecast to increase from $6.1 billion in 2015 to $12.6 billion by 2030[8], it follows that the cost of traffic congestion around Sydney Airport to the NSW and national economy is significant.

These challenges, their impact, and the importance of addressing ground transport congestion in the airport precinct were acknowledged in the 2014 *NSW State Infrastructure Strategy Update*, the *NSW Long Term Transport Masterplan* and *Sydney's Rail Future*.

Rail access to Sydney Airport and the surrounding employment precinct will also face the challenges of growing patronage and congestion in the near future. The share of people travelling to Sydney Airport has been growing by one percentage point per year, to now cover 21% of all passenger journeys to the airport, partly in response to growing road congestion. During the morning peak period, the mode share of the train to and from the domestic terminals is 26% of all journeys, with 22% of international passengers using the train at this same time. This is significant, with the airport's peak passenger arrival period (between 6am and 10am) coinciding with the peak period for commuters travelling to work around Sydney.

Therefore, it must be noted that the ability of rail to absorb additional patronage with existing infrastructure over the long term is limited. In March 2016, it was estimated that crowding on Airport Line trains reached as high as 158%, while averaging 130% during the morning peak. These figures are significant as 135% represents the load when passengers start to experience crowding, and on-time performance is impacted[9].

The 2012 report, *Sydney's Rail Future*, estimated that by 2031, train services on the East Hills and Airport line between Revesby and Green Square would experience 'passenger displacement' levels of crowding[10].

With heavy rail already being a major mode of transport to the airport, its continued patronage growth in terms of mode share and passenger numbers must remain a key element in the

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[7] Infrastructure Australia (2016) *Infrastructure Priority List: Project and Initiative Summaries* at p33
[8] See https://bitre.gov.au/publications/2015/files/is_074.pdf at p24
[9] See http://www.sydneytrains.info/about/our_performance/train_loads.jsp
[10] *Sydney's Rail Future at p8*

response to ground access challenges to the airport precinct. It should be noted that quick and regular heavy rail connectivity to Sydney Airport will support the growth of tourism, with a clear preference by Chinese visitors (who constitute the major country of origin for visitors to Sydney and Australia) for public transport. The proximity to the Sydney CBD from the airport, means that business would also benefit from enhanced public transport.

An efficient heavy rail service will play an important role in transporting passengers, staff and greeters to the airport, in turn freeing up capacity on the nearby road network and reducing pressures there.

Solutions already under way

In June 2014, the NSW Government and Sydney Airport announced a five-year package of road upgrades around the airport, with joint funding of approximately $500 million. Sydney Airport's component of the work program is nearing completion, ahead of schedule, while the NSW Government's works are due for completion in 2019. The package includes:

- the widening of Marsh Street,
- improvements to the intersection of Mill Pond Road and General Holmes Drive and Botany Road
- replacing the General Holmes Drive railway crossing with the extension of Wentworth Avenue under the Port Botany freight rail line
- the widening of Joyce Drive
- the creation of a 'one-way pair' on O'Riordan and Robey Streets around the Stamford Hotel, with the widening of O'Riordan Street through to Bourke Rd, Mascot
- Widening and reconfiguring the road network in the domestic terminal precinct, to form a one-way road through past T2 and T3
- Widening and developing new roads into the international terminal precinct, enhancing entry and exit points to the precinct.

The Infrastructure Priority List that was released in February 2016 by Infrastructure Australia in conjunction with the Australian Infrastructure Plan, included a high capacity road connection between Sydney Airport and Port Botany to WestConnex at St Peters (also known as the 'Sydney Gateway') as a high priority initiative to be developed in the near term[11]. While construction of the first two stages of WestConnex is under way, and the planning for stage three connecting the M4 and M5 is well advanced, there is no agreed timetable for development of the Sydney Gateway. It is imperative that this project is constructed to an appropriate specification in the near future, as without it, any benefits from the development of WestConnex will not be felt in the airport and Port Botany precinct.

In May 2017, the NSW Transport Minister also announced that 200 additional train services would operate per week on the Airport Line, commencing in November 2017. This announcement is most welcome, but it should be noted that the additional services will be scheduled outside of the morning and afternoon peak periods, when congestion is at its greatest. Indeed, we understand that there is limited ability to schedule additional train services during peak periods, owing to limitations with the power supply on this line.

[11] *Infrastructure Priority List* at p33

Longer term, the NSW Government has proposed additional bus routes to link the airport with the St George and Inner West areas, although the commencement of these services is conditional on the construction by Sydney Airport of a Ground Transport Interchange in the Domestic Terminal precinct.

Further solutions for the future: Metro Rail

The NSW Long Term Transport Master Plan acknowledges that significant growth in population, employment, economic activity and 'through traffic' around Sydney Airport will all occur over the next 15 years[12]. This includes employment increase of 31% at Port Botany, 21% at Sydney Airport and airport passenger numbers forecast to nearly double by 2031[13]. Similarly, the volumes of freight passing through Sydney Airport and Port Botany were forecast to double over the next 20 years in the 2014 update to the *NSW State Infrastructure Strategy*[14]. While the measures to improve ground transport around the airport precinct that are already underway or recently completed will alleviate some of the congestion already experienced, further measures will be required over the longer term to address rapidly expanding demand for access.

Long-term, the ability to further develop the road network around the airport is limited by the geography of the airport site and the complex land uses in surrounding areas. While there is some scope to increase services the existing Airport Rail Link, that too has its limitations in terms of capacity, infrastructure and the reach of the rail network. It should be noted that carriages on metro rail are generally better suited to transporting luggage to and from the airport, with more accessible space to store baggage during the journey.

This was recognised in the recently released *Draft Greater Sydney Region Plan 2017*, which indicates that the *Future Transport 2056* vision for mass transit in Sydney includes a new train or mass transit link connecting to Sydney Airport[15].

Accordingly, Sydney Airport is proposing the extension of the new metro rail network to pass through the airport precinct to Maroubra Junction as a measure that could help meet future demand for ground transport solutions at and around the airport in the future. Metro rail will support improved ground transport connectivity to the airport, as well as relieving pressure that is expected to be experienced on the South East Light Rail and the Illawarra heavy rail line between Redfern and Hurstville. With an extension to the future West Metro from Sydney to Parramatta already planned to continue to Maroubra Junction, a route that passes through Sydney Airport could significantly strengthen the value of the new line.

The development of a Metro line passing through Sydney Airport and connecting with other key centres in the south-east of Sydney, such as Maroubra Junction, the University of New South Wales, and the Moore Park precinct, could also serve a broader strategic policy purpose. Already, *A Plan for Growing Sydney* identifies the airport and port as key transport gateways, that should be connected with other strategic centres, such as the Randwick education and health priority precinct. Linking these precincts by metro rail could serve an important planning purpose, easing congestion on corridors to the airport not well served by

[12] NSW Government (2012) *NSW Long Term Transport Master Plan* at p116
[13] Ibid
[14] Infrastructure NSW (2014) *2014 State Infrastructure Strategy Update* at p18
[15] Greater Sydney Commission (2017) *Draft Greater Sydney Region Plan 2017* at p75

public transport at present, while also supporting increased population density along key corridors such as Anzac Parade and Bunnerong Road.

Both the NSW and Commonwealth Governments are currently undertaking significant reviews of freight policy and issues throughout Australia. One of the major issues already highlighted in this context is the impact of road congestion around the port, airport and around the area. In this context, any measures that will take vehicles off the road network will contribute to improved traffic conditions for heavy vehicles transporting freight away from the precinct. Strategy 16.1 of the *Draft Greater Sydney Region Plan* specifically recommends "providing the required commercial and passenger vehicle, and freight and passenger rail access" as a measure to support freight by addressing congestion.

Sydney Airport acknowledges that the future development of a metro rail link that passes through the airport will need to be part of a package of measures to address growing numbers of people travelling to the airport. As is already the case, other future measures will be required to allow people to travel to the airport by a wide range of transport modes, including active transport such as walking and cycling.

With our current *Five-Year Transport* Plan nearing completion, Sydney Airport is already looking to the future, seeking further transport improvement projects to address long term passenger growth that can be included in our forthcoming 2019 Masterplan. While the development of metro rail will ultimately be a matter for the NSW Government, Sydney Airport is willing to be a strategic partner in the development of metro rail through the airport site.

Conclusion

Thank you once again for the opportunity to comment on the development of Infrastructure Australia's next Infrastructure Priority List. Sydney Airport strongly supports the development of metro rail through the airport when the metro network is expanded in the future. This development has the potential to form the centrepiece of a package of measures that will address the growth in the number of people visiting the airport precinct in future years.

If you would like any further information, please feel free to contact Sydney Airport's Manager of Government Relations and Major Projects, Mr Robin Schuck on (02) 9667 9288 or at robin.schuck@syd.com.au.

Yours sincerely

Kerrie Mather
Managing Director and Chief Executive Officer

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 1:29 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for company The National Trust of Australia (NSW) (org_comments)
Attachments: 230819_National Trust Submission_ Metro_2017Nov07_1327.pdf

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From: system@accelo.comOn Behalf OfGraham Quint
Sent: 07 November 2017 13:28:14 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for company The National Trust of Australia (NSW) (org_comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Graham Quint
Organisation: The National Trust of Australia (NSW) (Director - Advocacy)
Govt. Agency: No
[redacted]

Address:
[redacted]

Sydney, NSW
2001

Content:
7 November 2017

Major Projects Assessment
Department of Planning and Environment
GPO Box 39
SYDNEY, NSW 2001
Attention: Director, Transport Assessments
Dear Director,
Sydney Metro City & Southwest T3 Bankstown Line - Sydenham to Bankstown Upgrade - SSI 17_8256

The National Trust makes the following submission on the Sydney Metro City & Southwest Sydenham to Bankstown upgrade Environmental Impact Statement which has been exhibited for public comment.
The Trust is deeply concerned that the environmental assessment requirements of the Secretary of the Department of Planning and Environment ("The Secretary's environmental assessment requirements") have not been addressed with regards to "environmental heritage" in the preparation of this Environmental Impact Statement and associated Technical Paper 3 - Non-Aboriginal Heritage Impact Assessment.
In terms of Heritage the Secretary's Environmental Assessment Requirements include the requirement
7. Heritage
1. The Proponent must identify and assess direct and /or indirect impacts (including cumulative impacts) to the heritage significance of:
(a) Aboriginal places and objects, as defined under the National Parks and Wildlife Act 1974 an in accordance with the principles and methods of assessment identified in the current guidelines;
(b) Aboriginal places of heritage significance, as defined in the Standard Instrument - Principal Local Environmental Plan;
(c) environmental heritage, as defined under the Heritage Act 1977; and
(d) items listed on the National and World Heritage lists.
The National Trust particularly notes that while (d) above specifically states items listed on the National and World Heritage lists (National Trust bolding), (c) above does not state items "listed on local environmental plans" and "listed

on the State Heritage Register".
The Heritage Act 1977 defines "environmental heritage" -
"environmental heritage" means those places, buildings, works, relics, moveable objects, and precincts, of State or local heritage significance.

The Heritage Act 1977 defines "local heritage significance" -
"local heritage significance" , in relation to a place, building, work, relic, moveable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.
The Heritage Act 1977 defines "State heritage significance" -
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As items of local heritage significance are identified they are progressively added to Council's Local Environmental Plan (LEP) Schedules of Environmental Heritage.
As items of State heritage significance are identified they are progressively added to the State Heritage Register.
The T3 Bankstown Line - Sydenham to Bankstown Upgrade Environmental Impact Statement and Heritage Impact Statement have only addressed "heritage-listed" items not "environmental heritage" as defined under the Heritage Act, 1977 (the Secretary's requirement).
While the National Trust notes the rationale for this proposal it is vital that impact on the "environmental heritage" is minimised and this can only occur if the "environmental heritage" is correctly identified.
When recently commenting on the Sydenham to Bankstown Urban Renewal Corridor the National Trust made the following comments and re-iterates them as they may have relevance for the Metro proposal: -
The corridor traverses three former local government areas - Marrickville, Canterbury and Bankstown. There appear to be major differences in the way that these Councils recognised and protected their heritage.

The Marrickville Local Environmental Plan 2011 has 36 Heritage Conservation Areas listed on Schedule 5 - (Environmental Heritage), of its Plan. By contrast, the Canterbury Local Environmental Plan 2012 Schedule 5 (Environmental Heritage) has only one Heritage Conservation Area and the Bankstown Local Environmental Plan 2015 has no Heritage Conservation Areas listed on its Environmental Heritage Schedule.

Deep community concern has been expressed to the Trust on the impacts of proposed rezonings on the heritage in some of these Station Precincts. The Trust is also aware that many residents of these areas are unaware of the likely impact of the rezonings on their heritage and their locality's sense of place and of the very limited time to now comment and influence this process.

The Trust notes that, for the Dulwich Hill and Hurlstone Park Station Precincts, there appears to have been recognition of the significance of the Heritage Conservation Areas, with a corresponding reduction in the density and height of new development proposed. However, with some other Station Precincts there appear to be major impacts on a number of Urban Conservation Areas which had been identified and listed on the National Trust Register in 1998/1999.

These listings in 1998 were the consequence of a major study "Housing in NSW - Between the Wars - A Study of Housing and Housing Estates constructed and developed in NSW between World War I and World War II".

This study was prepared in February 1996 for the National Trust of Australia (NSW) by Robertson & Hindmarsh Pty Ltd, Architects. The study was funded in two stages under the National Estates Grants program, at that time administered in NSW by the Heritage Branch of the NSW Department of Environment & Planning. The study examined interwar period housing in twenty Sydney local councils and two NSW country local government areas. The two Sydney local government areas with the highest number of identified precincts were Ku-ring-gai (23 precincts) and Canterbury (24 precincts).

Eighteen Urban Conservation Areas in the Canterbury Local Government Area were listed on the National Trust Register in 1998 and 1999. The three precincts identified in the 1996 Housing Study in the former Bankstown Local Government Area were also listed on the National Trust Register in 1998 and 1999.

The Trust raises its concerns in regards to the impacts of the proposed rezonings in the following Station Precincts where National Trust Register listed Urban Conservation Areas are sited : -

Belmore Station Precinct
Within the circled areas for the Belmore Station Precinct there are three National Trust Register listed Urban Conservation Areas: -

Canterbury Urban Conservation Area Precinct 15 - Paxton Avenue, Belmore

Canterbury Urban Conservation Area Precinct 16 - Redman Parade, Belmore

Canterbury Urban Conservation Area Precinct 17 - Belmore

Precinct 15 (Paxton Avenue, Belmore) is proposed for low rise housing. It has not been designated as a Heritage Conservation Area and consequently is under threat of major redevelopment without regard for its heritage values.

Precinct 16 (Redman Parade, Belmore) is proposed to be zoned to its east as low rise housing and to the west of Cecilia Street as medium rise housing. No Heritage Conservation Area has been designated to protect the heritage values identified by the National Trust.

Precinct 17 (Belmore) is proposed for rezoning for a combination of `Main Street Shop Top Housing' and High Rise and/or Mixed Use. No Heritage Conservation Area has been designated to protect the heritage values identified by the National Trust.

Bankstown Station Precinct
Within the circled areas for the Bankstown Station Precinct, there is the National Trust Register listed Urban Conservation Area: -

Bankstown Urban Conservation Area Precinct 2 - Bankstown

Precinct 2 (Bankstown) is largely proposed for rezoning for medium / high rise housing. No Heritage Conservation Area has been designated to protect the heritage values identified by the National Trust. This is particularly disappointing given that almost the entire inner circle area has been proposed for high rise and mixed use development.

Punchbowl Station Precinct
Within the circled areas for the Punchbowl Station Precinct, there are two National Trust Register listed Urban Conservation Areas: -

Canterbury Urban Conservation Area Precinct 27 - Punchbowl

Bankstown Urban Conservation Area Precinct 1 - Mt Lewis

Precinct 27 (Punchbowl) is proposed for low rise housing. It has not been designated as a Heritage Conservation Area and consequently remains under threat of major redevelopment without regard for its heritage values.

Precinct 1 (Mt Lewis) has a large area with proposed zoning for Main Street Shop Top Housing, medium high-rise housing, medium rise housing, low-rise housing and single dwelling areas. No Heritage Conservation Area has been designated and Precinct 1 (Mt Lewis) remains under threat of major redevelopment without regard for its heritage values.

Wiley Park Station Precinct
Within the circled areas for the Wiley Park Station Precinct, there is the National Trust Register listed Urban Conservation Area: -

Canterbury Urban Conservation Area Precinct 26 - Defoe Street, Punchbowl

Precinct 26 (Defoe Street, Punchbowl) is proposed for low rise housing. It has not been designated as a Heritage Conservation Area and consequently remains under threat of major redevelopment without regard for the heritage values identified by the National Trust.

Lakemba Station Precinct
Within the circled areas for the Lakemba Station Precinct, there is the National Trust Register listed Urban Conservation Area: -

Canterbury Urban Conservation Area Precinct 19 - Dennis Street, Lakemba

Precinct 19 (Dennis Street, Lakemba) is proposed for low rise housing. It has not been designated as a Heritage Conservation Area and consequently remains under threat of major redevelopment without regard for the heritage values identified by the National Trust.

The National Trust would be pleased to provide detailed information on the 1998 Study - "Housing in NSW Between the Wars - A Study of Housing and Housing Estates constructed and developed in NSW between World War I and World War II" and copies of the National Trust Register Listings referenced above to the planners dealing with the

Urban Renewal Corridor Strategy.

There are also individual National Trust Register listed places within the Station Precincts that may be under threat from redevelopment due to proposed rezonings. The Trust is concerned about following places which are affected by proposed changes to their existing zonings:

1. White House Bakery, 2 Wilson Avenue, Belmore, listed on the Trust Register in 1982. Proposed to be rezoned to Main Street Shop Top Housing.
2. Campsie Fire Station, Beamish Street, corner Hill Street, listed on the National Trust Register in 1993. Proposed to be rezoned to Main Street Shop Top Housing.
3. Hotel Canterbury, 208 Canterbury Road, Canterbury, listed on the National Trust Register in 2013. Proposed to be rezoned to Main Street Shop Top Housing.
4. Canterbury Post Office (1909), 193 Canterbury Road, Canterbury, listed on the National Trust Register in 1991. Proposed to be rezoned to Main Street Shop Top Housing.
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10. Former General Motors Holden Ltd Car Assembly Plant (mid 1920s) listed on the National Trust Register in 2015, proposed Carrington Road Precinct.

Whilst the Trust has these specific concerns, we acknowledge that many properties have been recognised as heritage items and their proposed future zoning is appropriate. These include:

Dulwich Hill and Hurlstone Park: -
1. Gladstone Hall (1870), 114 Ewart Street, Dulwich Hill, listed on the National Trust Register in 1974, proposed to be zoned Single Dwelling Areas.
2. Former Hercules Furniture Factory (Façade), 3 Terrace Road, Dulwich Hill, listed on the National Trust Register in 1986, proposed to be zoned Low Rise Housing.
3. Carmelite Convent Chapel, 194 Wardell Road, Dulwich Hill, listed on the National Trust Register in 1987, proposed Schools and Community Facilities Zoning.

Marrickville Station Precinct:-
1. Marrickville Sewage & Stormwater Pumping Station SPS271, listed on the National Trust Register in 1988, proposed zoning Industrial Areas.
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3. Sydenham Pit Stormwater Detention Basin and Pumping Station (late 1930s), listed on the National Trust Register in March, 2017, proposed zone Reservoir.
4. Marrickville Police Station, 4-8 Gladstone Street, Marrickville (1895 & 1920), listed on the National Trust Register in March, 1979, proposed for Main Street Shop Top Housing zoning.
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6. House, 294 Livingstone Road, Marrickville, listed on the Trust Register in 1989, proposed Single Dwelling Area zoning.
7. Marrickville Fire Station (1914), 309 Marrickville Road, Marrickville, listed on the National Trust Register in 1993, zoned Single Dwelling Area and within the Civic Precinct Heritage Conservation Area (C30) on Schedule 5 (Environmental Heritage) of the Canterbury Local Environmental Plan 2011.
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9. St Brigids Catholic Church and Monastery (1918-1921), Marrickville Road, Cnr Livingstone Road, listed on the National Trust Register in 1986, proposed School, Church and Private Recreation Zoning and within the Civic Precinct Heritage Conservation Area (C30) on Schedule 5 (Environmental Heritage) of the Canterbury Local Environmental Plan 2011.
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The National Trust would be pleased to provide more detailed information on the National Trust Register Listings referenced above to the planners dealing with the Metro Proposal.

Yours sincerely

Graham Quint
Director, Advocacy

[redacted]
Submission: Online Submission from company The National Trust of Australia (NSW) (org_comments)
https://majorprojects.accelo.com/?action=view_activity&id=230819

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

NATIONAL TRUST

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T +61 2 9258 0123 F +61 2 9251 1110
www.nationaltrust.org.au/NSW

7 November 2017

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

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Yours sincerely

Graham Quint
Director, Advocacy

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 1:33 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Martin Stott (object)
Attachments: 230821_Metro_HPA shortsubmission_Oct2017_2017Nov07_1332.pdf

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From: system@accelo.comOn Behalf OfMartin Stott
Sent: 07 November 2017 13:32:35 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Martin Stott (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Martin Stott
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
See attached file

[redacted]
Submission: Online Submission from Martin Stott (object)
https://majorprojects.accelo.com/?action=view_activity&id=230821

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Martin Stott

Address: 79 Floss Street, Hurlstone Park NSW 2193

Application number: SSI 17_8256

-■ I consent to my name being published
-□ I do not consent to my name being published

-■ I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

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- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

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Signature.....

PS I'm sceptical of you coming up with a better revised plan but the situation compels me.

Department of Planning and Environment

Dear Sir or Madam, I wish to protest about the proposed disruption and unnecessary expenditure by the Liberal NSW Goverment, the T3 Bankstown rail line is a perfectly good operating system, why replace it with single light carriages with passengers in cramped conditions, no guards, no drivers, no rail personnel on stations as explained to me. What happens to passengers in an emergency? Why get rid of a good system in the proposed 5-6yr disruption, traffic grid lock economic dislocation, are there no alternatives to this? Who benefits from this Hong Kong money? Traffic chaos but this present government is in the thrall of international interests, who profits? - not the people on the Bankstown line - Please review this decision.

Sincerely: Mr D White c/o 8a Park St Campsie NSW 2194

Shame on the NSW Gov!

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Marcia CREWES (MRS)

Address: 2 Dunkeld Ave. HURLSTONE PARK, 2193.

Application number: SSI 17_8256

-☑ I consent to my name being published

-☐ I do not consent to my name being published

-☑- I have no reportable donations to disclose

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Signature..... 1.11.17

M. CREWES

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Sent: Tuesday, 7 November 2017 1:49 PM
To: DPESYDMET Scanned
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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Margaret Kurk — Ronald Kurk

Address: 10 The Ave - Hurlstone Park 2193.

Application number: SSI 17_8256

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-☐ I do not consent to my name being published

-☐- I have no reportable donations to disclose

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Signature..... R. J. Kirk
R. J. Kirk

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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Mail to :

Major Projects – Metro EIS Submission
DPE
GPO Box 39
Svdnev. NSW. 2001

Name: ANNA YEATMAN

Address: 16 Dunkeld Avenue
Hurlstone Park, NSW 2193

Application number: SSI 17_8256

-☑ I consent to my name being published

-☐ I do not consent to my name being published

-☑ I have no reportable donations to disclose

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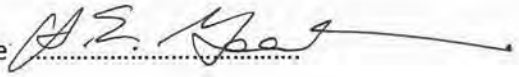
Signature 

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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: K. & S. SIKAIS

Address: 4 DUNKELD Ave HURLSTONE PARK

Application number: SSI 17_8256

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-□ I do not consent to my name being published

-□- I have no reportable donations to disclose

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Signature..... K Sikaris

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Sent: Tuesday, 7 November 2017 1:49 PM
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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Mail to :

Major Projects – Metro EIS Submission
DPE
GPO Box 39
Sydnev. NSW. 2001

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

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Signature [redacted]

25/10/2017

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Sent: Tuesday, 7 November 2017 1:49 PM
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Mail to :

Major Projects – Metro EIS Submission
DPE
GPO Box 39
Sydnev. NSW. 2001

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

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Signature [redacted].

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From: [redacted]
Sent: Tuesday, 7 November 2017 1:49 PM
To: DPESYDMET Scanned
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By 8 November 2017, mail to:
Attn: Director, Infrastructure Projects
Major Projects Assessment
Dept Planning and Environment
GPO Box 39
SYDNEY, NSW 2001

Or scan and lodge at http://majorprojects.planning.nsw.gov.au/

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

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Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plan to replace the existing, historic Sydenham-Bankstown rail line represent a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature 

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Sent: Tuesday, 7 November 2017 1:50 PM
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Director Infrastructure Projects

Major Projects Assessment

Dept Planning and Environment

GPO Box 39

Sydney, NSW 2001

Personal Submission to the Environmental Impact Statement Sydney Metro Sydenham to Bankstown Upgrade

Name: Nicholas Haikalis

Address: 61 MELFORD ST HURLSTONE PARK

Application No: SSI17_8256

I do not consent to my name being published

I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

It is not necessary to solve the problems of congestion in the Sydney rail network. There are alternative ways which would not involve the replacement of a functioning line and would allow the Metro to be diverted from Sydenham to suburbs not as well served by public transport.

The Metro is not necessary to meet the transport needs of the current already increasing population. Additional housing, at the level being proposed, is increasingly controversial. The corridor is already densely populated. In any case the claim that the Metro would carry significantly more peak hour passengers in questionable.

Stations can be made more accessible and safer without a metro conversion. This has already occurred at Marrickville.

Stations along the line include buildings of heritage significance, some of which would be demolished, to meet the requirements of Metro trains. The station design proposed for Hurlstone park station does not suit the local character.

I object to the huge disruption and inconvenience residents and commuters would have to tolerate for the five years of construction.

The alternative transport required for 8 weeks a year in school holidays plus more than 4 weekends for 5 years, as well as at least 3 to six months at the end of the project is inadequate. The additional buses required to carry 100,000 passengers a day would increase traffic congestion and the delays involved cause stress to commuters.

In Hurlstone Park the disruptions would include:

- Extra noise, especially for those closest to the railway line, sometimes at night
- Possible damage to buildings due to the vibration of heavy machinery
- Heavy truck traffic, noise and dust for those living on streets used as "haulage routes". This includes my own street, which would lead to a work site.

The Metro is not in the interest of residents of the corridor or for those in suburbs served poorly by public transport.

Signature:.....

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From: [redacted]
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Director Infrastructure Projects

Major Projects Assessment

Dept Planning and Environment

GPO Box 39

Sydney, NSW 2001

Personal Submission to the Environmental Impact Statement Sydney Metro Sydenham to Bankstown Upgrade

Name: Fotini Touloumidis

Address: 48B Kilbride St, Hurlstone Park, 2193

Application No: SSI17_8256

I do not consent to my name being published

I have no reportable donations to disclose

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Signature: F. Todaro

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From: [redacted]
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By 8 November 2017, mail to:
Attn: Director, Infrastructure Projects
Major Projects Assessment
Dept Planning and Environment
GPO Box 39
SYDNEY, NSW 2001

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Juris Liepins

Address: PO Box 18 Strathfield 1816

Application number: SSI 17_8256

-□ I consent to my name being published

-□ I do not consent to my name being published

-□- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care

centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.

- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
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Signature.....

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By 8 November 2017, mail to:
Attn: Director, Infrastructure Projects
Major Projects Assessment
Dept Planning and Environment
GPO Box 39
SYDNEY, NSW 2001

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Baiba Liepins

Address: 144 The Boulevarde Strathfield 2135

Application number: SSI 17_8256

-□ I consent to my name being published

-□ I do not consent to my name being published

-□- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

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Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

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centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.

- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
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- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

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The metro is not in the public interest but is enabling the over development of the corridor.

Signature.....

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From: [redacted]
Sent: Tuesday, 7 November 2017 4:44 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Joseph Capolupo (support)
Attachments: 230863_Sydney Metro_ SouthWest SSI 17_8256_Submission_2017Nov07_1642.pdf

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From: system@accelo.comOn Behalf OfJoseph Capolupo
Sent: 07 November 2017 16:43:23 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Joseph Capolupo (support)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Joseph Capolupo
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
Please see attached PDF for submission.

[redacted]
Submission: Online Submission from Joseph Capolupo (support)
https://majorprojects.accelo.com/?action=view_activity&id=230863

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Sydney Metro City & Southwest
Sydenham to Bankstown

SSI 17_8256 Submission

7 November 2017
Joseph Capolupo
4/17 Woodcourt st, Marrickville 2204
m: 041356 4246
e: jcapolupo@mac.com

To the Director, Transport Assessments, Department of Planning

I support the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to Metro standards primarily because of the improved frequency of services and station upgrades. But as a resident of Marrickville who uses Dulwich Hill Station to travel to work in Bondi Junction, I ask that you consider the issues and recommendations I have outlined below before approving the project.

1 - Loss of Car Spaces at Dulwich Hill Station

- The loss of car spaces is unacceptable. The spaces are being lost to enable a services building and kiss and ride, which are vital to the project. But at a minimum the lost spaces should be reinstated as apart of the project.
- The car spaces around Dulwich Hill station are important as they are used by commuters for heavy rail as well as the light rail. Losing this many in a small area will push people further away from the station into neighbouring residential streets or discourage customers to local businesses.
- ➡ **A simple solution** is to extend the current commuter car park down along the rail line and Ewart St, towards Ness st underpass. The mature trees that line Ewart st should be retained. This would be an ideal location to replace the lost car spaces.

2 - Haulage Route - Warren Rd Marrickville

- ❖ Warren Road in Marrickville should not be used as a "Primary Haulage Route", especially between Illawarra Road and Carrington Road. Warren Road is a narrow one lane neighbourhood road. Currently cars are unable to pass each other and must wait for cars to pass. Trucks wouldn't even fit down this road.

➡ **A simple solution** would be to use Harnett Ave and Renwick st. Both these roads are wide two lane roads.

3 - Marrickville Station - Station Street Shared Zone

- ❖ There should be no car parking in the shared zone area. Business's wont need parking spaces as they will have plenty of foot traffic/people exiting the station. This means the accessibility car spaces can be moved from Schwebel St to the shared zone along Illawarra rd.
- ❖ Priority should be made to pedestrians in the shared zone. The artist impression of the station doesn't seem to allow for a wide path for pedestrians when exiting the station. It's almost like you walk straight into the

➡ **A simple solution** would be to build a wide pathway for pederiays where the kiss and ride will be, moving the road closer to the retail space by removing any parking in this area.

➡ **Accessibility parking** moved closer to the station entrance, by placing it with-in the shared zone.

Conclusion

I hope these issues and recommendations I have raised will be considered for the approval of the project.

I consent to my name and submission to be published on your website and request a written response to each of the recommendation I have raised.

Regards

Joseph Capolupo

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From: [redacted]
Sent: Tuesday, 7 November 2017 8:21 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230902_Metro_submission_Nov 2017 KForrester_2017Nov07_2019.pdf

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From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 20:20:36 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
Refer to attachment

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230902

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

- I do not consent to my name being published
- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to Metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving bus services.

The project disregards existing rail system amenity, wastefully and expensively replicating what is already a functioning line.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated, and large scale increases in density will result in the destruction of established suburban character; taking Sydney further away from its heritage and toward the same bland cities you can find anywhere in the world.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- Potential vibrational damage to dwellings
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- Some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the sugar house and the new units backing onto Canterbury Rd

- Streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
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In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The Metro is not in the public interest and is enabling the over-development of the corridor.

Yours sincerely

7 November 2017

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From: [redacted]
Sent: Tuesday, 7 November 2017 8:45 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Jim Morris (object)
Attachments: 230912_Submission re_ the Syd-Btn Metro EIS_2017Nov07_2043.pdf

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From: system@accelo.comOn Behalf OfJim Morris
Sent: 07 November 2017 20:44:21 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Jim Morris (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: yes

Name: Jim Morris
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
Personal Submission regarding the Sydenham-Bankstown Metro EIS

Application No. SSI 17_8256

I'm Jim Morris at Hurlstone Park and I object to the proposal for the following reasons:

1. THE LOOMING TRADE IN SERVICES AGREEMENT (TISA)
I attended the public consultation on 28th October at Hurlstone Park RSL and was pleased to hear the NSW government would own all the rail infrastructure, but am not pleased that a private company would be running the service. I mentioned to the Transport NSW representatives the Trade in Services Agreement (TISA) which Australia is negotiating. The TISA would make any contracted service permanently privatised. The government would have to trade an equivalent government service for a privatised service to be again government run. This is the ugliness of new-liberalism, an ideology that is increasingly discredited. This consideration goes beyond the work of the Transport NSW representatives so there was nowhere to go with it last Saturday. Accordingly, there should be nowhere to go with the Metro. It should terminate at the point where it is completed. Just 40cm larger tunnels would allow double deckers through. Damage is done there, nowhere else please!

2. THERE IS NO COHERENT INFRASTRUCTURE PLAN FOR SYDNEY.
What should concern Transport NSW representatives is the distance between Bankstown and Cudgegong Road. No-one wants to find themselves that far from the evening meal because they'd dropped off to sleep. Far better to be on a loop through the CBD that takes us back to our home stations in reasonable time. It was Transport Minister Berejiklian's plan to extend the Metro to Liverpool. On the other hand the Greater Sydney Commission released a couple of weeks ago it's three 30 minute commute cities (Harbour-Parramatta-Western) plan. The exact opposite agenda is being followed by the Sydenham-Bankstown Renewal Corridor plan which would turn the Carrington Road industrial area into high rise residences, as has happened in the Mascot industrial area and many other inner Sydney locations. Not good for an integrated Harbour City. Then there are the Sydney CBD bound motorways. Any more conflicting grand plans?

3. GIVE THE SYDENHAM-BANKSTOWN LINE AN UNDERGROUND CBD LOOP.
Sydenham-Bankstown already has a 30 minute commute through St Peters and on through the CBD! I suggest a new

deep tunnel through a shorter CBD loop to solve the Central Station bottleneck. We should be able to change trains for Cudgegong Road as for all other lines. There is no hub on the NW-SW Metro plan for easy transfer to other lines, a major failing of incompatible services. It's reminiscent of the interstate rail gauge incompatibilities. It's far better to convert the existing Metro line to what we have, or at least not extend it, and put limited resources into badly needed new public transport corridors.

Public consultations have been top down declarations of what will happen and there has been no public sharing of ideas on how Sydney's rail services might best develop in the future, other than with a Metro. I was saddened to learn that unused underground platforms in the CBD are stranded assets because basements of high rise buildings have blocked their access. However, deeper tunnels have been dug for the Eastern Suburbs line double deckers and deeper tunnels can also be dug for the Sydenham-Bankstown double deckers.

4. WHAT THE RESIDENTS WANT
The Sydney Metro website hasn't published any online discussion or survey report such as
http://www.planning.nsw.gov.au/Plans-for-Your-Area/Priority-Growth-Areas-and-Precincts/Sydenham-to-Bankstown-Urban-Renewal-Corridor/How-to-get-involved

which has comments from residents related to the railway. Not one mention was made about improving our existing heavy rail passenger service. It is adequate for the task and can be improved with platform safety barriers, more efficient signalling, better internal designs of carriages. We have put up with frequent weekend rail bus services for decades because we've known they were necessary for the rail's continuing good service. Survey comments focused on:

north-south rail services to complement the current east-west service;

better feeder services (buses, light rail) to all stations;
the necessity of better commuter parking at all stations;
lifts at all stations;

noisy goods trains - solutions suggested: use only electric locomotives and put them underground.

With the limited resources available, we need to focus on much needed improvements to Sydnemham-Bankstown livability rather than replace the current rail service.

The Metro is directly linked to the Sydenham-Bankstown Urban Renewal Corridor and no doubt relies on it for viability. Till the goods line was privatised it had subsidised the passenger line. For the Metro to make profits the massive concentration of high rises near stations would be necessary.

The nightmare and worsening congestion at Canterbury Station and along Canterbury Road are clear warning signs of what the Corridor would become. The September EIS Overview is deceptive. Graphics of proposed Metro stations are superimposed on existing street maps, not the nightmarish high rise clutter that is hoped to complement the stations. Clearly the planned for high rises are intended to create a sufficient demand for rail services, in other words, the Metro is a solution looking for a problem.

The 413 responses to the abovementioned Urban Renewal Corridor survey focused on some really important infrastructure improvements, such as

More local schools for the growing population, not long train commutes for students.

Better community facilities regarding town centres (shops, community centres, libraries and entertainment), sport activities, parks, children's playgrounds, cycleways, more salubrious public toilets (I think St James station's toilets set the standard), growers markets, more native flora in streets and parks.

Proper community consultation about new high rise developments, more affordable housing, greater setbacks from the street for high rise residences and better quality architecture in those buildings - not the ghettos currently being built.

Much adverse comment about Punchbowl and Sydenham roads and the approaches to their respective stations.

The mess resulting from poor planning at Canterbury station and neighbouring local roads received much comment, as did the Canterbury Bowling Club, which must become publicly owned and developed into a community centre.

5. WE CAN DO BETTER THAN A SYDENHAM-BANKSTOWN METRO

1. From "SYDNEY'S RAIL FUTURE - Modernising Sydney's Trains" June 2002

http://mysydney.nsw.gov.au/sites/default/files/user-files/uploads/rail-future-web.pdf

P23 "The new infrastructure would be integrated into the existing Sydney rail network and operate with all double decker trains with a focus on seated capacity and timetabled services"

"with a focus on seated capacity" Absolutely! Anyone who catches peak hour trains knows the importance of relaxing in a seat. P13 has the title "PUTTING THE CUSTOMER FIRST". Customer comfort is a priority. WE DON'T WANT GLORIFIED CATTLE TRUCKS. A valuable feature of our trains in that seats can be arranged for groups of four and six to face each other and chat.

P25 Description of The Differentiated Service Model includes "Conventional service double deck trains with seating and mixed service patterns on lines with a high percentage of longer suburban trips." Doesn't the North-West line qualify as having a 'high percentage of longer suburban trips'? Liverpool is a 35.68km and is under consideration for the Metro (SMH 16th Nov 15). As the WestConnex and M5 plans indicate, roads are preferable to rail, in the government's thinking, and train travellers should be content with minimum service and comfort.

I take it that the long term model is for the eventual privatisation of the Sydney network using metros. The current proposal is a foot in the door. The Independent Option on P24 "would create a separate system that would divert funding away from improvements on the existing rail network". When would the Metro be put up for sale, on complete conversion of the whole of City Rail? I mention again the profitable NSW government owned goods line that was sold off.

2. From http://www.sydneytrains.info/travelling_with/trip_tips/

In the case of motion sickenss, 'Trip tips' stresses sitting towards the middle of the carriage and remaining seated while the train is moving. More reason for plenty of seating and seating towards the carriage centre.

3. If the North West line is too far advanced to retrofit for double deckers, let it terminate at its present completion point and stay with the current system and improving it. Profits from NSWGR's goods service covered our passenger services losses till it was all sold off. That sell-off was a massive opportunity cost to the people of NSW. The last thing we should be doing is continue making that same sort of mistake.

4. The long overdue Very Fast Train should be considered when proposing harbour tunnels, but I've found nothing on it's intended route through Sydney, whether it would be going through the City or further west.

Yours sincerely
Jim Morris
4 Watkin Street
Hurlstone Park 2193
[redacted]

[redacted]
Submission: Online Submission from Jim Morris (object)
https://majorprojects.accelo.com/?action=view_activity&id=230912

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission regarding the Sydenham-Bankstown Metro EIS

Application No. SSI 17_8256

I'm Jim Morris at Hurlstone Park and I object to the proposal for the following reasons:

1. THE LOOMING TRADE IN SERVICES AGREEMENT (TISA)

I attended the public consultation on 28th October at Hurlstone Park RSL and was pleased to hear the NSW government would own all the rail infrastructure, but am not pleased that a private company would be running the service. I mentioned to the Transport NSW representatives the Trade in Services Agreement (TISA) which Australia is negotiating. The TISA would make any contracted service permanently privatised. The government would have to trade an equivalent government service for a privatised service to be again government run. This is the ugliness of neo-liberalism, an ideology that is increasingly discredited. This consideration goes beyond the work of the Transport NSW representatives so there was nowhere to go with it last Saturday. Accordingly, there should be nowhere to go with the Metro. It should terminate at the point where it is currently completed. Just 40cm larger tunnels would allow double deckers through. Damage is done there, nowhere else please!

2. THERE IS NO COHERENT INFRASTRUCTURE PLAN FOR SYDNEY.

What should concern Transport NSW representatives is the distance between Bankstown and Cudgegong Road. No-one wants to find themselves that far from the evening meal because they'd dropped off to sleep. Far better to be on a loop through the CBD that takes us back to our home stations in reasonable time. It was Transport Minister Berejiklian's plan to extend the Metro to Liverpool. On the other hand the Greater Sydney Commission released a couple of weeks ago it's three 30 minute commute cities (Harbour-Parramatta-Western) plan. The exact opposite agenda is being followed by the Sydenham-Bankstown Renewal Corridor plan which would turn the Carrington Road industrial area into high rise residences, as has happened in the Mascot industrial area and many other inner Sydney locations. Not good for an integrated Harbour City. Then there are the Sydney CBD bound motorways. Any more conflicting grand plans?

3. GIVE THE SYDENHAM-BANKSTOWN LINE AN UNDERGROUND CBD LOOP.

Sydenham-Bankstown already has a 30 minute commute through St Peters and on through the CBD! I suggest a new deep tunnel through a shorter CBD loop to solve the Central Station bottleneck. We should be able to change trains for Cudgegong Road as for all other lines. There is no hub on the NW-SW Metro plan for easy transfer to other lines, a major failing of incompatible services. It's reminiscent of the interstate rail gauge incompatibilities. It's far better to convert the existing Metro line to what we have, or at least not extend it, and put limited resources into badly needed new public transport corridors.

Public consultations have been top down declarations of what will happen and there has been no public sharing of ideas on how Sydney's rail services might best develop in the future, other than with a Metro. I was saddened to learn that unused underground platforms in the CBD are stranded assets because basements of high rise buildings have blocked their access. However, deeper tunnels have been dug for the Eastern Suburbs line double deckers and deeper tunnels can also be dug for the Sydenham-Bankstown double deckers.

4. WHAT THE RESIDENTS WANT

The Sydney Metro website hasn't published any online discussion or survey report such as http://www.planning.nsw.gov.au/Plans-for-Your-Area/Priority-Growth-Areas-and-Precincts/Sydenham-to-Bankstown-Urban-Renewal-Corridor/How-to-get-involved

which has comments from residents related to the railway. Not one mention was made about improving our existing heavy rail passenger service. It is adequate for the task and can be improved with platform safety barriers, more efficient signalling, better internal designs of carriages lifts at all stations. We have put up with frequent weekend rail bus services for decades because we've known they were necessary for the rail's continuing good service. Survey comments focused on:

north-south rail services to complement the current east-west service;

better feeder services (buses, light rail) to all stations;

the necessity of better commuter parking at all stations;

lifts at all stations;

noisy goods trains - solutions suggested: use only electric locomotives and put them underground

With the limited resources available, we need to focus on much needed improvements to Sydnemham-Bankstown livability rather than replace the current rail service.

The Metro is directly linked to the Sydenham-Bankstown Urban Renewal Corridor and no doubt relies on it for viability. Till the goods line was privatised it had subsidised the passenger line. For the Metro to make profits the massive concentration of high rises near stations would be necessary.

The nightmare and worsening congestion at Canterbury Station and along Canterbury Road are clear warning signs of what the Corridor would become. The September EIS Overview is deceptive. Graphics of proposed Metro stations are superimposed on existing street maps, not the nightmarish high rise clutter that is hoped to complement the stations. Clearly the planned for high rises are intended to create a sufficient demand for rail services, in other words, the Metro is a solution looking for a problem.

The 413 responses to the above-mentioned Urban Renewal Corridor survey focused on some really important infrastructure improvements, such as

More local schools for the growing population, not long train commutes for students.

Better community facilities regarding town centres (shops, community centres, libraries and entertainment), sport activities, parks, children's playgrounds, cycleways, more salubrious public toilets, growers markets, more native flora in streets and parks.

Proper community consultation about new high rise developments, more affordable housing, greater setbacks from the street for high rise residences and better quality architecture in those buildings - not the ghettos currently being built.

Much adverse comment about Punchbowl and Sydenham roads and the approaches to their respective stations.

The mess resulting from poor planning at Canterbury station and neighbouring local roads received much comment, as did the Canterbury Bowling Club, which must become publicly owned and developed into a community centre.

5. WE CAN DO BETTER THAN A SYDENHAM-BANKSTOWN METRO

1. From *"SYDNEY'S RAIL FUTURE - Modernising Sydney's Trains" June 2002*
http://mysydney.nsw.gov.au/sites/default/files/user-files/uploads/rail-future-web.pdf

P23 ***"The new infrastructure would be integrated into the existing Sydney rail network and operate with all double decker trains with a focus on seated capacity and timetabled services"***

"with a focus on seated capacity" Absolutely! Anyone who catches peak hour trains knows the importance of relaxing in a seat. P13 has the title ***"PUTTING THE CUSTOMER FIRST"***. Customer comfort is a priority. WE DON'T WANT GLORIFIED CATTLE TRUCKS. A valuable feature of our trains in that seats can be arranged for groups of four and six to face each other and chat.

P25 Description of ***The Differentiated Service Model*** includes ***"Conventional service double deck trains with seating and mixed service patterns on lines with a high percentage of longer suburban trips."*** Doesn't the North-West line qualify as having a '***high percentage of longer suburban trips***'? Liverpool is a 35.68km and is under consideration for the Metro (SMH 16th Nov 15). As the WestConnex and M5 plans indicate, roads are preferable to rail, in the government's thinking, and train travellers should be content with less.

I take it that the long term model is for the eventual privatisation of the Sydney network using metros. The current proposal is a foot in the door. ***The Independent Option*** on P24 ***"would create a separate system that would divert funding away from improvements on the existing rail network"***. When would the Metro be put up for sale, on complete conversion of the whole of City Rail? I mention again the profitable NSW government owned goods line that was sold off.

2. From http://www.sydneytrains.info/travelling_with/trip_tips/

In the case of motion sickenss, 'Trip tips' stresses sitting towards the middle of the carriage and remaining seated while the train is moving. More reason for plenty of seating and seating towards the carriage centre.

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4. The long overdue Very Fast Train should be considered when proposing harbour tunnels, but I've found nothing on it's intended route through Sydney, whether it would be going through the City or further west.

Yours sincerely

Jim Morris

4 Watkin Street

Hurlstone Park 2193

jmrrs@bigpond.com

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: JIM MORRIS

Address: 4 WATKIN STREET HURLSTONE PARK

Application number: SSI 17_8256

-☑ I consent to my name being published

-□ I do not consent to my name being published

-□- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.

- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plan to replace the existing, historic Sydenham-Bankstown rail line represent a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.....

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 10:09 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230936_Sydney Metro Sydenham to Bankstown pg 1 &2_2017Nov07_2206.pdf

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From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 22:07:27 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Organisation: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
I do not support the Metro conversion of Hurlstone Park Station

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230936

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

-☐ I consent to my name being published

-☑ I do not consent to my name being published

-☑ I have no reportable donations to disclose

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Signature  .....

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Signature..  .....

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 10:16 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Ruth Saunders (object)
Attachments: 230938_Metro submission_SSI 17_8256_2017Nov07_2214.pdf

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From: system@accelo.comOn Behalf OfRuth Saunders
Sent: 07 November 2017 22:15:15 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Ruth Saunders (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Ruth Saunders
[redacted]

Address:
[redacted]

Dulwich Hill, NSW
2203

Content:
See attached document

[redacted]
Submission: Online Submission from Ruth Saunders (object)
https://majorprojects.accelo.com/?action=view_activity&id=230938

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Attention: Director, Transport Assessments

Re: **Application number SSI 17_8256**
Sydney Metro City and South

From: Ruth Saunders
7 Blackwood Avenue
DULWICH HILL NSW 2203

I am objecting to the proposal for the creation of the Sydney Metro City and South for a number of reasons.

General issues:

- There will be many years of bus replacement services when we already have too much traffic on inner west streets and overcrowded buses. The length of the construction time will place an inordinate strain on the travel experience of local residents.
- The new trains have little seating compared to current trains. Good for peak hour crowds maybe, but as people get older they need to sit for a journey of more than a couple of stops. And some of us are too short for comfortable strap hanging.
- No proposed underground link between Martin Place and Town Hall – running above ground through crowds in the rain at peak hour? No thanks. One of the stated benefits of the project is to streamline travel to and through the city but this is a major missing link in achieving the desired outcome.

Specific issues for Dulwich Hill:

- We will lose a large number of parking spaces during the construction period and not all will be restored, especially north of the station. It is already almost impossible to park around the area for more than two hours which is not enough for a trip into the city and back to shop, attend appointments, etc.
- Much of the construction work will be based around the triangle formed by the main line and the light rail line, focusing noise, vibration and dust on the surrounding streets. More residential streets in this area will be affected than at other stations.
- We have already lost our direct bus access to Circular Quay with buses now terminating at Martin Place and the new Metro will not provide direct access either. Every journey to Circular Quay will require a change or a long walk.

I am concerned that we will not see the benefits of the Metro for so long that they will have been eroded by the time the project is completed. We have already suffered with the constant delays in the construction of the city light rail so we know what can happen and I am worried.

As far as Dulwich Hill is concerned, there are only a few changes needed that would make the current system work better for travellers:

- a lift at the station
- an overbridge between the light rail stop and the train station
- an electronic indicator board at street level as well as platform level
- a timetable that schedules trains to run on this line at night. Currently two out of three trains in the late evening – home time from cinemas and theatres – go to the airport or East Hills line. Or stop at Central.

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 11:08 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for company EcoTransit (org_object)
Attachments: 230950_EcoTransit Submission on the_2017Nov07_2306.pdf

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From: system@accelo.comOn Behalf OfColin Schroeder
Sent: 07 November 2017 23:07:18 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for company EcoTransit (org_object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Colin Schroeder
Organisation: EcoTransit (Co-convenor)
Govt. Agency: No
[redacted]

Address:
[redacted]

Alexandria, NSW
2015

Content:
Please see uploaded PDF submission.

[redacted]
Submission: Online Submission from company EcoTransit (org_object)
https://majorprojects.accelo.com/?action=view_activity&id=230950

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

EcoTransit Sydney
PO Box 630 Milsons Point
NSW 1565
ecotransit.org.au

EcoTransit Submission on the EIS covering the downgrade of the Sydenham to Bankstown Line to metro operation.

Prepared by: Colin Schroeder
EcoTransit Co-convenor

7th November, 2017

Introduction

No sane Government would cannibalise two existing heavy rail lines with high quality double deck trains and convert them to a single deck metro with less than half the number of seats. This is however, what is happening in Sydney with the Epping to Chatswood Line and the Sydenham to Bankstown Line being consumed into the Sydney Metro.

The Government is not doing this to improve public transport and get commuters out of their cars and on to public transport, the Government is doing this to provide developers the opportunity to over develop areas of Sydney, thereby destroying communities and destroying heritage.

The Government doesn't want commuters to leave their cars in the garage and catch trains instead; this would destroy the business model of the Toll Road Operators, who donate significant sums of money to political parties. The whole raison d'être for the Sydney Metro is to provide transport for families who will be crowded into high-rise developments along its route, providing huge profits for developers and causing the destruction of communities in suburbs such as Waterloo, Marrickville, Campsie, Belmore, Lakemba and Bankstown.

Prior to the 2019 Election the government will be endeavouring to have contracts signed and TBMs (tunnel boring machines) in the ground, for the second section of the Metro from Chatswood to Sydenham. They will also be trying to have contacts let and work started on the third stage from Sydenham to Bankstown. If the second stage has been progressed to a point where it is not possible to vary the contracts, it will be inevitable that it will be built at least as far as Sydenham.

Spin and deceptions

The Government has promoted the Metro through a series of lies and misinformation, the biggest of these is that; "double deck trains can not be run as frequently as single deck metro trains." This is clearly false as double deck trains already run more frequently (every 3 minutes during peak periods) than the proposed 4 minute service on the Metro.

The proponents of the Metro will argue that the service can be increased to a train every 2 minutes, which would be a 50% increase over what is possible double deck trains. This is total misinformation as it is possible to run double deck trains every 2 minutes, as is regularly done on the Paris RER. In fact, the Paris RER are planning to increase the number of services on some of their lines to a train every 90 seconds i.e. 40 trains per hour.

The next biggest lie is that: "the Metro will increase capacity across the Network." The truth is that if the NWRL and the Chatswood to Sydenham line had been built for double deck trains and integrated with the Sydney Network, there would have been a general increase in capacity across the whole Network. The only increase in capacity will be from Cudgegong Road to Bankstown and if the service were to be operated by double deck trains, the

capacity would be 22,500 passengers per hour, compared with only 15,000 passengers per hour with single deck metro trains. These figures are based on a train every 4 minutes and at "crush" capacity.

The difference between double deck trains and single deck metro trains is more stark when seating capacity is compared. Double deck trains would have a seating capacity of 14,250 seats per hour whereas single deck metro trains will have only 5,940 seats per hour!

It is clear that had the NWRL and its approved and proposed extensions been built to accommodate double deck trains, the capacity of the line would have been far greater than that of the Metro.

The third biggest lie is that: "commuters will save up to 60 minutes per week on the Metro when travelling from Bankstown to the City." This claim can not be supported when comparing the current timetable with past timetables and with 26 minutes that Sydney Metro claim for the travel time between Bankstown and Central. It is also untrue for people travelling from beyond Bankstown who will have to add a minimum of 5 minutes to their journey, as they will be forced to change trains at Bankstown!

The following table shows comparative travel times between Bankstown, Central and City Circle Stations:

Train Type	Bankstown to Central	Change Trains	Bankstown to Museum	Bankstown to St James	Bankstown to Circular Quay
Metro	26 mins	5 mins	34 mins	36 mins	39 mins
Double Deck at 1987 times	29 mins		32 mins	34 mins	37 mins
*Double Deck at 1987 times with higher frequency	27 mins		30 mins	32 mins	35 mins

* Assumes a 2 minute saving by reducing dwell times at busy stations.

The 1987 times were chosen for comparison as these times are more realistic than the current slow timetable.

It will be noted that the maximum time saving on the Metro will be 30 min (based on a five day week in two directions) between Bankstown and Central. However, between Bankstown and City Circle Stations, the Metro will actually add 20 minutes to commuter's travel time when compared to the realistic times of the 1987 timetable!

The next biggest lie is that by taking Bankstown Line service out of the City Circle, it will free it up for additional services from the West. The Government has committed to maintain the existing services from St Peters and Erskineville. To achieve this, there will have to be short services from Illawarra Line or the East Hills Line via St Peters and Erskineville, which will use the existing time slots that Bankstown services use.

There are already two spare time slots around the City Circle during peak periods. It is interesting to note that these two spare time slots will be taken up by additional Bankstown Line services in the new timetable.

Destruction of communities

The Government is using the Metro to justify the overdevelopment of the suburbs between Sydenham and Bankstown. There is some scope for increasing densities within the corridor however, the plan to turn suburbs such as Belmore and Lakemba into mini Hong Kongs with 25 storey buildings, will destroy existing communities and force many long term residents out of their homes and the suburbs that some have lived in for 60 plus years.

The Government seems unconcerned with the feelings and rights of the current residents in the Sydenham to Bankstown corridor and only concerned with the profits of developers and the construction industry.

Destruction of heritage

The conversion of the Bankstown Line to metro will necessitate the destruction of many valuable heritage buildings and platforms. These buildings and platforms are in many cases over 100 years old are significant examples of irreplaceable railway architecture.

Many of the claimed “upgrades” to stations that the Government spruiks are not necessarily part of a metro conversion. Some of the stations have already undergone major upgrades with the addition of lifts and improved facilities. These same upgrades could be carried out at all of the existing stations without converting the line to metro.

This is just another example of Government spin meant to confuse people and gain support for what will be a downgrade to rail services on the Bankstown Line.

Bankstown “all change please”

Commuters who currently catch Bankstown Line serves from stations between Liverpool and Bankstown will be put at a significant disadvantage, having to change trains at Bankstown. This will add at least 5 minutes to their travel time, when they are forced to change trains.

The new timetable to be introduced in November will have 6 services per hour during the peak period from Liverpool to the City via Bankstown. There is no alternative route for these services as most of the spare capacity on the Western Line will be taken up by new services from Western Sydney, which rules out replacing the Bankstown Line services with services via Regents Park or via Granville.

The announcement "Bankstown all change please" will become a regular feature of the commute to the City from stations beyond Bankstown.

Saving the Bankstown Line from destruction

To save the Bankstown Line and the communities that stretch out along it, the Metro should be diverted from Sydenham on a route that currently does not have a rail service. This would actually expand Sydney's rail network and not just replace one service with another inferior service.

EcoTransit has identified an alternative route that would not only provide a rail service to an area that currently has none but would also be an alternative to the F6 tollway to the Sutherland Shire. The route would take the Metro south through Sans Souci, across the Georges River to a terminus at Miranda, where there would be an interchange with the Cronulla Line.

There would be significant commuter benefits provided by changing the route of the Metro from Sydenham to Bankstown to Sydenham to Miranda. The current T4 timetable has the fastest service from Miranda to Central taking 39 minutes and the slowest taking 54 minutes. On our suggested route for the Metro, we estimate that all services (stopping at each station) would take 28 minutes from Miranda to Central. This would give time savings between 11 and 26 minutes for commuters.

The distance from Sydenham to Miranda is approximately 19 kilometres. Based on known costs of rail infrastructure in Sydney, EcoTransit estimates the cost of building the Metro from Sydenham to Miranda to be approximately $5.5 billion. Building the Metro along this route would be significantly cheaper than tunnelling for the F6 along the same route and would probably be a similar cost to the conversion of the Bankstown Line to metro!

Conclusion

The conversion of the Bankstown Line to metro operation will not achieve what the Government claims that it will. It will not improve travel times for the majority of commuters; it will in fact increase their travel time! It will not add extra capacity across the network and it will not provide additional time slots on the City Circle for Western Line services.

The conversion of the Bankstown Line will be a disaster for Sydney's rail network and a disaster for the communities along its corridor.

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 11:13 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230952_Sydney Metro Sydenham to Bankstown pg 1 & 2 GJ_2017Nov07_2310.pdf

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From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 23:11:37 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
I object to the Metro

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230952

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

-□ I consent to my name being published

-☒ I do not consent to my name being published

-☑ I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.

- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plan to replace the existing, historic Sydenham-Bankstown rail line represent a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature. 

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 7:55 AM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230712_Metro_HPA shortsubmission_Oct2017_ Pve_2017Nov07_0753.pdf

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From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 07:54:20 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name:[redacted]
Email:[redacted]

Address:
[redacted]

[redacted]

Content:
Submission attached

IP Address: -[redacted]
Submission: Online Submission from[redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230712

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

- I do not consent to my name being published
- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving bus services.

The project disregards existing rail system amenity, wastefully and expensively replicating what is already a functioning line.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated, and large scale increases in density will result in the destruction of established suburban character; taking Sydney further away from its heritage and toward the same bland cities you can find anywhere in the world.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

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- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd

- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

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- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

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- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Regards

7 Nov 2017

DPESYDMET Email

From: [redacted]
Sent: Monday, 6 November 2017 8:10 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Melinda Leves-Isted (object)

From: system@accelo.comOn Behalf OfMelinda Leves-Isted
Sent: 06 November 2017 20:10:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Melinda Leves-Isted (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Melinda Leves-Isted
Email: [redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
The Environmental impacts of this project far outweigh the benefit.
The existing line provides sufficient coverage and could be improved without the huge expense of a completely different operating system.
The inconvenience caused for such large periods of time when you consider 100,00 people will be forced onto already congested roads in the inner west and more people in their cars.
Public transport needs to be improved, no one would argue with that point, but to spend vast amounts of money to replicate a single track line when vast parts of Sydney still have very few transport options, is a complete waste.
I object to this project and the environment impact it will have on communities across the area.

[redacted]
Submission: Online Submission from Melinda Leves-Isted (object)
https://majorprojects.accelo.com/?action=view_activity&id=230685

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Monday, 6 November 2017 8:16 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Michael Isted (object)

From: system@accelo.comOn Behalf OfMichael Isted
Sent: 06 November 2017 20:16:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Michael Isted (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Michael Isted
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
I object to the application on many grounds. Building the line will include lengthy periods of time (even if on schedule) when there is no train, people will be forced onto the roads but the new rail line will mean significant road closures on underpasses/bridges. The inner west is already crippled with traffic congestion and none of these plans adequately deal with the huge numbers of people that need to get to work and school when there is no train line.
The train line is a working line that does not require a wasteful amount of money spent replicating another single train line.
I'm sure the people of Sydney would prefer to see public transport in areas where there is none.

[redacted]
Submission: Online Submission from Michael Isted (object)
https://majorprojects.accelo.com/?action=view_activity&id=230687

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Scanned

From: [redacted]
Sent: Wednesday, 1 November 2017 12:08 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Kathleen Murphy (object)
Attachments: 230014_Objection to Hurlstone Park Station Kathleen Murphy_2017Nov01_1203.pdf

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From: system@accelo.comOn Behalf OfKathleen Murphy
Sent: 01 November 2017 12:03:44 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Kathleen Murphy (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Kathleen Murphy
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
Please see attachment

[redacted]
Submission: Online Submission from Kathleen Murphy (object)
https://majorprojects.accelo.com/?action=view_activity&id=230014

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Kathleen Murphy

Hurlstone Park Station

SSI 17_8256

I object to the suggested upgrades to Hurlstone Park station.

- Hurlstone Park area has undergone extensive investigation regarding Heritage Listing and is waiting for final approval to be listed as a Heritage area
- The suggested impression has no reference, connection or likeness to the surrounding older style buildings
- The suggested impression and description make no mention of the heritage platform buildings. Loss of these is unnecessary and destructive
- The suggested impression have no reference to the common building materials used in the older style buildings that surround the station and on the platforms
- The suggested impression is totally incongruous to the surrounding architectural style and manner and makes no contribution to the reason why many residence choose to live in this area
- The suggested impression has no reference to the traffic needs and particular pedestrian movements of the area, especially in relation to bus movements and protection of pedestrians
- The suggested impression has no reference to the fully grown flowering gum on the south side of the current station. Loss of this superb tree is unnecessary
- The suggested impression has limited and mean tree coverings
- The suggested impression refers to air conditioning- in times of climate change needs, this is entirely unnecessary
- The suggested impression has no reference to those buildings that share a boundary with the rail line and rail areas
- The suggested impression refers to a retail area- this is unnecessary and competes with a small commercial strip in Crinan St. Why boast the metro and accompanying planning will increase small business opportunities and then set up competition with existing small businesses?
- The suggested impressions have had no input from local residences, associations or council regarding the appearance, local character, pedestrian and commercial needs

DPESYDMET Email

From: [redacted]
Sent: Thursday, 2 November 2017 1:40 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Darian Eckersley (object)

From: system@accelo.comOn Behalf OfDarian Eckersley
Sent: 02 November 2017 13:39:37 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Darian Eckersley (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Darian Eckersley
[redacted]

Address:
[redacted]

Earlwood, NSW
2206

Content:
With little detailed information to the disruptions and environmental effect of these works on River Street, Earlwood. I can not support this proposal and the 'Connection of power to Ausgrid substation as in 'The project area - map 6'.

River Street is a small one way street with beautiful sandstone planter boxes quarried locally and adding much needed greenery to our lovely street. Large Vehicles, Delivery trucks and garbage trucks frequently have trouble accessing and navigating our street, let alone equipment related to works of this nature, the risk to damaging these planter boxes and our street is to great.

River Street has no footpath is narrow and no nature strip, so where these power lines would be laid is a big concern for residents. The works would also be a great disruption to the families who live in small cottages with only on-street parking.

Surely a more suitable route can be found which poses less disruption to our community and risk damaging a unique Sydney street with aspects which should be rigorously protected.

[redacted]
Submission: Online Submission from Darian Eckersley (object)
https://majorprojects.accelo.com/?action=view_activity&id=230147

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Thursday, 2 November 2017 2:52 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Helena Youlden (object)

From: system@accelo.comOn Behalf OfHelena Youlden
Sent: 02 November 2017 14:51:35 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Helena Youlden (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Helena Youlden
[redacted]

Address:
[redacted]

Earlwood, NSW
2206

Content:
1. Planter boxes make River St one of the most characterful, quaint streets in Earlwood. Subdivided for the workers in the quarry at the bottom of the street, locally quarried sandstone planter boxes line the street. It would be a great shame for this to be damaged or destroyed in any way.
2. The River St quarry face is a heritage listed item. The sandstone from this quarry was considered some of the highest quality sandstone in Sydney, another reason for the planter boxes to be protected. Again, it would be a huge loss to the local community to see any damage caused to the quarry face as you will need to get the power down the face.
3. River St is extremely narrow with no gutters, no continuous footpaths or nature strip. We fail to see where the power lines would be laid. It would clearly cause a large disruption to the local residents. Many residents are elderly and there are presently several families with small children. Access to parked cars within a reasonable proximity to these homes is necessary. The proposed run does not seem very efficient at all. Running the power through a more major street (Woolcott? Thompson?)would mean that there would be less disruption as the line could be run in the verge in which case only one side of the street would be out of action rather than an entire street. There is already a proposed new power line connecting the Summer Hill power station to the Canterbury Substation. This power could potentially be run in the same route and even in the same trench possibly.

[redacted]
Submission: Online Submission from Helena Youlden (object)
https://majorprojects.accelo.com/?action=view_activity&id=230152

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Scanned

From: [redacted]
Sent: Monday, 6 November 2017 4:00 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for MICHELE VAN DER SANDER (object)
Attachments: 230651_Metro Submission MV_2017Nov06_1558.pdf

From: system@accelo.comOn Behalf OfMICHELE VAN DER SANDER
Sent: 06 November 2017 15:59:17 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for MICHELE VAN DER SANDER (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: MICHELE VAN DER SANDER
[redacted]

Address:
[redacted]

HURLSTONE PARK, NSW
2193

Content:
There is a perfectly good rail line in operation which still has plenty of capacity. This metro project is just an excuse to impose bad development on the people of this corridor.

[redacted]
Submission: Online Submission from MICHELE VAN DER SANDER (object)
https://majorprojects.accelo.com/?action=view_activity&id=230651

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Michele van der Sander

Address: 39 Floss St, Hurlstone Park

Application number: SSI 17_8256

☒ I consent to my name being published

☐ I do not consent to my name being published

☒ I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.

- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

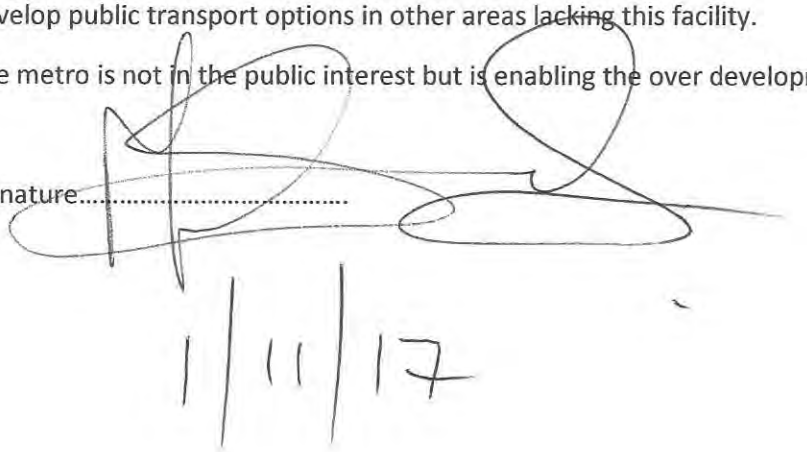
The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.....



1/11/17

DPESYDMET Scanned

From: [redacted]
Sent: Monday, 6 November 2017 4:03 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Barbara Stockwell (object)
Attachments: 230653_Metro Submission BS_2017Nov06_1601.pdf

From: system@accelo.comOn Behalf OfBarbara Stockwell
Sent: 06 November 2017 16:02:37 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Barbara Stockwell (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Barbara Stockwell
[redacted]

Address:
[redacted]

HURLSTONE PARK, NSW
2193

Content:
This is not progress - it is an ill conceived plan - offering no signoficant benefit to commuters on this line. In fact, removing Redfern ensures that students wishing to attend Syd Uni from the south west have a longer commute.

[redacted]
Submission: Online Submission from Barbara Stockwell (object)
https://majorprojects.accelo.com/?action=view_activity&id=230653

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Barbara Stockell

Address: 39 Floss St Hurlstone Pk

Application number: SSI 17_8256

-[x] I consent to my name being published

-□ I do not consent to my name being published

-[x] I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

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Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

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- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
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- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

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- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

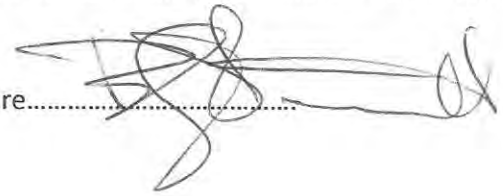
The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.....



DPESYDMET Scanned

From: [redacted]
Sent: Monday, 6 November 2017 6:48 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230677_Saveourtrains_2017Nov06_1846.pdf

From: system@accelo.comOn Behalf Of[redacted]
Sent: 06 November 2017 18:47:19 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name:[redacted]
Email:[redacted]

Address:
[redacted]

[redacted]

Content:
Please find attachment

IP Address:[redacted]
Submission: Online Submission from[redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230677

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

As a long term resident of Hurlstone Park, I am totally against the replacement of our heavy rail with the proposed automated Metro. Hurlstone Park has been chosen as a heritage conservation area and yet Sydney Metro are determined to destroy the heritage nature of the area and demolish the heritage listed Station.

The Sydenham to Bankstown heavy rail is a very important part of this area. It has stood the test of time since 1880. The removal of an efficient service to replace it with an automated private metro is an absolute travesty. There has not been a cost benefit analysis provided. A very limited biodiversity study has been undertaken "Given the access limitations described above and the duration and timing of the field surveys (i.e. three days in mid-Winter), it is likely that some flora species that occur were not detected during the field survey."

This whole venture is purely to increase the density of population in this community. This train needs to stop at Sydenham. The city needs new public transport not the demolition and wastage of finances on replacing infrastructure that is already functional. What we have should be conserved and adapted to fit not replaced with a poor second.

"The first section of the Bankstown line was constructed between 1880 and 1895 from Sydenham to Belmore. Between 1896 and 1909 the line was extended from Belmore to Bankstown, where the railway terminated for the next 19 years. By 1939 the connection between Bankstown and Regents Park was completed."

Socially listed as Hurlstone Park predominantly older aged profile group with a higher proportion over 70, yet you want to replace our trains with virtually no seating.

Proper community consultation has not happened – The Metro have told our councils and the residents that this is what is happening. That is not consultation. Our road transport is absolutely unable to cope with buses to replace the trains whilst this destruction of perfectly good public transport is demolished.

1.Hurlstone Park is listed as proposed Heritage Conservation Area:

http://webdocs.bankstown.nsw.gov.au/api/publish?documentPath=aHR0cDovL2lzaGFyZS9zaXRlcy9QbGFubmluZy9TUC9QbGFubmluZyBQcm9wb3NhbHMvUGxhbm5pbmcgUHJvcG9zYWwgLSBQUF8yMDE2X0NCQU5LXzAwMyAtIEh1cmxzdG9uZSBQYXJrIEhlcml0YWdlIFtZW5kZWQgRENQIENoYXB0ZXIgQjguGRm&title=Draft%20Amended%20DCP%20Chapter%20B8.pdf

Hurlstone Park station has two heritage listed platforms and is adjoined by two heritage conservation sites and yet the Sydney Metro, your architects and concept drawers obviously have no understanding of the meaning of heritage as demonstrated by the following quote :

"Although the removal of the heritage listed overhead booking office, footbridge and stairs would alter the 'sense of place' and character in these streetscapes, the new station building would improve legibility of the station entry, and the design would have an improved character and prominence. Overall, this would result in a considerable improvement in the landscape quality and functionality to this precinct, which is of local sensitivity. There is expected to be a moderate beneficial landscape impact during operation." Pg 77 Landscape and Visual

The proposed Station design is not in keeping with the two heritage conservation area that it divides. The proposed demolition of the heritage listed Platform building is totally unacceptable. An heritage architect should be consulted to provide plans more in keeping with the area.

In the recent Land and Environment Court, Commission C Dickson ruled that 4 storeys would not be appropriate in site opposite the station (cnr Floss and Duntroon) She wrote -"I accept the agreement of the experts that it can be appropriate to have a building larger than a single storey on the site, and that 3 storeys is an appropriate form;" https://www.caselaw.nsw.gov.au/decision/59c083d8e4b058596cbaa791

2. South Duntroon St is a bus route in a residential street. The buses and cars presently have difficulty with the narrow street with the bend at the station, to widen the footpath will only increase this problem. To place the crossing right on the bend will cause further traffic congestion.

3. Hurlstone Park station Does not require **four** lifts. All the stations should have been upgraded with lifts already.

4. Disabled parking- HP already has 3 disable spaces, does not need a fouth. Duntroon south is a proposed heritage conservation area and does not need footpath widening with resultant loss of street trees and **destruction of sandstone kerb and guttering**.

5. Kiss and drop zone is in very dangerous location. Not appropriate for taxi rank either. This corner is already a site of congestion a drop zone at this proposed site, with a bike path behind is definitely an accident waiting to happen

6. Foord Ave Bridge is also a heritage listed item yet it is unclear in the documentation whether this will be protected. " The Foord Avenue bridge is of local significance as the first prestressed concrete railway bridge built for the metropolitan network, the second within the NSW rail network. The bridge is a good and early representative example of prestressed concrete girder construction."

7 Edgeware School is a special needs school for behaviourally challenged students and yet the glossy brochures state it is a school for year 9-12 students.

8. The residential parking near the station is insufficient at best and to remove 5 spaces from Duntroon St will impact greatly on the houses that do not have off street parking and whom are presently affected by commuters daily.

DPESYDMET Scanned

From: [redacted]
Sent: Monday, 6 November 2017 9:38 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230695_Metrosubmission2017_2017Nov06_2136.pdf

From: system@accelo.comOn Behalf Of[redacted]
Sent: 06 November 2017 21:37:17 (UTC+10:00) Canberra, Melbourne, Sydney
To:[redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name:[redacted]
Organisation:[redacted]
Email:[redacted]

Address:
[redacted]

[redacted]

Content:
Please see attached pdf

IP Address:[redacted]
Submission: Online Submission from[redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230695

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because: Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

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DPESYDMET Scanned

From: [redacted]
Sent: Monday, 6 November 2017 9:40 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230697_Metrosubmission2017_2017Nov06_2138.pdf

From: system@accelo.comOn Behalf Of[redacted]
Sent: 06 November 2017 21:39:17 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
please see attached pdf

IP Address: [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230697

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

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The metro is not in the public interest but is enabling the over development of the corridor.

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 2:07 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Benjamin Clive (object)

From: system@accelo.comOn Behalf OfBenjamin Clive
Sent: 07 November 2017 14:06:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Benjamin Clive (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Benjamin Clive
[redacted]

Address:
[redacted]

Sydney, NSW
2204

Content:
I do not believe the impact on the amenity would be low, considering the destruction of local habitat and vegetation that is planned. Noisy and intensive 24/7 construction works will be carried out while the line is shut down. residents are at risk of sleep disturbance, and increased vibration levels. This project is a benefit for the people who live in Bankstown, as they will get a morning seat, the brochure says their will be less seats than we have now. What are the benefits to the commuters in between the 2 end stations, between Marrickville to Dulwich Hill station?

No community consultation, Increased risks associated with driverless trains, and Millions of dollars in over-development and major impacts on the heritage of the area. We have a functioning service already. Why replace it at huge expense and inconvenience to residents?
We do not need a large construction on approach to the Albermarle St over bridge. Widening this section of road will encourage more traffic through the area. Traffic calming needs to be addressed. The bridge must be a low impact design, a one size fits all approach does not work in unique, conservation areas.

The Sydney metro favours economics over community requirements.
Stop and plan for the long term - into the next century, Regenerate the land along the rail corridor to as a green urban space to benefit wildlife and residents quality of life. Aim to reconstruct the natural qualities - treat each part of the landscape as a whole, with interacting eco-sysytems and connectivity.

The current proposal is missing major opportunities to enhance the environment and leave the residents and commuters in an improved position. How can you ensure owners, residents, and stakeholders in the community will be better off than before the works began. Do not leave us with a degraded landscape and no established vegetation or maintenance plan to follow.
There needs to be a comittment to remediation.
We live in a quiet residential area. The development should reflect our natural heritage and community goals.

IP Address: [redacted]
Submission: Online Submission from Benjamin Clive (object)
https://majorprojects.accelo.com/?action=view_activity&id=230827

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade

https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 10:37 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Diane Collins (object)

From: system@accelo.comOn Behalf OfDiane Collins
Sent: 07 November 2017 22:37:10 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Diane Collins (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Diane Collins
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
i wish to protest in the strongest terms to the proposed changes to the Sydenham-Bankstown rail line.
First, this is a MASSIVE inconvenience for local residents given that the line will be closed for significant periods of time with the consequently untenable increase in bus and road traffic. The roads are already jammed and will become more so given the proposed parallel increase in population densities.
Not only will the construction phase this make access to the city and surrounding suburbs extraordinarily difficult by public transport - upon which many people rely - but the congestion issue is intensified by the need to make changes to road bridges. The consequent level of transport disruption - and noise - that comes with this project is utterly unacceptable.
Added to this is the FARCE of tearing up an existing heavy rail line for a metro, single decker line which provides considerably reduced passenger seating - and thus comfort - and no overall increase in volumes carried over the existing new train timetable. There is also the need to renovate existing train stations And for what? A driverless, unionless train service without direct access to the city circle route and offering a decidedly inferior passenger service in terms of frequency, comfort and passenger numbers.
Since there is no sensible reason to destroy an existing train line that works well for local residents, the only rationale can be initiate a developer frenzy of - in all probability - poorly constructed, poorly thought out high rise development, this increase in housing densities occurring without any where near adequate provision for public facilities - including - at the very least -open spaces, schools and hospitals.
Yes, cities change and populations expand. But the proposed development is an appalling and unnecessary assault on existing public infrastructure that encourages the worst kind of highly politicised, developer-driven urban alteration which can only degrade the Sydenham-Bankstown transport corridor as a place to live and commute in and thus the health, efficiency, attractiveness and heritage of Sydney as a whole.

[redacted]
Submission: Online Submission from Diane Collins (object)
https://majorprojects.accelo.com/?action=view_activity&id=230942

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown

https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Tuesday, 7 November 2017 10:39 PM
To: DPESYDMET Email
Subject: FW: Submission Details for I Tyrrell of UNSW (object)

From: system@accelo.comOn Behalf OfI Tyrrell
Sent: 07 November 2017 22:39:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for I Tyrrell of UNSW (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: I Tyrrell
Organisation: UNSW (Emeritus Professor)
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
T I am opposed to this proposal because of the disruption that will be caused-- it is interesting that in the application, converting other sections of heavy rail elsewhere in the city to light rail is dismissed because of the potential disruption! But it's O.K. to dump this sort of thing on Marrickville! One can be sure from other projects (e.g., the Marrickville Station upgrade recently) that the project will not be delivered on time, and that the project will be tormenting residents for many months more than promised as estimated, due to noise, traffic, and buses replacing trains.

The idea of a four minute train service in peak hour is pie in the sky. It simply won't happen any more than any of the other promises this government makes.

The whole project doesn't make sense without the proposed residential development proposed for the land corridor. But the problems with finding and using that land without destroying the suburbs and their current liveable amenity are immense. I am completely opposed to that project. The land corridor project should be decided on BEFORE the metro option past Sydenham is even applied for.

The new system would mean that when I use the rail to travel to the city, I will have to change at Sydenham. That creates problems in terms of finding a seat. The trains coming from the south are already overcrowded. Meanwhile getting on at Marrickville there will be no seats left, and there is going to be much more standing room only on the metro. As an older person I'll be therefore forced to stand ALL the way from Marrickville to the city! It's unfair to pensioners. It's DISCRIMINATORY.

A further objection is to the introduction of "Australian-first platform screen doors improving customer safety and allowing trains to get in and out of stations much faster." These will disfigure the heritage federation stations of Marrickville and Dulwich Hill, and are aesthetically incompatible with them.

So I oppose this project as it is socially and economically disruptive, will not deliver what is promised, will disrupt the traffic immensely on the roads during the construction, will destroy heritage values in the existing stations (including buildings at Dulwich Hill and Hurlstone Park); and will not produce an improved service but rather will provide less seating.

[redacted]
Submission: Online Submission from I Tyrrell of UNSW (object)
https://majorprojects.accelo.com/?action=view_activity&id=230944

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

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From: [redacted]
Sent: Tuesday, 7 November 2017 1:50 PM
To: DPESYDMET Scanned
Subject: Emailing: Scan 23.pdf
Attachments: Scan 23.pdf

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Director Infrastructure Projects

Major Projects Assessment

Dept Planning and Environment

GPO Box 39

Sydney, NSW 2001

Personal Submission to the Environmental Impact Statement Sydney Metro Sydenham to Bankstown Upgrade

Name: Tina. Aalea.

Address: 50 Kilbride St Hurlstone Park

Application No: SSI17_8256

I do not consent to my name being published

I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

It is not necessary to solve the problems of congestion in the Sydney rail network. There are alternative ways which would not involve the replacement of a functioning line and would allow the Metro to be diverted from Sydenham to suburbs not as well served by public transport.

The Metro is not necessary to meet the transport needs of the current already increasing population. Additional housing, at the level being proposed, is increasingly controversial. The corridor is already densely populated. In any case the claim that the Metro would carry significantly more peak hour passengers in questionable.

Stations can be made more accessible and safer without a metro conversion. This has already occurred at Marrickville.

Stations along the line include buildings of heritage significance, some of which would be demolished, to meet the requirements of Metro trains. The station design proposed for Hurlstone park station does not suit the local character.

I object to the huge disruption and inconvenience residents and commuters would have to tolerate for the five years of construction.

The alternative transport required for 8 weeks a year in school holidays plus more than 4 weekends for 5 years, as well as at least 3 to six months at the end of the project is inadequate. The additional buses required to carry 100,000 passengers a day would increase traffic congestion and the delays involved cause stress to commuters.

In Hurlstone Park the disruptions would include:

- Extra noise, especially for those closest to the railway line, sometimes at night
- Possible damage to buildings due to the vibration of heavy machinery
- Heavy truck traffic, noise and dust for those living on streets used as "haulage routes". This includes my own street, which would lead to a work site.

The Metro is not in the interest of residents of the corridor or for those in suburbs served poorly by public transport.

Signature: Irina. Aalea.

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 1:50 PM
To: DPESYDMET Scanned
Subject: Emailing: Scan 24.pdf
Attachments: Scan 24.pdf

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Director Infrastructure Projects

Major Projects Assessment

Dept Planning and Environment

GPO Box 39

Sydney, NSW 2001

Personal Submission to the Environmental Impact Statement Sydney Metro Sydenham to Bankstown Upgrade

Name: JOHN - GAREA.

Address: 50 KILBRIDE ST HURSTVILLE PARK

Application No: SSI17_8256

I do not consent to my name being published

I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

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Signature:.....

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 1:51 PM
To: DPESYDMET Scanned
Subject: Emailing: Scan 30.pdf
Attachments: Scan 30.pdf

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By 8 November 2017, mail to:
Attn: Director, Infrastructure Projects
Major Projects Assessment
Dept Planning and Environment
GPO Box 39
SYDNEY, NSW 2001

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: [redacted]

Address: [redacted]

Application number: SSI 17_8256

-☐ I consent to my name being published

-☑ I do not consent to my name being published

-☑ I have no reportable donations to disclose

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- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care

centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.

- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plan to replace the existing, historic Sydenham-Bankstown rail line represent a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.... 

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 1:51 PM
To: DPESYDMET Scanned
Subject: Emailing: Scan 31.pdf
Attachments: Scan 31.pdf

Your message is ready to be sent with the following file or link attachments:

Scan 31.pdf

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

By 8 November 2017, mail to:
Attn: Director, Infrastructure Projects
Major Projects Assessment
Dept Planning and Environment
GPO Box 39
SYDNEY, NSW 2001

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: [redacted]

Address [redacted]

Application number: SSI 17_8256

-□ I consent to my name being published

-☑ I do not consent to my name being published

-☑- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care

centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.

- some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

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- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plan to replace the existing, historic Sydenham-Bankstown rail line represent a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.....[redacted]

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 10:40 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Christopher Murphy (object)
Attachments: 230946_Metro_HPA shortsubmission_Oct2017 3_2017Nov07_2238.pdf

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From: system@accelo.comOn Behalf OfChristopher Murphy
Sent: 07 November 2017 22:39:26 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Christopher Murphy (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Christopher Murphy
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
See File attachment 1

[redacted]
Submission: Online Submission from Christopher Murphy (object)
https://majorprojects.accelo.com/?action=view_activity&id=230946

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Name: Kathleen and Chris Murphy

Address: 24 Canterton Street. Hurlstone Park 2193

Application number: SSI 17_8256

-□ I consent to my name being published

-□ I do not consent to my name being published

-□- I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

The Bankstown line does not have large event and public places, such as Homebush, that justify this development. Nor is there a large CBD with high employment capacity in service and educational facilities, such as Parramatta.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings
- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage listed properties, close to the project will suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd

- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items such as platform properties is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature.....Chris and Kathleen Murphy.....

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 1:34 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Tealia Scott (object)
Attachments: 230817_current_weed_infested_turf_2017Nov07_1326.pdf; 230817_guideline-for-batter-surface-stabilisation-using-vegetation_2017Nov07_1326.pdf; 230817_Kunzea_ambigua_2017Nov07_1326.pdf; 230817_Marrickville DCP 2011_ 2_18 Landscaping and Open Spaces_2017Nov07_1326.pdf; 230817_Screenshot-2017-11-6 TUS_report_v3_ TUS_report_Web pdf_2017Nov07_1326.pdf

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From: system@accelo.comOn Behalf OfTealia Scott
Sent: 07 November 2017 13:28:02 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Tealia Scott (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Tealia Scott
[redacted]

Address:
[redacted]

Sydney, NSW
2204

Content:
I object to the application in its current state. The Sydney Metro development will negatively affect the amenity of our area. I am greatly concerned about the impacts to local fauna & flora communities & species as a result of this project. I do not agree with your EIS report that the impacts will not be significant given how little native vegetation now exists in the area.

It is clear that Sydney Metro is missing an opportunity to create a connected, green corridor for wildlife & safeguard green urban space. Species thrive in natural vegetation, such as along rail-lines. Green urban spaces are prized in most developed cities around the world. There is no doubt that we need improved public transport networks to service our growing population & the protection of our remaining green spaces should be integrated into them.

I am highly concerned about the departure from measuring the benefits of a development proposal against community and environmental impacts or benefits in favour of economic considerations.

Sydney Metro must consider the needs, interests & activities of the owners & stakeholders of the surrounding land. How can you ensure that you will leave the land improved? There must be revegetation and remediation of degraded landscapes, and minimal impact on the existing remnant bushland.

Stop, think & plan land use for the next few centuries or millennium, rather than decades. It is poor policy & wrong to plan, analyse & make decisions based on unnatural boundaries. In basic environmental terms, any piece of land is part of a bigger picture, & requires full-systems approach. Do not examine each part in isolation to others.

Existing Environment

The rail corridor, Marrickville Station to Dulwich Hill Station was once a part of the Ecological Community of Sydney Turpentine-Ironbark Forest. The Sydney Turpentine-Ironbark Forest is listed as an Endangered Ecological community under the NSW Biodiversity Conservation Act 2016.

There are pockets of remnant bushland, including many species listed as Vulnerable within the rail corridor.

Probably the most significant survival in the area is a small patch of native grassland of Kangaroo Grass Themeda australis & Plume Grass, species Dichelachne, on the edge of the railway cutting at the city end of Dulwich Hill Railway Station. This is an important survival story of the grassland understorey of the "Kangaroo Ground" shown on Lieutenant Watkin Tench's 1793 map.

Shrubby heathplants of Kunzea ambigua & Lomandra longifolia survive on the sandstone cutting at Kays ave. Dulwich Hill, & around the over bridge at Challis Ave & Albermarle St Marrickville. Weeds may crowd out some smaller native plants.
See attached photo, Kunzea ambigua survive Albermarle St Marrickville
Remnant Turpentine trees Syncarpia glomulifera & Blacthorn Bursaria spinosa beside the railway line east of Hurlstone Park Station.

Fortunately the ability of some species & relics of ecosystems to `hang on' in an urban environment can be surprising. Yet these areas are generally low in biodiversity, & the native species that do exist have to compete with introduced species and a highly fragmented landscape

Habitat Biodiversity

The value of bushland is finally recognized, the importance of protecting our natural biodiversity, that is the total assemblage of plants, animals including insects and other invertebrates, microbes etc together with their specific habitats & environments.
An area of relatively little usage, because of limited human access, such as the rail corridor, could become a valuable wildlife habitat and protect the important remnant shrubs. Seed from other remnant species could be used to provide additional shrubs to maintain the local genetic pool. Implementing methods to protect the little remaining remnants of native vegetation in the area is essential.

Large numbers of hollow bearing trees are also under threat from Sydney Metro.

Bush fragments without connecting corridors can lead to local extinctions.
Knowledge of their locations & importance should be incorporated into management plans.

Albermarle St over bridge

The EIS report states clearly the methods Sydney Metro will use to build barriers within & disconnect the landscape. Hard surfaces, throw protection screens, high impact concrete/perspex walls, fencing, removal of vegetation all spells loss of habitat & an environment favouring pest plants & animals.

See attached photo of current "lawn" management & expensive, repeat slashing control of noxious weeds

The new Albermarle St over bridge, where vegetation is removed, opens up views to & from the adjacent residential properties & gardens. Including the construction of new metro telecommunications masts, signaling equipment & throw protection screens returning along Albermarle st would be clearly visible.
There is no mention of how the area will be improved after the Sydney Metro "upgrade" It is over development in a heritage conservation area & does not reflect the character and culture of the area.

The bridge design should be a low impact design, with traffic calming measures to reduce the potential traffic increase on our quiet residential streets. The widening & expansion of roads have been shown to encourage more cars, even though areas simply cannot accommodate them. It is the local community that suffers the consequences, yet the community's ability to genuinely participate in the assessment of large-scale infrastructure projects has been a major casualty of NSW's poor planning track record.

Conservation

The protection of remaining natural areas must always be the number one priority, with a commitment to remediation, aiming to reconstruct the historical vegetation in heavily modified areas.

Significant conservation outcomes are possible but only if a set of guiding
Principles are created and all levels of government commit to preserving what's left, & maintaining and improving connectivity. Example, the successful completion of the Kays Ave, Dulwich Hill, native rain garden & stormwater catchment project.

The habitat fragmentation caused by clearing & other human-related disturbances has been described by Sydney's Royal Botanic Gardens as "one of the most serious ecological threats confronting the long-term survival of flora &

fauna"

This is most particularly the case when ecological communities are restricted to small isolated pockets that produce in-breeding, lost connectivity between populations, & greater vulnerability to unpredictable environmental events.

Revegetation

Instead of total vegetation removal there are options.

Remediation planting can be executed in the groundcover & shrub plant layer.
There are many alternatives to replacing vegetation with concrete capping. Re-establishment of local native vegetation to stabilise bank sediments by generating a network of roots is one. The bioengineering methods for slope stabilization & erosion control have a number of advantages. They are generally low cost & easy to install, & rather than disintegrating over time, their strength increases as root systems develop & the structures become more stable. Stabilization measures may be used to remove loose rock, secure it in place with bolts, or to drape mesh, weed matting on the slope.

Potential of falling vegetation has been sited by Sydney Metro as the main reason for total removal of vegetation, as highlighted in the EIS; the above solution removes the hazard. This site-specific control remedy will protect the remnant patch of Kunzea ambigua on Albermarle St Southside, & deliver effective bank stabilization along the corridor. To reduce the risk associated with driverless trains & computers who cannot respond to debris & other foreign matter on the tracks, the lower plant layers can be planted in.

Natural vegetation contributes to a more pleasant landscape in which to live.
DCP
2.18.13 List of preferred native plant species
See attached pdf. file.

Guideline for Batter Surface stabilization using vegetation
See attached pdf. file

LGA Biodiversity Strategy 2011-2021

Our Nature, Our Vision is a LGA strategy providing actions to meet the challenges of urban biodiversity management. The plan reflects the ideals through well co-ordinated community engagement for the process of protecting what is left.
An increasing prioritisation of the natural environment has occurred with demographic changes to inner Sydney in the past two decades.
Built-in sustainability is in the community's long-term interest. Solid working relationships between all relevant community, council, developer and state government parties have been proven to ensure the most effective strategic planning for open space, habitat & corridor values. Marrickville council have worked hard on environmental policies to promote enhanced biodiversity, replace exotic street & park plantings with native species & new vegetated verges & rain gardens.
Anecdotal reports suggest that wildlife seems to have responded to this change in environmental focus with increased populations & greater species diversity in Marrickville & Dulwich Hill. This is also reflected in the increased number of WIRES (Wildlife Information Rescue and Education Service) rescues over a
10-year period with a dramatic rise in bird numbers & the reappearance in the area of the long-nosed bandicoot, not recorded in the area since the 1950s. It is hypothesized that the bandicoots had used increased vegetation around the inner west goods line as a corridor to re-establish themselves in the area.

Please refer to attached WIRES database - Inner West branch
These areas are capable of supporting a range of species (particularly birds) & are vital to the conservation network. Long-term strategies should aim to provide habitat for those species that were once common in the urban landscape, but are now in decline.

Future planning

Significant conservation outcomes are possible, the scope for Sydney Metro to create habitat, complemented by connectivity of large continuous areas of vegetation where possible, that can be used by a wide variety of native species is strikingly evident when one looks at the bigger picture. Maintenance efforts should be conducted at a rate that minimises disturbance & provides ongoing habitat. The removal of exotic vegetation should be undertaken with caution & preferably following the establishment of native species. Providing for a co-ordinated approach & a variety of funding opportunities that assists local government to deliver the plan's objectives.

Sydney is one of the few major cities that can take pride in having an urban population living closely to where natural ecosystems still survive. The sights & sounds of wildlife, & the pleasure of encountering animals are part of the quality of life in Australia. This is a significant part of our heritage as Australians & a unique part of the heritage of each district.

As the population & densities increase, the greater metro region faces significant challenges in the 21st century. Rather than choosing between parks & bushland, & annexing green space for people to live in, which is an unsustainable short term fix, the governance of Sydney should make long term plans for both to coexist & prosper.

[redacted]

Submission: Online Submission from Tealia Scott (object)
https://majorprojects.accelo.com/?action=view_activity&id=230817

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501


WARNING
QENOS PTY. LTD
HIGH PRESSURE
GAS PIPELINE

Roads & Maritime

Guideline for Batter Surface Stabilisation

using vegetation

About this release

	Guideline for Batter Surface Stabilisation using vegetation

Approval and authorisation		Name
Prepared By	A/Environment Manager Performance Improvement	Scott Machar
	Environment Manager Performance Improvement	Sean Hardiman
	Landscape Advisor	Leigh Trevitt
Approved By	Principal Manager Environment Operations	David Featherston

Version	Date	Revision Description
1.0	April 2015	Publication of Guideline for Batter Surface Stabilisation using vegetation

Acknowledgements

This publication includes material prepared for the Roads and Maritime Services by LandLoch Pty Ltd.

Contents

Section 1
Use and scope of this guideline

The construction and maintenance of roads often results in long linear stretches of 'batter' adjacent to the road alignment that are exposed and at risk of erosion if left unstabilised. This document has been prepared to provide guidance for NSW Roads and Maritime Services staff and contractors on batter surface stabilisation solutions using vegetation.

1.1 Purpose

The purpose of this guideline is to provide guidance on the suitability of various batter surface stabilisation techniques using vegetation for a range of site conditions.

The Guideline considers:

- Factors that should be used to select appropriate batter surface stabilisation solutions
- The aspects of specific batter surface stabilisation techniques
- Existing Roads and Maritime specifications, procedures and guidelines
- Application for both temporary vegetation cover and long-term landscaping requirements
- The ability to use both temporary and long-term methods to achieve stability.

1.2 Scope

The Guideline addresses common batter surface stabilisation scenarios using vegetation that are likely to be encountered by Roads and Maritime staff and contractors during the construction and maintenance of roads in NSW regardless of their scale or extent of works. It includes sufficient detail on a range of batter surface stabilisation techniques to allow users of this Guideline to make informed decisions on which techniques are most appropriate for their given site. Users of this guideline must consider the whole of life maintenance costs and safety in design, construction and maintenance activities.

The Guideline does not address geotechnical or civil engineering aspects of batter surface stabilisation and a separate assessment of geotechnical stability should always be conducted. The techniques described in the Guideline can be used to aid geotechnical stability. It is important to note that the Guideline is for surface stabilisation. **All references to "stabilisation" should be read as "surface stabilisation".** Whenever there is doubt about the geotechnical stability of a batter contact your local Environment Officer for further advice on other disciplines and expertise to be sought (see Section 5 Contacts).

1.3 How to use this guideline

Readers are encouraged to use the digital version of this Guideline as hyperlinks are provided throughout to allow easy navigation between sections – they are indicated with blue underline.

The Guideline provides background information in Sections 2-6, and then uses that background information to detail a range of specific batter surface stabilisation techniques in Section 7 Fact sheets.

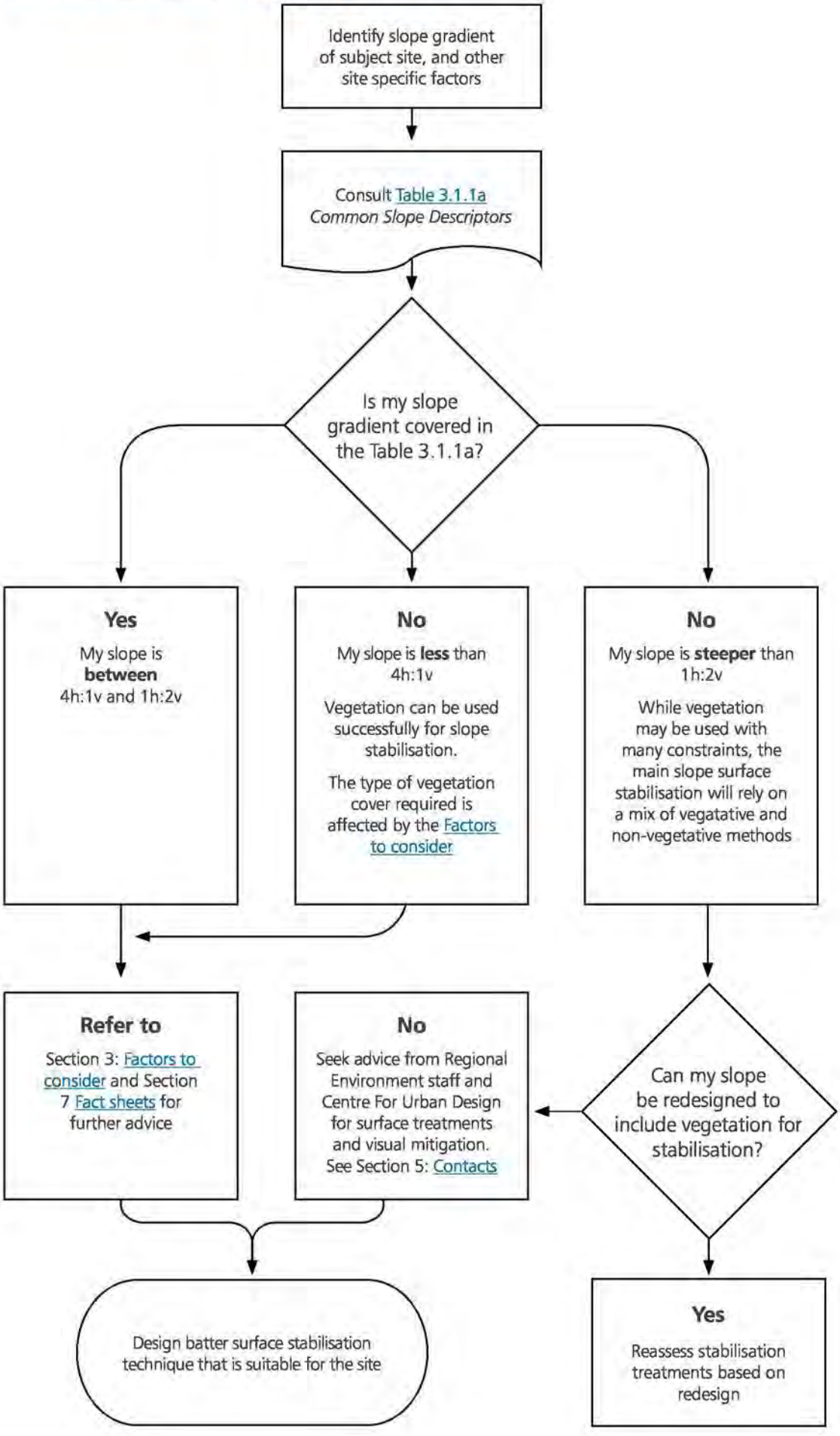
The limiting factor in most batter surface stabilisation scenarios is the batter slope. Section 2 provides a Decision support table that can be used to shortlist the batter surface stabilisation techniques that might be suitable for a given site, based on the slope of the batter/s in question. It also provides indicative information on the cost of each technique and the likely timeframe until erosion protection is achieved for each.

Once the slope of a batter has been used to shortlist potentially suitable batter surface stabilisation techniques, there are many other factors that must be considered in order to select the most appropriate batter surface stabilisation technique for a given site. Information on other Factors to consider is provided in Section 3.

Section 7 provides a series of fact sheets on the range of Batter Surface Stabilisation Techniques that are available, including detailed information on the Factors to consider as they relate to each technique.

The process for using this Guideline is shown in Figure 1.3, over page.

Figure 1.3: Process for using this guideline



Section 2
Batter surface stabilisation – Decision support table

Table 2 – Decision support table provides a summary of the slope conditions for each batter surface stabilisation technique that might be suitable, as well as the indicative cost of each to install and the time period until each technique will provide surface erosion protection (see Key below). The information should only be used for the purposes of short-listing potential stabilisation options for a particular site. The relevant factsheets should then be consulted to provide details about each technique and to select the most appropriate option/s from the shortlist.

Key

Suitability for Slope	
	Technique is likely to work for slope
	Technique may work for the slope, if supplemented with other techniques
	Technique is not likely to work for the slope

Indicative Cost (at time of publication)	
	Low (~ $0.15 – $1.50/m²)
	Moderate (~ $1.50 – $5.00/m²)
	High (~ $5.00 – $10.00/m²)
	Very High (~ $10.00 – $35.00/m²)

Time until erosion protection	
	Slow (relies on establishment of vegetation)
	Rapid (within 48 hours, but erosion protection will be enhanced with vegetation establishment)
	Rapid (within 48 hours)
	Immediate (effective as soon as installation is complete)

Table 2 – Decision support table

Batter stabilisation technique	Indicative cost	Time until erosion protection	Suitability for slope (described as horizontal run (h) to vertical rise (v) – see Table 3.1.1a)					
			4h:1v	3h:1v	2h:1v	1.5h:1v	1h:1v	1h:2v
Drill/Broadcast seeding	$							
Soil binder – Bitumen emulsion	$							
Soil binder – Tackifier	$							
Mulch/Topsoil mixes	$							
Hydroseeding	$							
Straw mulching	$							
Hydromulching – Standard	$							
Hydromulching – Bonded fibre matrix	$							
Hydromulching – Hydrocompost	$							
Erosion control blanket – Organic fibre	$							
Erosion control blanket – Synthetic	$							
Cellular confinement systems	$							
Compost blanket	$							
Placed turf	$							
2-D turf reinforcement mats	$							
3-D turf reinforcement mats	$							

Section 3
Factors to consider

The stability of a landform surface is a function of many factors. Some factors, such as site access (see Section 3.7) and Bioregion (see Section 3.6), are relatively constant over a significant area and not readily changed. However, other factors such as the growing media, vegetation type and (less often) slope length are variable and can be tailored to a specific site to achieve appropriate batter surface stabilisation. To ensure successful batter surface stabilisation, it is important that all relevant factors are considered. Generic information about these factors is discussed in the following sub-sections – this information can be used to help interpret the Fact sheets (see Section 7) about specific batter surface stabilisation techniques.

The following list of factors is not exhaustive. There may be other factors relevant to your site that may also require consideration (eg hydro-geography). Contact your local Environment Officer (see Section 5) for further advice on other site specific issues if required.

- Slope
- Level of erosion protection
- Growing media
- Soil and growing media testing
- Soil amelioration
- Bioregion
- Access requirements
- Duration
- Visual amenity and ecological outcome
- Vegetation type
- Establishment time until erosion protection
- Cost
- Preparation
- Rate of vegetation establishment
- Quality assurance and surveillance
- Establishment and maintenance.

3.1 Slope

The most significant aspects relating to the slope of a batter are the slope gradient and the slope length. For the purposes of this guideline, where a batter has complex shapes or multiple gradients, the selection of a stabilisation technique should be based on the steepest gradient and the longest slope on the given batter. Different stabilisation techniques may be used concurrently.

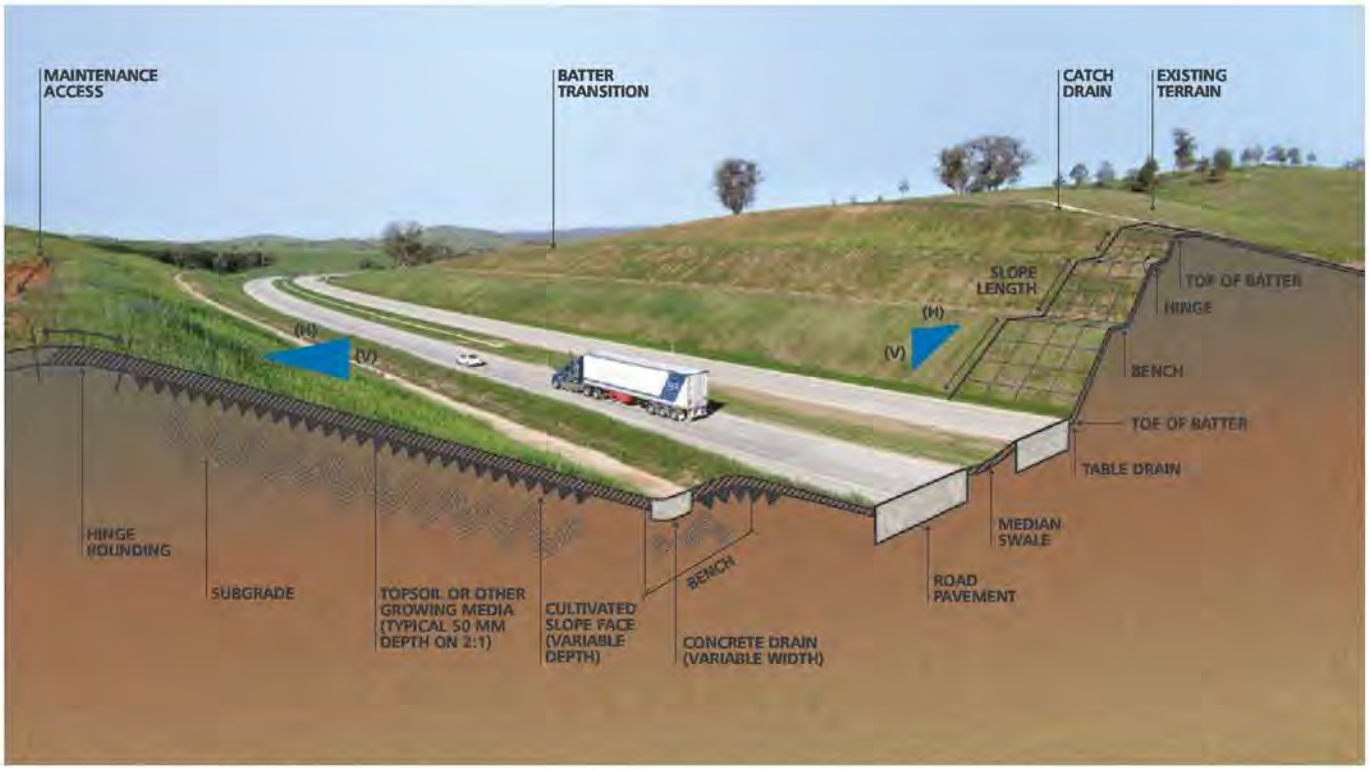


Figure 3.1: Typical profile of a batter.

3.1.1 Slope gradient

The slope gradient of a batter is usually the most significant parameter when considering any stabilisation technique. This must be determined using accurate site survey data, which may include site modifications during construction. Slope gradient can be defined in a number of ways, however the most common ways are as the horizontal run to vertical rise of the slope, ratio or as a percentage slope. Slopes can also be referred to as the angle however these are not widely used. For example:

- If a slope has a vertical rise of 1 metre over a horizontal distance of 10 metres it is referred to as having a slope of 10h:1v. This convention will be used throughout this document
- The slope percentage is calculated as the rise of the slope divided by the run, multiplied by 100. So a 10h:1v slope is [(1/10) x 100], which equals 10 percent.

When constructing roads and the associated batters, it is important to ensure that the batter slope gradient is appropriate for the geotechnical and erosion characteristics of the soil. If unsure, seek further advice (see Section 5).

In general, topsoil should not be placed on slopes steeper than 2h:1v without any additional means of stabilisation as there is a high risk of the topsoil slipping off the slope. Further, slopes steeper than 2h:1v are unsafe for access on the slope face without fall attenuation devices. The maximum thickness that topsoil should be applied on a given slope is summarised in Table 3.1.1b. Topsoil may be blended or conditioned with other materials to increase the depth if required.

The slope gradient influences:

- The ability to apply and hold topsoil or some other growing media on the slope
- The ability to incorporate ameliorants into the soil on the slope in-situ
- The type of machinery and equipement needed to prepare the slope and undertake stabilisation works and
- The erosion risk from run-off velocity and slip failures.

Table 3.1.1a provides examples of the common slope descriptors.

Figure 3.1.1: Topsoil being progressively applied over a prepared batter.

Table 3.1.1a: Common Slope Descriptors.

	Slope as 'x' in 1	Slope as horizontal run (h) to vertical rise (v)	Slope as percentage	Slope as degrees from horizontal	Landscape (adapted from NSW Department of Primary Industries, 2009)
	4 in 1	4h:1v	25%	14°	Moderate slope
	3 in 1	3h:1v	33%	18°	Steep slope
	2 in 1	2h:1v	50%	26°	Steep slope
	1.5 in 1	1.5h:1v	66%	33°	Very steep slope
	1 in 1	1h:1v	100%	45°	Very steep slope
	0.5 in 1	1h:2v	200%	63°	Very steep slope

Table 3.1.1b: Maximum Topsoil Thickness by Slope.

Slope	Maximum Topsoil Thickness
> 2 in 1	Seek advice from local environment officer.
3 in 1 ≤ 2 in 1	50 millimetres.
≤ 3 in 1	100 millimetres.

Note: the ability of a slope to hold topsoil is dependent on site-specific conditions and slope design. Seek advice if the batter topsoils need to be a different depth to those indicated in Table 3.1.1b.

3.1.2 Slope length

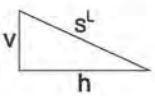
The length of the batter slope influences the potential for erosion*. As the slope lengthens, so does the potential overland flow and associated erosive forces. On very long slopes, these forces are generally observed as sheet erosion at the top of the batter, turning into rill erosion at the bottom of the slope (see Section 3.2). The distance over which this will occur is based on a number of factors including:

- Slope gradient
- Soil type
- Surface roughness
- Surface cover

To minimise the erosion caused by long slope lengths and to maximise the efficiencies of the stabilisation treatments applied to the batter, consider some general controls used in soil conservation such as breaking up the slope length with benches or terraces. It is critical that any control or bench be installed in a continuous line along the contour. Otherwise, gravity will direct water along the control and eventually concentrated flow will be directed to a single location where it could cause significant erosion. Gradient benches or terraces are constructed along the face of a slope to reduce erosion by capturing surface runoff and directing it to a stable outlet at a speed that minimizes erosion and prevents ponding. Concrete lining of these controls, such as catch drains, may be necessary to prevent erosion and infiltration to the slope.

* Slope length is the total distance from batter hinge to toe, calculated by:

$$S^L = \sqrt{(h^2+v^2)}$$



Advice can be sought from an independent soil scientist on the maximum slope length that should be allowed based on the erodability of the soil. Where advisory lengths are exceeded then consideration should be given to re-engineering the batter to conform with the slope length, or selecting a more robust stabilisation technique.

Figure 3.1.2a: A large batter slump due to insufficient batter preparation.

Figure 3.1.2b: A batter that had been incorrectly vertically scarified during construction, creating preferential flowpaths for runoff, which has started causing rill erosion.

3.2 Level of erosion protection

In most Roads and Maritime road construction projects upstream surface flows are diverted away from batters using catch drains and benches. This means that the batter surface stabilisation technique used and any subsequent vegetation that grows only has to withstand raindrop splash impact and overland flow generated on the batter itself. The stabilisation techniques described in this Guideline assume that upstream overland flows are diverted away from the slope. It is also important to ensure that water does not pond on or above the slope, particularly where dispersive soils are present.

There will be situations however, on lower standard or older roads where concentrated or overland flows are not diverted away from the slope. Such conditions will require more intensive stabilisation techniques to withstand the flow velocities and avoid erosion and slumping.

However, in all situations some volume of water will flow over a batter, and each stabilisation technique will provide a different degree of erosion protection to withstand the flow conditions. There are three broad categories of flow conditions, as described in Table 3.2.

Table 3.2: Flow Conditions.

Flow condition	Description
Raindrop splash impact	Minimal erosion potential. The first stage of the erosion process. The energy of raindrops hitting the soil surface can displace soil particles and destroy soil structure. This enables the soil particles to be transported downstream when either sheet flow or concentrated flow occurs. See Figure 3.2a.
Sheet flow	Moderate erosion potential. When water flows down a relatively smooth slope with a thin, consistent depth and is not concentrated into channels. See Figure 3.2b.
Concentrated flow	High erosion potential. When runoff is concentrated in well-defined channels. The concentration of the water results in increased velocity and energy and hence erosion potential. See Figure 3.2c.

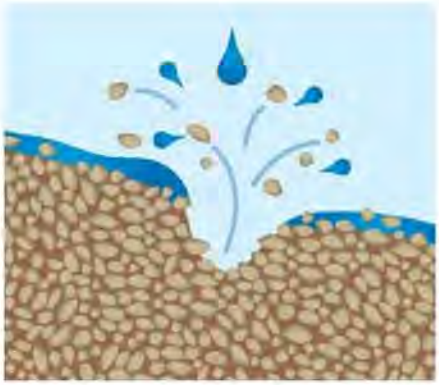


Figure 3.2a: Raindrop splash impact displacing soil particles and allowing downstream transport.

Figure 3.2b: Sheet flow over batter, Pacific Highway, Glenugie Upgrade.

Figure 3.2c: Concentrated flow on a batter during a heavy rain event.

3.3 Growing media

All of the stabilisation techniques presented in this Guideline should ultimately involve the use of vegetation to assist in the stabilisation process. All vegetation needs suitable growing media to germinate, grow and persist – this includes site-won soil, imported soil and other soil replacement products. During construction the natural soil profile is substantially disturbed by stripping, stockpiling and changing the landforms by cutting, filling and creating mounds or basins. Respreading topsoil can mix multiple soil layers and significantly alter the physical, chemical and biological properties of the soils from those that existed pre-disturbance.

3.3.1 Types of growing media

The most common growing media that will be used when undertaking revegetation works include:

- Topsoil – the upper, outermost layer of soil (usually the top 5–20cm) typically comprised of the O and A horizons and contains the highest concentration of organic matter and micro-organisms and is where most of the biological soil activity occurs. The depth and quality of topsoils around NSW have marked variance. Site-won soils may contain weed seed and other deleterious material, but also may contain a native seed bank that can be used for natural regrowth
- Subsoil – the soil beneath the topsoil and overlying the bedrock where the biological, physical and chemical characteristics often inhibit the establishment of plants and require significant amelioration to be a suitable growing media. The subsoil typically comprises the B and C horizons
- Compost – organic matter that has been decomposed and recycled as a fertilizer and soil amendment, or in some cases a dedicated growing media
- Ameliorated soils – additives blended with the soil to improve the growing media characteristics. Ameliorants may include lime, gypsum, fertilisers, compost or other organics. Ameliorated soils should be used in accordance with project specifications and soil test recommendations. Previously disturbed sites may not have any discernible soil horizons.

Growing media intended for use on batters should be provided to enable safe establishment of vegetation that is suitable for thin and dry soils only. The growing media should not be used for water infiltration to the structural batter.

Figure 3.3a: Topsoil being re-applied to a batter, after it was stripped and saved during the construction process.

3.3.2 Growing media quality

The quality and depth of topsoil will vary considerably across regions and sites. It is possible to improve the quality of this resource by direct supervision and surveillance of topsoil stripping activities and adjusting the stripping depth appropriately.

Topsoil is the most important growing media. During construction activities it should be collected and protected for future revegetation wherever possible. Essential elements for plant growth in the soil are accumulated in the topsoil by plant and soil organisms. Plant roots draw nutrients from the soil throughout the soil profile. As vegetative material falls from plants and plants die, the organic material and nutrients end up higher in the soil profile, forming the O horizon (see Figure 3.3.2).

Figure 3.3.1: Examples of different soil profiles from around NSW. The lower two images are supplied courtesy of SESL Australia Pty Ltd.

When stripping topsoils it is critical to:

- Avoid stripping during excessively wet or dry conditions
- Avoid compacting topsoil stockpiles
- Do not mix soil horizons contaminated with weed seeds or deleterious materials
- Revegetate topsoil stockpiles as soon as possible to re-initiate the processes of soil biota.

Topsoil stripping is ideally done after the soil profile is understood. Testing for soil quality can be done at this stage and unsuitable materials separated for improvement and reuse, or disposal. A soil stripping plan outlines the depths of stripping and any identified limitations. Ameliorants may be incorporated during stripping, in stockpile or in-situ (see Section 3.5).

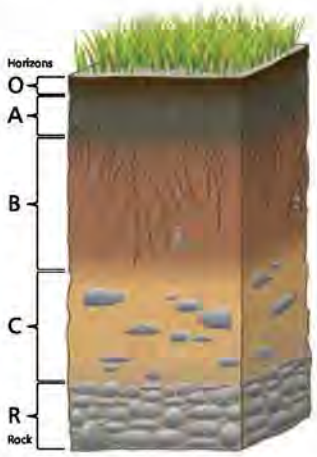


Figure 3.3.2: Soil Horizons.

If not properly managed, the process of stockpiling stripped topsoil can significantly impact soil biota and soil chemistry. The topsoil can change from an aerobic state to an anaerobic state and putrefy. Soil biota can die and the processes they control (carbon conversion, humus formation, water uptake, nutrient cycling, nitrogen fixation) can cease to function.

Site won topsoil and subsoils can usually be reused, but in cases where construction limitations mean that it is not always possible to adequately strip, manage and re-use topsoil, batter surface stabilisation works therefore often involve revegetating on subsoils that do not necessarily have soil properties to sustain plant growth. In these cases, soil amelioration will be required (see Sections 3.4 and 3.5).

The subsoil and/or growing media must not be compacted after preparation or placement over the batter slope. Compaction of the subsoil will causes loss of cohesion of the growing media to the slope, and compaction of the growing media will impair conditions for vegetation to germinate and establish. Note that when topsoil is properly stripped, managed and reused to its optimal quality, there will be benefits in reducing material costs.

There are also pre-existing factors that can limit the availability of topsoil during a construction project. Previous weed infestation at a location can mean that the topsoil can be inappropriate for reuse due to weed seed in the soil which will result in re-infestation of weeds. Topsoil can also be simply unavailable due to previous poor land management activities or existing site conditions.

If there is no topsoil available on site, a growing media must be imported. This could include topsoil from another location or manufactured products such as compost blanket.

No matter what the growing media is, project managers must understand its quality and suitability for the intended use. All growing media, either sourced from site or imported, must comply with the applicable standards for soil, mulch and soil conditioners (eg Australian Standard 4454). There are three basic steps to ensure that appropriate revegetation options are selected and that the chance for successful vegetation establishment is maximised – see Flowchart 3.3.

1. Sample
and test the growing media at an appropriate soil laboratory and obtain a written report detailing recommendations of the materials suitability for re-vegetation.
(see Section 3.4)

2. Ameliorate
the growing media as recommended by an independent soil scientist.
(see Section 3.5)

3. Apply
the amelioated growing media to surfaces prepared in accordance with the chosen stabilisation technique requirements.
(see Fact sheets)

Flowchart 3.3: Achieving suitable growing media.

3.4 Soil and growing media testing

Soils cannot be managed or ameliorated without soil testing data. Revegetation programs worth hundreds of thousands of dollars have failed on road projects due to the failure to undertake adequate soil testing and amelioration of the soil.

Sufficient soil samples must be collected to:

- Account for the different soil types within or proposed for the slope
- Ensure there is sufficient depth for the rooting depth of plants.

In the past soil sampling programs have focused only on the topsoil, however plant roots often extend into the subsoil and therefore understanding the physical and chemical properties of the subsoil is important. To ensure samples are representative of the stockpiled or in-situ soils, advice should be sought from an independent soil scientist on an appropriate sampling regime.

Soil testing should be undertaken as early as possible to allow sufficient time for amelioration, however if growing media conditions have changed (eg stockpile relocation; compaction; mixing with new materials) follow-up testing must be undertaken.

Soil sampling equipment must not contaminate the samples. Stainless steel is the preferred material for sampling equipment. The location of each sample should be recorded using a GPS. Samples should be placed in a sealable, heavy duty, clean, unused plastic bag. Check with the laboratory or a soil scientist for the minimum sample size required for the analysis – this is usually at least 500 grams of soil for each sample. The sample location, depth and date must be recorded on the bag. Samples from stockpiles must include the stockpile marker and sampling location.

A report should be requested from an independent soil scientist that includes results from the testing and recommendations on how to ameliorate the soil. Results will be improved if details of the stabilisation technique and recommended vegetation type are also provided. See Section 5 for contact details.

Figure 3.4: Collecting a soil sample in a clean sterile bag. (Source: SESL Australia Pty Ltd)

3.5 Soil amelioration

The ability to rapidly establish and sustain vegetation growth is essential for effective batter surface stabilisation. Therefore soils must be ameliorated as close as possible to optimum conditions for the desired vegetation outcome. Ameliorants must be mixed into the soil to be effective and may be added to both topsoil and subsoils. Amelioration methods and products are dependent on the growing media quality for each project and may even vary between sections or stages of a project. There is no single formula which will work in all situations.

3.5.1 Types of soil ameliorants

Typical soil ameliorants, and their target soil deficiency, are provided in Table 3.5.1a.

Table 3.5.1a: Typical Soil Ameliorants.

Soil Ameliorant	Target Soil Deficiency
Fertiliser	Nutrient deficiencies must be appropriate for target vegetation type (eg low phosphorus for natives).
Lime	Low pH.
Sulphur	High pH; legume stimulant in some conditions.
Gypsum	Dispersion; sodicity; soil structure; calcium to magnesium ratio.
Compost	Low organic carbon, structure, water holding capacity, calcium to magnesium ratio.
Wetting agents	Hydrophobicity.
Biological inoculants	Lack of natural soil biota such as Rhizobium, Mycorrhiza fungi and humates. High quality topsoil is not always available in the quantities needed to meet the objectives of a revegetation project. In such cases, infertile subsoils can be augmented by the incorporation of organic matter and biological inoculants. This practice can be an important tool to begin the process of rebuilding a soil and re-establishing native vegetation.

Table 3.5.1b – Soil Amelioration Matrix. (Source: SESL Australia Pty Ltd)

		pH (in water)		
		Low (<5.5).	Optimum (5.5–7).	High (>7).
Ratio ca:mg	Low (<3) – These are typically dispersive soils, which are erodable and usually low in Ca.	Add $CaCO_3$ (Lime); raises pH and Ca.	Add CaSO4 (Gypsum).	Add Sulphur or Iron Sulphate + gypsum.
	Optimum (3–8).	Add Magrilime: lime/ dolomite 50:50.	Do nothing.	Add Sulphur or Iron Sulphate.
	High (>8) – these are non-dispersive soils which are subject to compaction.	Dolomite or magnesite; raises pH and Mg.	Add Epsom Salts or Sulphate of Mg.	Add Sulphur + Epsom Salts.

3.5.2 Soil amelioration in-situ

Ameliorants applied to the soil surface can be washed away during rainfall, so must be incorporated into the soil. The depth of amelioration required depends on the desired outcome. Common ameliorants for plant growth such as lime, compost and fertiliser are typically incorporated to a depth of 150 millimetres to 300 millimetres. In some situations, such as highly dispersive subsoil, it may be necessary to incorporate gypsum to a depth of one metre.

It can be difficult to ameliorate soil in-situ on a batter, particularly when the slope gradient is steeper than 3h:1v. Conventional earthmoving equipment can only safely operate on the contour across slopes ≤ 3h:1v. This allows soil ameliorants to be applied cost effectively with broadcast type fertiliser spreaders and then be incorporated into the soil using ripper tynes or scarifiers on machinery such as tractors, bulldozers or graders (see Figure 3.13b).

A bulldozer is only able to work perpendicular to contours on slopes > 3h:1v and < 1h:1v and only under ideal soil conditions. While it may be possible to apply the ameliorants to the slope, it is inappropriate to scarify or rip the slope perpendicular to contours as any ruts in this direction can concentrate flow and will significantly increase the erosion potential of the batter. On slopes steeper than 3h:1v soil ameliorants can be lightly incorporated by excavators using the bucket teeth on a swivelling head attachment or track rolling up the slope, however in most instances the depth of amelioration is too shallow and much of the loose soil needed to provide an appropriate seed bed is lost down the slope.

Figure 3.5.2a: Track rolled batter with horizontal scarification, and seed beginning to germinate.

In these circumstances it is better to use a stabilisation technique that applies and sufficiently holds soil ameliorants on the batter surface and allows them to leach into the soil profile over time (eg Compost blanket). Ameliorants applied to steep slopes by Hydroseeding or Hydromulching are likely to be washed off the slope. Multiple applications of ameliorants will be required over time and this is rarely accounted for in project budgets and difficult to reapply over a partially vegetated site.

Figure 3.5.2b: Lime applied to a batter waiting to be incorporated.

3.5.3 Soil amelioration during soil stripping

Soil amelioration is most effective if undertaken during the soil stripping phase. Ameliorants are applied to the soil prior to soil stripping and they are then easily incorporated during the stripping and stockpiling process.

The type of amelioration and its effectiveness over time must consider the duration and lag between construction stages (see Section 3.8 Duration).

Amelioration using lineal windrows is an easy and effective method where space permits.

3.5.4 Soil amelioration within a stockpile

In some situations soil can be ameliorated in a stockpile. This can only be achieved if the stockpile is of sufficient width to allow a bulldozer to create a flat running area for machinery or trucks to apply the ameliorants. The bulldozer can then furrow the ameliorants into the stockpiled soil. The depth of amelioration must be accurately recorded and marked as the process of amelioration must be repeated once the ameliorated layer has been removed from the soil stockpile and respread.

Stockpiles must be worked and managed carefully to ensure natural soil structures and chemistry are not destroyed.

Figure 3.5.4: Topsoil stockpile that has been set up to allow machinery to apply and incorporate ameliorants.

3.5.5 Amelioration post-establishment

Soils should be retested after initial vegetation establishment to determine if maintenance applications of soil ameliorants are required. This should be done six to twelve months post establishment or if there is evidence of vegetation stress.

3.6 Bioregion

There are 17 bioregions in NSW (see "What is a bioregion?" at NSW Environment and Heritage) Throughout Australia bioregions have been further divided into subregions, which are based on finer differences in biophysical attributes including geology and vegetation. Knowing in which bioregion the batter occurs will assist with selecting the appropriate stabilisation treatment and species in the vegetation mix.

The soils used should match the habitat and ecology of the context of the batter. Retention of locally-occurring materials will provide the best base for the target vegetation type.

It is not always possible to keep topsoils to a specific location due to materials management and construction space. In road projects, the constructed landforms usually change the aspect and microclimates, which in turn affects the possible vegetation types that can be supported on them. Therefore, it is better to match the conditions for target vegetation outcomes using species selected from the bioregion.

Specific ecological and biodiversity issues such as fauna or adjacent threatened species must be considered in the batter revegetation where possible.

See Section 3.10 Vegetation Type and the Roads and Maritime Biodiversity Guideline (2011) for further information.

3.7 Access requirements

The access to a batter that needs to be stabilised can influence the type of stabilisation technique that can be used. Appropriate and safe access is often required for both installation and maintenance of the chosen technique. Proper installation and sufficient maintenance are often critical in achieving successful batter surface stabilisation, so access requirements should be a key consideration when selecting a technique for a given situation.

During installation, machinery such as excavators will require access to the batter and operational space at the batter to be stabilised (eg the reach of an excavator arm to prepare the batter surface or apply stabilisation materials onto the surface). For some more intensive batter surface stabilisation techniques (eg cellular confinement systems, turf, erosion control blankets) manual handling might be required for all or some of the installation. In these cases, the steepness of the batter must be considered in regard to worker safety. Specialised safety equipment such as rigging and harnesses or elevated work platforms might be required, with qualified operators.

Where access is difficult, techniques that can hydraulically apply stabilisation materials (eg Hydromulching, Tackifier) can be considered. However, the preparation requirements of these techniques should be considered, as they may still require significant works to prepare the batter surface prior to application that can only be effectively done using machinery (see Figures 3.13a and 3.13c).

Access for maintenance must be considered and planned during the design phase. Maintenance requirements vary significantly between different batter surface stabilisation techniques, and range from basic monitoring through to full re-application. Many stabilisation techniques will require irrigation for initial setting of tackifiers and germination of seeds, so the ability to apply water should be considered. Access may become limited if the batter is adjacent to a road that is opened to traffic.

3.8 Duration

When planning a batter surface stabilisation project, the timeframe over which the stabilisation is required will be an important aspect in deciding which technique to employ. Where vegetation is an integral part of the stabilisation technique, the Vegetation Type (see Section 3.10) will influence the duration over which the technique remains effective.

All long-term stabilisation techniques must be enduring and match at least the design life of the road infrastructure. Permanent vegetated areas must achieve 40–100 years, although a stable site will grow in perpetuity.

The effective duration of temporarily unvegetated, or the non-vegetative components of vegetative stabilisation techniques, can vary significantly, from as little as one month up to several years. The cost of a stabilisation technique is often proportionate to its effective duration, so the period that stabilisation is required should be considered in conjunction with long-term landscape requirements. There is little value in investing in an expensive technique that can remain effective for up to three years, if final landscaping will be installed in a matter of months.

The duration claims of proprietary products should be carefully scrutinised, as they are often reliant on ideal conditions that are rarely present on dynamic construction sites. Correct implementation using manufacturers' instructions and advice from soil scientists, landscape designers and ecologists will maximise the effective duration for these proprietary products. The Fact sheets (see Section 7) at the end of this Guideline provide some indicative duration timeframes for generic stabilisation techniques.

3.9 Visual amenity and ecological outcome

Often there are competing needs in a given revegetation situation. A challenge for batter surface stabilisation is to ensure that temporary stabilisation techniques and the final desired permanent landscape outcome do not conflict each other. Rapid surface cover using non-local grasses is often needed to provide temporary stabilisation and to maintain the desirable soil properties, but these grass species may out-compete the native species that are part of a landscape plan to provide a permanent visual amenity and ecological outcome.

The long-term visual amenity and ecological outcome should always be considered when short-term stabilisation techniques are being planned. There are numerous techniques that can be used to successfully transition from short-term stabilisation to the long term visual amenity and ecological outcome, such as:

- Using non-vegetative options (eg – bitumen emulsion, erosion control blankets) for short-term stabilisation
- Using sterile or non-invasive cover crops that last only for the required duration
- Progressively install the final landscape design as construction zones are completed
- Integrate temporary and permanent (landscape) stabilisation solutions by applying compatible cover crop and enduring species.

Figure 3.9: Cover crops used for erosion protection and weed suppression. (Source: Landloch Pty Ltd)

3.10 Vegetation type

In roadside batters, the design is not intended to allow water infiltration, so the vegetation type must be suitable for both free-draining soil and non-retaining water management. It must be appropriate to the condition of the soil regardless of the surrounding vegetation type (eg trees cannot be supported on thin topsoil placed over a cut rock batter). The vegetation selected must also be suitable for the climatic conditions and the ongoing maintenance schedule for the batter. Local rainfall predictions must be considered and for low or zero watering programs species must be hardy and drought tolerant.

Vegetation used for batter surface stabilisation can broadly be divided into two categories – temporary and permanent.

Vegetation used to provide temporary batter surface stabilisation is referred to as a 'cover crop'. The use of fast growing cover crops is often an essential step in slope stabilisation irrespective of the final revegetation outcome. The purpose of the cover crops is to provide surface cover to protect the soil from raindrop splash erosion and surface flows, anchor the soil with their roots, increase soil carbon (from sloughing of roots), restart the biological processes in the soil and suppress weeds. To be effective, at least 70 percent surface cover must be achieved to adequately protect batters from rain drop impact.

Much of the stabilisation of the batter surface is provided by a healthy and well developed prolific root system of both cover crop and long-term vegetation. Often a number of different species of cover crop are required due to their varying characteristics (habit, root type, tolerance to soil conditions etc). Common cover crop species for NSW roadsides include:

- Japanese Millet (*Echinochlora esculenta*). Other millets may be used with approval from Roads and Maritime
- Rye Corn (*Secale cereale*)
- Red Clover (*Trifolium pratense*)
- Rye Grass (*Lolium multiflorum*).

Cover crops are seasonal and should be selected considering the time of year that they will be used. Japanese Millet is a warm season grass and Rye Grass is a cool season grass. It is important to include both grasses in the transitions between cool and warm seasons. Roads and Maritime Regional Environment Staff (see Section 5 Contacts) can provide advice on grass and legume species that are suitable for use as a cover crop in a given area.

Permanent vegetation is grown as part of the landscape plan, and will be designed to achieve various visual amenity and ecological outcomes (see Section 3.9 Visual amenity and ecological outcome). Permanent vegetation commonly consists of native species that are suited to the local environment and specific site conditions (see Section 3.6 Bioregion) and will be successful with minimal intervention or maintenance.

Both temporary cover crop and permanent landscape treatments selected for vegetative batter surface stabilisation should have the following attributes:

- Reliable growth and establishment
- Resilient and self-regenerating (this may not be desirable in some temporary situations)
- Be readily available at low cost
- Minimal roadside hazard including fire, sightlines and collision
- Provide soil surface cover to minimise erosion
- Adaptability to poor and variable soils and climatic conditions
- Low maintenance requirements
- Low potential to attract animals (road kill risk) if the batter is adjacent to the road.

Regional Environment Staff and the Centre for Urban Design (see Section 5 Contacts) are able to provide specialist advice relating to vegetation type, including seed germination and testing, and landscape treatments.

3.11 Establishment time until erosion protection

Erosion is the process by which soil particles are displaced and then transported. The various batter surface stabilisation techniques aim to protect soil particles from the effects of erosion and minimise their displacement and transport. Each stabilisation technique will provide a different level of erosion protection. The level of erosion protection is largely related to the level of surface cover provided, but is also related to the type of cover that is provided. Some stabilisation techniques will also provide erosion protection more rapidly than others, often depending on the Rate of vegetation establishment (see Section 3.14) when vegetation is involved.

Increased soil surface cover will protect soil particles from the effects of raindrop impact and flow, hence reducing the likelihood of erosion. It is considered that 70 percent soil surface cover is required to achieve an appropriate level of erosion protection. This cover can be provided in a variety of ways and includes both natural products (eg – vegetation, mulch) and artificial products (eg – Erosion control blanket), or a combination of products and methods. Cover can be measured in a variety of ways, see your local Environment Officer for assistance.

The timing for when erosion protection is required is a critical factor when selecting a batter surface stabilisation technique. Immediate erosion protection might be required where a construction site is being closed down either temporarily on permanently. Techniques that do not rely on vegetation to establish in order to provide the protection (eg – Hydromulching, Erosion control blankets) will be required in these circumstances. Where a construction site is still under development and other erosion and sediment controls remain in place, immediate erosion protection might not necessarily be required. In these circumstances it might be desirable to use vegetation to stabilise a batter, using techniques such as Drill / Broadcast seeding or Hydroseeding. Different vegetation types will establish and provide erosion protection quicker than others, so the Rate of vegetation establishment (see Section 3.14) should be considered in relation to site-specific requirements.

To ensure maximum erosion protection is achieved as quickly as possible, it is essential that stabilisation techniques are applied or installed correctly. Any product that is rolled onto a batter must be adequately trenched and anchored at the top and bottom of the batter, and then securely pinned at regular intervals down the slope, to ensure that water cannot flow underneath and cause erosion. Incorrect installation can result in worse erosion than if no protection was applied, as flows are concentrated at weak points where they have more energy to displace and transport soil particles.

Figure 3.11: Effective soil surface cover, provided by a combination of Turf Reinforcement Mat and seeded grass that has begun to establish through it.

Specific installation requirements for various products and materials are available from the suppliers, but application and installation of these products must be designed in consideration of other constructability and site requirements.

If further advice is required, Soil Conservationists (see Section 5 Contacts) are able to provide specialist advice relating to erosion risk and a stabilisation technique that will provide erosion protection within a suitable timeframe. Also refer to individual fact sheets for guidance on preparation requirements for each method.

3.12 Cost

Stabilisation treatments must be considered as a whole of life cost, including maintenance and safety in all activities – the upfront installation costs should not be considered in isolation. There are various costs involved in a thorough batter surface stabilisation project, such as site testing, investigations, materials, handling, establishment and maintenance, and monitoring. Costs of establishment can be minimised by simulating surrounding vegetation conditions where possible.

Batter surface stabilisation techniques that utilise minimal materials and site preparation are likely to incur higher establishment and landscape management costs in re-work, weed removal or slope repair for patchy or un-vegetated parts of the batter.

The costs of vegetative treatments for batter surface stabilisation can be divided into:

- Design and specification, usually a one-off cost
- Investigations and testing, which may be recurrent depending on risk factors
- Monitoring, which are usually recurrent for up to three years after completion
- Materials, including transport to site and measured in bulked quantities or per-square metre application
- Site management and preparation, usually a one-off cost
- Establishment, usually charged as a group of activities per month for 6 months
- Maintenance, usually charged per activity per day for a set number of days over 1 to 3 years.

There are no firm percentages for the proportion of costs between activities or materials, as site location, access, seasonal constraints and origin of materials all influence the total cost.

The highest value is gained by assuring quality controls and not requiring rework or protracted establishment, so the costs of some treatments and methods should be compared to the cost of inaction, rework or repair when selecting inappropriate methods.

3.13 Preparation

The surface of the constructed batter on which the soil, growing media or stabilisation materials will be placed must be appropriately prepared such that no slumping or displacement will occur regardless of saturation, desiccation or exposure to wind, and vegetation establishes successfully.

Soils on road projects are often highly compacted, creating conditions that are not ideal for long term stabilisation, and that are unsuitable for plant establishment and growth. Seeds require intimate contact with the soil or light soil cover to germinate. Plants require uncompacted growing media for root penetration. An open soil structure is required for water infiltration and the exchange of carbon dioxide, and a roughened soil surface is required to ensure organics and plant propagules are kept on the slope and that water does not wash off the surface.

Therefore, before any batter surface stabilisation can be undertaken, the batter must be appropriately prepared in order for the stabilisation technique to key into the batter surface and remain in place. Where the final slope gradient is going to make batter preparation difficult (eg access and safety), consideration should be given to undertaking the preparation in conjunction with the construction and formation of the batter.

Figure 3.13a: Contour ripping across a batter using an excavator. Note that on batters ≤ 3h:1v this can also be done with a bulldozer.

Figure 3.13d: Contour scarification across a batter. Lime amelioration is being applied prior to topsoil application.

Preparation requirements vary between stabilisation techniques, so it is necessary to consult any relevant guidelines, specifications or manufacturer instructions. However, some general principles apply.

For stabilisation techniques that need to hold themselves on the batter (eg – Hydromulching, Straw Mulching, Compost Blanket, Hydrocompost, Tackifier), compacted or smooth surfaces need to be roughened and some rocky surfaces require scarification. This uneven surface assists to hold the products in place and provide any vegetation time to establish.

Figure 3.13b: Track rolling a batter in preparation for the application of a stabilisation technique.

Figure 3.13c: Pad roller preparing a batter in preparation for the application of a stabilisation technique.

When undertaking any surface roughening or scarification, the works should always be undertaken along the contour of the slope. It is generally inappropriate to undertake these works vertically as any vertical ruts can concentrate flow and will significantly increase the erosion potential of the batter.

On slopes ≤ 3h:1v conventional earthmoving equipment such as graders, bulldozers and tractors can be used to contour scarify slopes. For slopes > 3h:1v an excavator must be used. The excavator should have a swivelling head attachment that allows the bucket to be rotated 90 degrees allowing the teeth to be dragged horizontally across the slope. Care needs to be exercised when deep ripping sodic, dispersive or magnesic soils, as water ponding in the rip lines can cause tunnel erosion and potentially result in a cascading gully erosion failure down the slope. Short 2h:1v slopes can be vertically track-rolled with earthmoving equipment to roughen and/or scarify the surface.

For stabilisation techniques that involve the use of rolled products (eg – Cellular Confinement Systems, Erosion control blankets) that are manually anchored to the batter, intensive preparation is usually required to ensure a smooth, uniform, uncompacted surface that provides intimate contact between the product and the surface. Obstructions such as tree stumps, clods, rubble, tracks (eg – machinery or footprints) should be removed as they can create voids under the product where water can pool and potentially undermine the stabilisation.

If further advice is required, Soil Conservationists (see Section 5) are able to provide specialist advice relating to the preparation requirements of specific stabilisation techniques.

3.14 Rate of vegetation establishment

Generally, rapid vegetative cover improves resistance to surface erosion by shielding the ground from raindrop erosion, binding the topsoil with fibrous roots, and bonding the topsoil to lower soil layers by structural roots and mychorriza. However, fast growth is not always an indicator of establishment, as newly germinated and fast-growing plants may fail to establish (i.e. anchor and become self-reliant) on site. All vegetation has strong external influences – climate, rain, fertilisers, conditioners, the season of application and the natural growing seasons of that species.

There is also generally a correlation being fast-growing plants that are short-lived, and slower-growing plants that are longer-lived. Some short-lived species are also prolific in self-propagation and capable of replacing themselves after a quick period, but not all such species are appropriate for use in many NSW bioregions and some are listed as environmental weeds. Generally, best results are achieved when diversity is broadened.

The site conditions also impact the rate of vegetation establishment. Seed mixes are usually specified to match the surrounding environment and landscape, but subtle differences such as change of aspect of the batter face, diversion of overland flows or removal of upper canopy and unshaded ground will affect the vegetation results. Poor quality or mismanaged materials or preparation – including soil profiles, soil amelioration and conditioning, competition with weeds or aggregation of incompatible materials - will lead to vegetation failure even in an ideal climate.

Seed mixes with both temporary cover crop and long-term native mixes will need to go through the stages of succession, which are: cover crop > pioneer species > secondary species > tertiary (final) vegetation. There may need to be multiple applications and establishment of temporary vegetation depending on construction program and requirements. The rate of vegetative establishment from cover crop to tertiary species may span years, so management activities should focus on successful establishment of cover crop and early surface cover, with periodic monitoring for other long-term species following. Most broadscale revegetation activities compress the sequence of succession to increase the rate of establishment. In some circumstances, forced establishment of secondary or tertiary species will lead to vegetation failure due to over-demand of soil nutrient and moisture.

The landscape design must describe the expectations for rate of establishment and vegetation cover when growing from seed, but the construction team must consider the climate and season of application, rates of growth for the whole species mix, and landscape management activities that may enhance or impede vegetation establishment.

3.15 Quality assurance and surveillance

As all batter surface stabilisation using vegetation has various factors that all contribute to a successful outcome, the timing and intensity of quality assurance and surveillance greatly affects the outcome. Each stabilisation technique will have different requirements, and these can be specified in the construction documentation.

The Fact sheets (see Section 7) include guidance on the quality assurance and surveillance that must be considered for each technique during implementation. It is critical to undertake quality assurance and surveillance during the installation, establishment and maintenance of batter surface stabilisation activities to ensure that the technique is being delivered as specified. There are significant cost savings to be achieved if inputs (eg seed, fertiliser) to installation or maintenance are reduced, and hence the temptation to cut corners always exists.

The most effective method of quality assurance and surveillance is to be present during the application / installation to oversee the activities and ensure rectification of problems at the time they occur rather than later. Table 3.15 details some of the quality assurance issues that might need to be considered and some of the quality assurance and surveillance methods available.

Table 3.15: Quality assurance issues

Quality assurance issue	Description and Surveillance
Soil testing	Any stabilisation technique that requires the establishment of vegetation requires soil tests and reports to determine any limitations and describe the recommended amelioration for the intended vegetation. See Section 3.4 Soil Testing and refer to relevant contract or supplier specifications. Surveillance can be undertaken by checking that the required tests have been completed including correct sample sizes and origin location of test samples, and reports received. Soil quality must comply with relevant specifications, which may require screening or removal of other deleterious materials.
Soil preparation	Generally, the timing, site conditions and period between soil preparation and application are critical for success. Each stabilisation technique has specific soil preparation requirements. See Section 3.13 Preparation and refer to relevant contract or supplier specifications.
Growing media placement	Surveillance can be undertaken by observing the activity of growing media placement and the final outcome of placement. Surveillance should include compaction, consistency of material, depth, uniform thickness and coverage in accordance with the project specification, timing of application.
Soil amelioration	Where limitations in soil quality for the establishment of vegetation have been identified, soil amelioration may be required to ensure it is appropriate for use. See Section 3.5 Soil Amelioration and refer to relevant contract specifications. Surveillance can be undertaken by checking that the recommended ameliorants have been used and effectively applied.
Seed germination and purity	Where a stabilisation technique involves the use of seed to establish vegetation, it is important to ensure that the seed will provide a high level of germination to achieve good cover, and only contains the intended species (purity). Requirements will be detailed in relevant contract or supplier specifications. Surveillance can be undertaken by requesting a "Certificate of Provenance" from the seed supplier.
Product certification	Surveillance can be undertaken by checking the certification from suppliers of products (eg – straw) that the material is free from weed seeds and meets quality controls as detailed in relevant contract or supplier specifications.
Application rate (seed, mulch, binder, soil ameliorant, compost)	The success of many stabilisation techniques depends on sufficient application of inputs (eg – adequate mulch to provide soil surface cover). Application rates will be detailed in relevant contract or supplier specifications. Surveillance can by undertaken by observing the inputs used during the preparation of materials (eg – mulch into a hydromulch mixture), or by checking the outcome on the ground (eg – level of soil surface cover). Application rate is usually expressed as "kg / ha".
Seed carrier application	Seed is distributed across a broad area along with various 'carrier' mediums (eg mulch), depending on the stabilisation technique being used. All sprayed or blown applications require complete coverage of the surface to be stabilised. Surveillance can be undertaken to ensure the batches to be sprayed contain the correct seed and medium mixes, and are prepared correctly before each application.

Quality assurance issue	Description and Surveillance
Seed application method	Different vegetation species require different germination conditions. The seed should be applied using a method that is appropriate to create these conditions. This may require the seed to be applied separately prior to the application of an erosion protection medium, or within the erosion protection medium itself (eg – a surface germinating seed should not be covered by thick mulch and a deep germinating seed should not be suspended in a thinly applied material). Requirements will be detailed in relevant contract or supplier specifications. Surveillance can be undertaken by observing how and when seed is applied (eg – separately and prior to the erosion protection medium, or batched with other materials and applied with the erosion protection medium).
Mulch type	There are many forms of mulch available, and some techniques require the use of specific forms to achieve maximum success (eg – Hydromulching – Bonded fibre matrix). Mulches derived from processed organic materials are generally able to be hydraulically applied or blown onto batters. Requirements will be detailed in relevant contract or supplier specifications. All mulches must comply with relevant standards and Roads and Maritime specification. Surveillance can by undertaken by observing the type of mulch that is used. Mulches derived from mineral materials are not recommended for batters except for very specific hydraulic or structural conditions (eg rock mattresses).
Soil surface cover	Effective erosion protection (see Section 3.11) is usually obtained once ~70 percent soil surface cover is achieved. However each stabilisation technique will also require a minimum thickness of the relevant product in order to be effective (eg – minimum 20mm thickness for Straw Mulching). Requirements will be detailed in relevant contract or supplier specifications. Surveillance can by undertaken by observing the soil surface cover achieved on the ground. The time to achieve effective slope stabilisation will depend on the composition of materials and the site conditions.
Ensure application coverage by multiple passes in different directions	For stabilisation techniques that involve the blown application of materials (eg – Hydromulching, Soil binder, Compost blanket), the application over each area should be undertaken with a sufficient number of passes in different directions where possible to avoid "spray shadow" (ie areas missed because they are not in direct line of sight of the applicator such as uneven ground or overhangs). Surveillance can by undertaken by observing the application and / or the soil surface cover achieved on the ground.
Ensure the area is moist before application	For stabilisation techniques that include glues or tackifiers that need to set, a moist surface will assist in gluing the product to the soil surface. For techniques that use seed for the establishment of vegetation, the moisture underneath the mulch layer will also assist with germination. Requirements will be detailed in relevant contract or supplier specifications. Surveillance can by undertaken by observing the application.
Installation of rolled products	Rolled products (eg – Erosion control blankets) require specific installation methods to ensure success. Products need to be correctly anchored at the top and bottom of the batter and down its length. They also need to be overlapped with the top length laid over the top of the length below (similar to roof tiles) to ensure water does not flow underneath and undermine the product. Product specific requirements will be detailed in relevant contract or supplier specifications. Surveillance can be undertaken by observing the installation and/or inspection of the final product on the ground.
Compost quality	Compost is a material that may be a manufactured product or derived from site materials, and as such the quality can vary significantly. Whatever the origin, poor quality compost can be insufficiently processed, and cause 'nitrogen drawdown', apply uneven or incorrect levels of nutrients and can contain weed seeds and pathogens if not pasteurised appropriately. Australian Standard 4454 is often used as a minimum benchmark for the required compost quality. Requirements will be detailed in relevant contract or supplier specifications. Surveillance can be undertaken by requesting certification from the compost supplier that the material was produced according to the required specifications and testing of the compost if derived from site materials.

3.16 Establishment and maintenance

Establishment means the short-term period and process required for vegetative materials to germinate and become self-sustaining. During this phase, some activities may be required to achieve establishment, such as watering, weed management, fertilising, application of other landscape materials and monitoring and management of ancillary controls and fences. A batter using vegetative techniques for stabilisation cannot be considered complete until establishment is achieved.

Maintenance means the management activities and programme required for long-term slope stabilisation after establishment is complete, and may extend beyond the life of the construction contract. An appropriate maintenance program is critical for the effectiveness of the stabilisation technique employed. The cost of regular maintenance is typically only a small percentage of the overall cost of the technique and is far more cost-effective than re-implementing the works or completely re-working a batter because of a failure. With tight project margins, re-working failed batters and slopes can have a major impact on costs, especially where the batter slope is above an operating road.

Batter surface stabilisation solutions should be designed so that maintenance requirements are minimised, especially for locations that are steeper than 1h:2v or where access for bulk landscape materials is very limited. Maintenance requirements vary greatly between stabilisation techniques, and should be guided by contract and / or supplier specifications, as well as site-specific conditions (eg – periods of drought or extreme weather).

Maintenance should include a program of routine checks and activities, but also include re-active checks and activities following rainfall. Occasional maintenance should be done to slash dead temporary crops, remove standing dead vegetation from cut slopes, repair rolled products or target noxious weeds. Select herbicides should be used for weed management to target the correct form or species of weed for each particular site. If too much spraying or inaccurate spraying is done, then the long-term vegetative cover will also be damaged and impaired. For assistance in preparing a targeted weed management program, please contact your local government officer (see Section 5).

It is critical to attend to minor maintenance issues (eg – loose erosion control blanket) promptly, as they can quickly result in major issues or even complete batter failures if not fixed prior to rainfall.

Section 4
Glossary

Word	Definition
Batter	The uniform side slope of a cutting or an embankment.
Batter face	The surface area between the top and toe of the batter.
Batter rounding	Curvature that is applied to improve the stability and appearance of the road at the intersection of the extension of the road crossfall and/or existing surface (hinge point), with the batter slope of an embankment or cutting.
Batter transition	The zone on the leading edges of the landform in which the batter slope of an embankment or cutting meets the existing terrain.
Bench	A ledge constructed in a batter or natural slope for the purpose of providing adequate horizontal sight distance, greater security against batter slippage or to assist with batter drainage.
Dispersive soils	Soils that are high in relative levels of dissolved sodium or magnesium, which causes the soil particles to repel each other when wet and separate into single particles. As such, dispersive soils are unstable and prone to erosion by water.
Gradient	The degree of inclination with respect to the horizontal, expressed as rise or fall in a certain longitudinal distance. Also known as slope.
Growing media	Growing media is a combination of mineral, organic matter, water, air and living organisms in variable proportions.
Hinge / hinge point	The point in the cross-section of a road at which the extended batter line would intersect the extended verge line.
Magnesic soils	Soils that are high in dissolved magnesium compared to other ions, which enhances the dispersive (see above) effects of sodium.
Roads and Maritime	NSW Roads and Maritime Services.
Sodic soils	Soils that have too much sodium compared to other ions, which causes the soil to become dispersive (see above).
Stabilise	To modify any material on a slope to improve or maintain its load carrying capacity (eg saturation), and to prevent erosion or slippage of that slope.
Slope	An inclined surface. Also known as Gradient.
Vegetation	All plant matter that is remnant, sown or planted occurring on the or adjacent to the batter.

Section 5
Contacts

Name	Contact Details
Roads and Maritime Centre for Urban Design	Landscape Advisor (02) 8588 5776
Roads and Maritime Regional Environment Staff	The Environment Managers by region are as follows: Head office (02) 8588 5766 Northern region (02) 6640 1072 Pacific Highway (Nth) (02) 6640 1375 Pacific Highway (Sth) (02) 4924 0281 Motorways (02) 8588 4372 Southern region (02) 6492 9515 Southwest region (02) 6923 3419 Sydney region (02) 8849 2516 Western region (02) 6861 1628 Hunter region (02) 4924 0440
Services	The Registered Contractors list is kept updated on the following web page: www.rms.nsw.gov.au/doingbusinesswithus/tenderscontracts/registeredcontractors.html

Section 6
References

NSW Department of Primary Industries March (2009), *Saving Soil – A landholder's guide to preventing and repairing soil erosion,* NSW Department of Primary Industries

Roads and Maritime Biodiversity Guidelines (2011)

Roads and Maritime contract specifications

- G36 (Environmental Protection)
- G38 (Soil and Water Management)
- G40 (Clearing and Grubbing)
- R176 (Native Seed Collection)
- R178 (Vegetation)
- R179 (Landscape Planting).

Section 7
Fact sheets: Batter surface stabilisation techniques

The following fact sheets provide details on some of the common batter surface stabilisation techniques that are used on Roads and Maritime road construction projects. There are many variations of the techniques available on the market as proprietary products, and also new and alternate products and equipment that may not be covered in this Guideline. As with any construction process using vegetation, regionally-specific requirements should also be employed to ensure success. Please contact your local Environment Officer (see Section 5) if you would like to clarify the details or suitability of a particular product.

Each fact sheet can be removed from the Guideline and used as standalone information. The following fact sheets are included:

The fact sheets detail how each of the techniques relate to the Factors to consider (see Section 3). The fact sheets have been prepared to be consistent with, and complementary to, the Roads and Maritime contract specifications G36 (Environmental Protection), G38 (Soil and Water Management), G40 (Clearing and Grubbing), R176 (Native Seed Collection), R178 (Vegetation) and R179 (Landscape Planting). Specifications for various materials and installation methods as referenced in R178 and R179 are found in various other Australian Standards, Roads and Maritime guidance documents and other industry documents. These include the correct site and weather conditions that affect the safe implementation of these techniques.

Fact Sheet 1

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Drill / Broadcast seeding

Drill seeding involves seeding using a mechanical disc seeder towed by a tractor.

Drill seeders have metal discs that create small furrow and seed is placed into the furrow. Broadcast seeding involves the mechanical spreading of seed on the soil surface using a trailer or truck mounted spinning type or agitator type seed spreader. Following the seeding, the soil should be harrowed to cover the seed with a thin layer of soil.

Figure FS1a: Direct seeding a batter. (Source: Martin Sullivan)

Figure FS1b: Air seeding native grass using a 4WD. (Source: Martin Sullivan)

April 2015

FACTOR	DETAIL
Slope	Mechanical seeders are either truck or trailer mounted and as such they cannot work safely across slopes steeper than 3h:1v. Hand seeding can be undertaken on small areas that are steeper than 3h:1v.
Level of erosion protection	Once vegetation has established, raindrop splash erosion and sheet flow.
Growing media	Topsoil.
Soil amelioration	Soil ameliorants are delivered with seed. Fertiliser can cause seed burn.
Bioregion	Areas with high rainfall or strong winds may need additional surface protection that is appropriate to the species being used. Drill seeding is ideal for locations where species tend to have longer dormancy.
Access	Installation – access will be required for machines to apply seed. Maintenance – access may be required to water vegetation as it establishes and remove weeds as necessary.
Duration	Completely dependent on 'Vegetation type' (see below).
Visual amenity and ecological outcome	Drill / broadcast seeding is appropriate for the use of cover crops, grasses, legumes and many natives. However, there is significant scope within these types of vegetation to plant a desirable selection of species to meet visual and ecological outcome requirements.
Vegetation type	Cover crops, grasses, legumes and many natives.
Establishment time until erosion protection	Drill / broadcast seeding does not provide any erosion protection until the vegetation establishes. Optimum erosion protection is provided once 70 percent soil surface cover is achieved. A mulch cover is often recommended to provide raindrop splash and erosion protection during establishment.
Cost (at time of publication)	Low if suitable weed free topsoil and suitable machinery is available in the immediate area: • $0.15 – $0.50 / m² depending on location and area seeded • $3 – $5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for watering in dry conditions and weed suppression (where necessary).
Preparation	Planning by relevant experts and agronomists to develop the appropriate species, seeding rates, ameliorants and watering requirements. Soil surface should be scarified and topsoil / subsoil should be ameliorated (where necessary) based on results of soil tests.
Rate of vegetation establishment	Slow and highly variable, depending on Vegetation type and Bioregion.
Quality assurance and surveillance	Quality assurance and surveillance should consider: soil preparation; soil testing; soil amelioration; seed germination and purity; application rate. Seed should be buried in the soil two to three times its diameter to ensure intimate contact with the soil and access to soil moisture. Drill seeders typically place the seed at depths greater than 50 millimetres. Poor plant establishment can result as the shoots use all the available energy in the seed to push through the depth of the soil. Broadcast seeders apply the seed to the soil surface and can result in poor soil contact. It is desirable to lightly harrow or roll the seeded area to ensure intimate soil contact.
Establishment and maintenance	Establishment and maintenance costs can be high depending on the quality of topsoil used, the presence of weed seeds in the topsoil and the surrounding vegetation. Maintenance might include: • Erosion repairs if rain occurs prior to vegetation establishment • Maintenance application of ameliorants • Weed control if topsoil is poor, weeds are adjacent or vegetation establishment is slow • Watering immediately after application of seed / mulch in dry conditions and in rural areas to establish the vegetation • Ongoing specialist advice if performance is poor.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 2

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Soil binder – Bitumen emulsion

Soil binders are a range of products that are applied to the soil surface to effectively glue the soil particles together, forming a crust that is resistant to erosion in varying degrees. They can also be referred to as soil stabilisers.

Bitumen emulsion is a specific type of soil binder that can be used for a variety of applications. There are different types of bitumen emulsion, but the type that should be used for batter surface stabilisation is Anionic Slow Setting Bitumen emulsion. Cationic bitumen emulsion, which is typically used for road sealing, is not suitable for use in vegetation areas.

Bitumen emulsion should be applied at a rate of one litre of undiluted residual bitumen emulsion per square metre. It can be diluted up to 50/50 with water, and the diluted emulsion sprayed to achieve the application rate (1L/m^2). It is generally applied with conventional agricultural spray bars, and can be used in a variety of ways.

Bitumen emulsion can be sprayed directly onto the soil surface to simply bind the soil together. It can also be used in conjunction with Straw Mulching (see Fact Sheet 6) to provide temporary batter protection, or open weave Organic fibre Erosion control blankets (see Fact Sheet 10) to provide an increased level of erosion protection for higher velocity flow situations. Application with Straw Mulching or Organic fibre Erosion control blankets will also aid in vegetation establishment, conserve moisture in the soil, increase infiltration and minimise temperature fluctuations. For all applications, 100 percent soil surface cover is critical to ensure effective erosion control.

Figure FS2a: Application of bitumen emulsion (darker area) over straw mulch.

Figure FS2b: Uneven establishment of grass through bitumen emulsion.

FACTOR	DETAIL
Slope	≤ 3h:1v but the length of the slope should be limited.
Level of erosion protection	If used standalone or in conjunction with Straw Mulching, bitumen emulsion will withstand raindrop splash erosion and low velocity sheet flow. If used in conjunction with an open weave Organic fibre Erosion control blankets (see Fact Sheet 10) bitumen emulsion will withstand low velocity concentrated flow. If vegetation is established, erosion protection will be enhanced.
Growing media	Can be applied to any growing media or soil surface cover (eg – organic fibre erosion control blankets). If the soil is dispersible it should be ameliorated prior to application.
Soil amelioration	Bitumen emulsion provides no soil amelioration. If vegetation is to be established, soil amelioration might need to be undertaken prior to installation to provide suitable conditions for the desired vegetation type.
Bioregion	Avoid application during low humidity or in areas with very dry or very wet soil, around wetlands, riparian areas or other sensitive receivers.
Access	Installation – application machinery (eg – agricultural spray bar) will need access to the batter. If necessary, access for applying Straw Mulch (see Fact Sheet 6), Organic fibre Erosion control blankets (see Fact Sheet 10) or undertaking soil amelioration may also be necessary. Maintenance – access may be required for erosion repairs or repeat applications if rainfall occurs prior to any vegetation establishment. Depending on site conditions, access may also be required for weed control, repeat applications of ameliorants or watering vegetation.
Duration	Bitumen emulsion will remain effective for 3 – 12 months, depending on site conditions and level of disturbance. Much longer stabilisation will be achieved if vegetation is established along with straw mulch or organic fibre erosion control blankets – duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	Bitumen emulsion is a dark colour that provides minimal visual impact, but alone it provides no ecological value. The establishment of vegetation will improve the visual amenity and has the potential to improve ecological outcomes.
Vegetation type	None if used directly on the soil as a binder. All vegetation types if used to stabilise growing media while vegetation establishes.
Establishment time until erosion protection	Erosion protection will usually be achieved after 24 hours curing time, though slow-breaking emulsion may take longer in humid areas.
Cost (at time of publication)	Moderate if suitable machinery and materials are available in the area: • $1.00 - $5.00 / m² depending on location • $3 - $5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for seed, watering in dry conditions and weed suppression (where necessary).
Preparation	Bitumen emulsion can be applied to any surface, however maximum effectiveness will generally be achieved when the surface is uniformly roughened. Roughening should be done along the contour (ie – horizontally) rather than down the slope, to ensure runoff is not concentrated into channels.
Rate of vegetation establishment	Establishment of any vegetation used in conjunction with the bitumen emulsion is completely dependent on the Vegetation Type and Bioregion (see above).
Quality assurance and surveillance	Soil preparation; seed germination and purity (if used in conjunction); application rate; seed application method; soil surface cover; ensure application coverage by multiple passes in different directions; ensure the area is moist prior to application.
Establishment and maintenance	If used in isolation and while a complete surface crust remains, very little establishment and maintenance should be required. If used in conjunction with vegetation and/or if the surface crust breaks, the following establishment and maintenance might be required: • Reapplication if heavy rain or flow damages the surface crust • Watering vegetation during dry periods • Weed control if topsoil is poor, weeds are adjacent to the seeded area or vegetation establishment is slow • Maintenance applications of ameliorants.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Roads & Maritime

Soil binder – Tackifiers

Soil binders are a range of products that are applied to the soil surface to effectively glue the soil particles together, forming a crust that is resistant to erosion in varying degrees. They can also be referred to as soil stabilisers.

For the purposes of this fact sheet 'Tackifier' refers to all soil binders other than bitumen-based (see Fact Sheet 2), and includes products that are based on polymer, cementitious or organic (natural) ingredients. Commonly used products include:

- Guar gum – a natural organic tackifier that comes from seeds in the guar plants
- Starch-based – a natural organic tackifier that comes from cornstarch
- Polymer-based – chemical products that are engineered for specific purposes, and can contain additional beneficial ingredients such as fertiliser.

Soil binders are mixed with water and applied to batters hydraulically. They are extremely versatile and can often be used for other applications, such as binding mulches, straw / hay, seeded batters, organic fibre erosion control blankets and compost. Individual product specifications should be used to guide the use and application of each product, noting that some manufacturer's claims might be based on ideal conditions, which are rarely available on dynamic road construction sites.

The effectiveness of tackifiers can be significantly affected by soil type. Heavy and / or well compacted soils may limit the ability of the tackifier to penetrate the soil and form a sufficiently thick surface crust.

Impacts on downstream environments should be considered when selecting an appropriate tackifier. Some are fully biodegradable, while others are photo/chemical degradable.

Figure FS3a: Tackifier applied with a green dye.

Figure FS3b: Water cart application of a tackifier. (Photo: Vital Chemical Pty Ltd)

FACTOR	DETAIL
Slope	Tackifiers are likely to be effective on slopes ≤ 3h:1v Some manufacturers claim their products will be effective on slopes up to 1h:1v. Application rate will generally increase with steepening slopes.
Level of erosion protection	Dependent on the specific product, but generally raindrop splash erosion and sheet flow.
Growing media	Can be applied to any growing media or soil surface cover (eg – organic fibre erosion control blankets).
Soil amelioration	Generally none. Some advanced products contain added ingredients that can assist with soil amelioration.
Bioregion	Organic tackifiers are generally suitable in all bioregions, but some types may turn the soil hydrophobic. Areas with prolonged or frequent rainfall reduce the effectiveness of tackifiers by leaching or slippages when wet.
Access	Installation – access will be required for machines to apply the tackifier. Proximity will depend on the application distance of the specific machine. Maintenance – access may be required for repeat applications.
Duration	Short term. Duration varies dramatically, from as little as one month to more than a year. Factors that influence durability include the specific product type, the application rate and the type of activity on the batter. Some are designed to withstand heavy activity such as haul roads, while others will not withstand any disturbance at all.
Visual amenity and ecological outcome	Unless a dye is applied, tackifiers are generally not visible once set and will have no impact on visual amenity or ecological outcome. If they are used in conjunction with seeding, the vegetation type will influence this factor.
Vegetation type	Many tackifiers are appropriate to stabilise the growing media but still allow the germination of seed. As they are designed to degrade over time, they are suitable for use with any vegetation type.
Establishment time until erosion protection	Maximum erosion protection is achieved once the tackifier has cured, which can vary from almost instant to 24 hours, depending on the specific product.
Cost (at time of publication)	Low if suitable weed free topsoil is available in the immediate area and application equipment is available on site: • $0.15 - $0.50/m² • Additional $3 - $5/m² to strip, ameliorate and respread topsoil if necessary • Additional cost allowances should be made for seed, watering in dry conditions and weed suppression (where necessary).
Preparation	Tackifiers can be applied to any surface, however maximum effectiveness will generally be achieved when the surface is uniformly roughened. Roughening should be done along the contour (ie – horizontally) rather than down the slope, to ensure runoff is not concentrated into channels. Pre-wetting of the surface should be undertaken to assist with adhering the tackifier.
Rate of vegetation establishment	Establishment of any vegetation used in conjunction with the tackifier is completely dependent on the Vegetation Type and Bioregion (see above).
Quality assurance and surveillance	Soil preparation; seed germination and purity (if used in conjunction); application rate; seed application method; soil surface cover; ensure application coverage by multiple passes in different directions; ensure the area is moist prior to application.
Establishment and maintenance	If used in isolation and while a complete surface crust remains, very little establishment and maintenance should be required. If used in conjunction with vegetation and/or if the surface crust breaks, the following establishment and maintenance might be required: • Reapplication if heavy rain or flow damages the surface crust • Watering vegetation during dry periods • Weed control if topsoil is poor, weeds are adjacent to the seeded area or vegetation establishment is slow • Maintenance applications of ameliorants.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 4

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Mulch / Topsoil mixes

Mulches are homoegenous materials that are derived from organic products.

They can be laid as a blanket directly over the batter surface to be vegetated, or can be used in combination with other stabilisation techniques, such as under- or overlays for organic and synthetic erosion control blankets. They can also be blended with topsoil or compost to provide a relatively stable product that holds growing media in place and provides erosion protection.

Mulches are applied to batters hydraulically, airblown, mechanically or spread manually and may be applied lightly or thickly depending on the material and performance requirements. Mulches provide protection to the batter surface from raindrop, wind and overland flow erosion and can act as a blanket for seed protection, weed suppression, dust control and soil moisture conservation. Commonly used products include:

- Straw – covered separately in Fact Sheet 6
- Shredded vegetation – generally bark and upper canopy material that cannot be milled and is processed for further use (does not include tub-ground mulch which can only be used with caution and specific approval)
- Woodchip – derived from processed hardwood and softwood timbers and some post-consumer wood waste. Apply with caution on acidic soils
- Blended mulches – organic material combined with other materials including tackifiers, topsoil, compost and/ or conditioners. The ratio of growing media to mulch must be advised by the soil scientist.

Although most mulches can have multiple purposes, products available as garden or landscape mulches (including fine composts) are not always compatible for use in slope stabilisation. Mulches sourced from site-won material are generally not appropriate for reuse without further processing. Individual product specifications should be used to guide the use and application of each mulch, noting that some manufacturer's claims might be based on ideal conditions, which are rarely available on dynamic road construction sites. Mulch selection must also consider the soil type and soil reports.

Mulches perform in all seasons and climates, although their effectiveness can be influenced by microclimate, aspect, thickness of application and drainage controls. Impacts on downstream environments should be considered when selecting an appropriate mulch as some can float and clog drainage inlets and channels, and some contain tannins that can leach and drain into downstream waterways.

Figure FS4a: Mix of 60% soil and 40% shredded mulch from local vegetation at Glenugie Upgrade on rock cutting.

Figure FS4b: Woodchip and shredded mulch from local paper mill on planted 2h:1v cuts at Woomargama Bypass.

FACTOR	DETAIL
Slope	Generally acceptable ≤ 4h:1v. Might be effective up to ≤ 1.5h:1v, if combined with a supplementary stabilisation technique, depending on the geology and drainage design.
Level of erosion protection	Excellent for most erosion types except concentrated flows. Mineral mulches (including rock mattresses) should be used on non-dispersive soils in locations of concentrated flows.
Growing media	Can be applied over any growing media. Some forms of mulch may be mixed with growing media to enhance adhesion to the slope surface in rural areas only.
Soil amelioration	Requirements subject to soil report recommendations. Fresh mulch should not be used in acidic environments. Breakdown of woodchip mulches can result in nitrogen being drawn out of the soil (nitrogen draw-down), so additional amelioration with nitrogen may be required.
Bioregion	Suitable for use in all bioregions, but the rate of biodegradation will be faster with increased humidity, temperature and moisture.
Access	Installation – direct access for machines is preferred, but some mulches can be airblown or hydraulically applied up to 100 metres from the access point. Maintenance – access may be required for erosion repairs or repeat applications for light mulches if heavy rainfall occurs prior to any vegetation establishment. Depending on site conditions, access may also be required for weed control, repeat applications of ameliorants or watering vegetation.
Duration	Extremely variable – mulch and mulch blends will remain effective anywhere from 2–12 months, depending on the type of mulch used. Much longer stabilisation will be achieved if vegetation is established with the mulch – duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	Mulch and mulch blends alone provide little value for visual amenity or ecological outcomes. Good outcomes can be achieved if vegetation is established with the mulch, but will vary according to the Vegetation Type.
Vegetation type	Cover crops, grasses, legumes, native ground covers, shrubs and trees.
Establishment time until erosion protection	Some fine materials will wash out immediately, but mulch and mulch blends will provide instant erosion protection. Additional erosion protection will be provided once vegetation (if used) is established. It should be noted that it may not be possible to achieve 70 percent vegetation cover using this technique – however, the mulch pieces will provide part of the soil surface cover, in addition to any vegetation that has established.
Cost (at time of publication)	Low, but variable depending on availability of weed-free mulch: • Call local landscape suppliers or Environment Officers for availability and cost if mulch is not available on-site • $3-$5/m² should be allowed to strip and ameliorate topsoil (if necessary), then mix with mulch and respread mulch / topsoil mix • Additional cost allowances should be made for seed, watering in dry conditions and weed suppression (where necessary).
Preparation	Soil scarification and amelioration of subsoil and topsoil.
Rate of vegetation establishment	Vegetation establishment is generally moderate to rapid, although will largely depend on the type of mulch or mulch blend used, the Vegetation Type and the Bioregion.
Quality assurance and surveillance	Soil preparation; soil testing; soil amelioration; seed germination and purity; seed application rate; seed carrier application rate (where specified); binder type and application rate (where specified); mulch application rate; soil surface cover.
Establishment and maintenance	• Site won topsoils may also contain a seed bank of native or weed seeds • The soil must be appropriately managed to pressure the native seed for natural regrowth • Weed seed infested topsoil should be managed as per relevant specifications.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 5

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Hydroseeding

Hydroseeding is the hydraulic application of seed and soil ameliorants using purpose built equipment. The seed and ameliorants are added to a tank fitted with an agitator and pump.

The agitator mixes and then applies the materials via a cannon from the top of the unit or via hoses. The largest and most powerful hydro-seeders can apply seed up to 100 metres away from the unit.

A seed carrier is commonly used to ensure even mixing of the seed in the tank and help it stick to the soil surface. The seed carrier allows visual inspection of the seed application rates and also protects the seed as it passes through the hydro-seeder pump. The seed carrier is normally shredded recycled paper or wood fibre and is applied at 200kg / hectare.

Hydroseeding is mainly used where suitable topsoil is available. Native plant seeds can be applied on subsoil and rocky slopes but vegetation establishment is generally poor.

IMPORTANT NOTE: Hydroseeding is not hydromulching – it is simply a method of applying seed. It does not offer erosion protection until vegetation establishes. It's normally used in situations where conventional seeding equipment such as drill seeders cannot be used due to access limitations or slope steepness. Hydroseeding is often undertaken prior to hydromulching or straw mulching, which will then provide erosion protection until vegetation establishes.

Figure FS5a: Hydroseed application on a prepared batter.

Figure FS5b: Diverse vegetation establishment resulting from hydroseeding overlaid with hydromulch on the Kempsey Bypass.

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FACTOR	DETAIL
Slope	< 2h:1v if followed by hydro mulching. The slope is limited by the topsoil application.
Level of erosion protection	Sheet flow less than maximum permissible velocity of the soil.
Growing media	Topsoil.
Soil amelioration	Very low. Multiple applications required. Ameliorants easily washed off the slope.
Bioregion	Hydroseeding for temporary cover will work in all NSW bioregions, but success will depend on the amount of follow-up rain. Extreme weather conditions will cause failure in hydroseeding from inadequate moisture and death of germinated seed, or the seeding mix being washed off the batter prior to root establishment. Hydroseeding with native seed mixes are more difficult to establish reliably and consistently, as many native seeds require specific climatic conditions to germinate, and may have natural periods of dormancy. Species that have tropical or rainforest origins typically do not work in hydroseeding due to the size and type of seed. Hydroseeding works well in bioregions with little climatic variation.
Access	Installation – access will be required for hydro-seed machines to apply the seed. Proximity will depend on the application distance of the specific machine – truck-mounted units are fixed and will need to be immediately adjacent to the batter, whereas machines fitted with hoses may be able to apply seed up to 100 metres from the access point. Maintenance – access may be required for erosion repairs or repeat applications if rainfall occurs prior to establishment. Depending on site conditions, access may also be required for weed control, repeat applications of ameliorants or watering vegetation.
Duration	Completely dependent on 'Vegetation type' (see below).
Visual amenity and ecological outcome	Hydroseeding allows the use of any Vegetation Type (see below), subject to seed availability, and hence any visual amenity and ecological outcome requirements can be tailored in the seed mix.
Vegetation type	Cover crops, grasses and legumes, native ground covers, shrubs and trees.
Establishment time until erosion protection	No erosion protection is provided until vegetation establishes. Optimum erosion protection is usually provided once 70 percent soil surface cover is achieved. A hydromulch cover is often recommended to provide erosion and raindrop protection during establishment.
Cost (at time of publication)	Low if suitable weed free topsoil is available in the immediate area: • $0.40 - $2.00/m² depending on location and area seeded • Additional $3 - $5/m² to strip, ameliorate and respread topsoil if necessary • Maintenance costs can be high depending on conditions (see below).
Preparation	Soil surface should be scarified and topsoil and subsoil should be ameliorated. Advice should be sought by relevant experts and agronomists to develop the appropriate species, seeding rates, ameliorants and watering requirements.
Rate of vegetation establishment	Slow – highly variable.
Quality assurance and surveillance	Soil preparation, soil testing, soil amelioration, seed germination and purity, application rate and purity, seed carrier application (where specified), seed application method, binder application rate (where specified).
Establishment and maintenance	Establishment and maintenance can be intensive depending on site conditions, and could include: • Erosion repairs or repeat applications if rain occurs prior to vegetation establishment • Maintenance application of ameliorants • Weed control if topsoil is poor, weeds are adjacent to the seeded area or vegetation establishment is slow • Watering in dry conditions to establish vegetation.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 6

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Straw mulching

Straw mulching is the application of a cereal or cane toppings straw material to the soil surface to provide raindrop splash erosion protection and moisture retention and thermal insulation.

These properties make it a very effective method for vegetation establishment (particularly grasses). Despite this, the use of straw mulch has declined due to the difficulty in obtaining cheap and weed free straw. Hay can be used when the establishment of pasture grasses and weeds is not an issue.

If vegetation is to be established, the topsoil must be tested, ameliorated and seeded (normally Hydroseeding) prior to the application of the straw mulch. When straw is used as seed mulch, it is important that the application rates are sufficient to retain moisture in the soil (~25mm), but not too deep that a physical barrier is formed and all sunlight is restricted (~50mm).

Straw and hay can be spread by hand or with a straw blower. For large jobs, using a trailer or truck mounted blower unit is the most practical application method. Straw mulch should be applied at a rate of 5000kg/hectare (approximately 250 bales). The distance that straw or hay can be blown depends on the hay blowing equipment, wind conditions during application, straw characteristics, and whether the material is being applied upslope or downslope (cuts or fills). When wind is favourable, straw can be blown up to 45 metres. However in adverse conditions the application of straw may not be possible.

Once applied, the straw is susceptible to movement with moderate to high winds, so is usually applied with some form of binder, such as Bitumen emulsion (see Fact Sheet 2) or Tackifier (see Fact Sheet 3). The straw and bitumen emulsion can either be applied at the same time or the bitumen emulsion applied as an overspray. Tackifiers are often applied over the straw, and can be used with low quantities of Hydromulch to assist in binding the straw together.

However if a binder is used it only glues the straw to itself, not the soil surface. As such it is critical that all upstream flows are diverted away from the batter so the straw is not dislodged by overland flow. As an alternative, straw can also be crimped, rolled, or punched into the soil. These measures will bury portions of the stems into the soil and can increase erosion protection because of the more intimate contact of straw with the soil surface. The potential for compaction is increased and should be considered if using these treatments.

NOTES: Straw mulch should not be used on dispersive soils unless they are suitably ameliorated with gypsum. *Triticale* species must not be used in the Tablelands, Central Slopes and Western Plains regions, in order to prevent the spread of "wheat rust" in wheat growing areas.

Figure FS6a: Straw mulch being applied with a trailer mounted straw blower.

Figure FS6b: Straw mulch being ineffectively applied in adverse wind conditions.

FACTOR	DETAIL
Slope	≤ 2h:1v
Level of erosion protection	Raindrop splash erosion only.
Growing media	Topsoil.
Soil amelioration	Straw mulching provides little or no soil amelioration. Depending on the results of soil tests, the subsoil and topsoil should be ameliorated prior to seeding (if relevant) and the application of straw mulch
Bioregion	Straw mulching is appropriate for use in all NSW bioregions, and can be used at any time of year for erosion control purposes. Straw mulching is an excellent thermal cover for seeded batters in frost-prone and cool climate areas, and soil moisture retention in hot and dry areas. Careful planning should be untertaken for the application of straw mulch in windy areas or hot seasons as dry straw can be a fire risk and is easily blown from site. In wet sites, ensure that the species origin of the straw will not host pathogens or other plant diseases that may affect agricultural areas.
Access	Installation – Straw mulch has a limited application distance so machinery will need access immediately adjacent to the batter. If necessary, access for soil amelioration may also be necessary. Maintenance – access may be required for erosion repairs or repeat applications if rainfall occurs prior to establishment. Depending on site conditions, access may also be required for weed control, repeat applications of ameliorants or watering vegetation.
Duration	Straw mulch will remain effective for 2 – 6 months. Much longer stabilisation will be achieved if vegetation is established with the straw mulch – duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	Straw mulch (& binder if used) alone provides little value for visual amenity or ecological outcomes. Good outcomes can be achieved if vegetation is established with the straw mulch, but will vary according to the Vegetation Type.
Vegetation type	Cover crops, grasses and legumes.
Establishment time until erosion protection	Immediate if only straw mulch is used. Up to 24 hours if a binder is used, to allow for curing.
Cost (at time of publication)	Moderate if suitable weed free topsoil is available in the immediate area: • $0.60 - $5.00/m² depending on location, area to be treated and availability of weed free straw • Additional $3-$5/m² to strip, ameliorate and respread topsoil, if necessary • Additional cost allowances should be made for seed, watering in dry conditions and weed suppression (where necessary).
Preparation	Soil scarification and amelioration of subsoil and topsoil.
Rate of vegetation establishment	Vegetation establishment is moderate to rapid.
Quality assurance and surveillance	Soil preparation; soil testing; soil amelioration; seed germination and purity; seed application rate; seed carrier application rate (where specified); seed application method; binder type and application rate (where specified); straw mulch weed certification certificates; straw mulch application rate; soil surface cover.
Establishment and maintenance	Establishment and maintenance can be relatively intensive depending on site conditions, and could include: • Watering (dependent on rainfall and Vegetation Type) • Weed control if topsoil is poor, weeds are adjacent to the area or vegetation establishment is slow • Re-application if vegetation does not establish or there is damage from wind or water erosion.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 7

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Hydromulching – Standard

Hydraulic Mulch (Hydromulch) consists of various types of organic fibrous materials (eg – paper / wood pulp, wood fibre, straw fibre or milled cane fibre) mixed with water and sprayed onto the soil surface in slurry form that sets to provide a layer of temporary protection from wind and water erosion. There are three broad types of Hydromulching: Standard (this Fact Sheet), Bonded fibre matrix (Fact Sheet 8) and Hydrocompost (Fact Sheet 9).

Standard Hydromulches should be applied at the specified rate, generally between 1,500 and 3,500 kilograms per hectare. They are manufactured containing around 5 percent Tackifier (see Fact Sheet 3), soil ameliorants, and sometimes seed. However ideally the seed should be applied separately prior to mulching, to ensure good contact with the soil. Food-based dyes are commonly added to provide a blue or green colouring.

Standard Hydromulch provides a degree of short term soil surface protection from raindrop splash erosion and low volume sheet flow in low to moderate rainfall erosivity environments. It is essential that upstream flows are diverted away from the batter.

IMPORTANT NOTE: Aged organic materials should be used to prevent nitrogen draw-down.

Figure FS7a: Standard Hydromulch being applied to a batter on the Hunter Expressway.

Figure FS7b: Hydromulch application on a shallow gradient batter, with green dye for visibility.

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FACTOR	DETAIL
Slope	< 3h:1v On slopes ≥ 3h:1v Hydromulch can potentially be used in combination with a suitable supplementary stabilisation technique, such as an open weave organic fibre erosion blanket.
Level of erosion protection	Raindrop splash erosion and low volume sheet flow. Bonded fibre matrix or Hydrocompost will withstand heavier flow conditions.
Growing media	Topsoil.
Soil amelioration	Low. Only very small quantities of ameliorants are retained in the mulch. Ameliorants are easily washed off the slope so multiple applications may be required. The quality of the growing media and the Vegetation Type will determine the type and quantity of ameliorants that are required.
Bioregion	Hydromulching for temporary cover will work in all NSW bioregions, but success will depend on the amount of follow-up rain. Extreme weather conditions will cause failure in hydromulching from inadequate moisture and death of germinated seed, or the seed and mulch mix being washed off the batter prior to root establishment. Hydromulches with native seed mixes are more difficult to establish reliably and consistently, as many native seeds require specific climatic conditions to germinate, and may have natural periods of dormancy. Species that have tropical or rainforest origins typically do not work in hydromulching due to the size and type of seed. Hydromulching is appropriate to use in areas where the may be sudden changes in climatic conditions, or where straw mulching cannot be applied.
Access	Installation – Access will be required for Hydromulch machines to apply the mulch (and seed, where used). Proximity will depend on the application distance of the specific machine – truck-mounted units are fixed and will need to be immediately adjacent to the batter, whereas machines fitted with hoses may be able to apply mulch up to 100 metres from the access point. Maintenance – Access may be required for re-application, watering, applications of ameliorants or weed control.
Duration	Hydromulch will remain effective for 2 – 6 months. Much longer stabilisation will be achieved if vegetation is established with the Hydromulch – duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	Hydromulch alone provides little value for visual amenity or ecological outcomes. Good outcomes can be achieved if vegetation is established with the Hydromulch, but will vary according to the Vegetation Type (see below).
Vegetation type	Cover crops, grasses, legumes, native shrubs.
Establishment time until erosion protection	Hydromulch will provide erosion protection as soon as the mulch sets (12 - 24 hours), however only offers a low level of protection. Vegetation (if used) will provide significantly better erosion protection once established. Bonded fibre matrix or Hydrocompost will provide better erosion protection than Standard Hydromulch, in a similar time period.
Cost (at time of publication)	Low if suitable weed free topsoil is available in the immediate area: • $0.70 - $2.50/m² depending on location and area treated • Additional $3 - $5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for seed, watering in dry conditions and weed suppression (where necessary).
Preparation	Scarified soil and amelioration of topsoil and subsoil.
Rate of vegetation establishment	Vegetation establishment is slow and variable.
Quality assurance and surveillance	Soil preparation, soil testing, seed application method, seed application rate, seed germination and purity, mulch type and application rate, soil surface cover, binder application rate, soil ameliorant application rate; application coverage by multiple passes in different directions, ensure the area is moist prior to application.
Establishment and maintenance	Establishment and maintenance can be relatively intensive depending on site conditions, and could include: • Reapplication if heavy rain or flow washed hydromulch off the slope • Watering vegetation during dry periods • Maintenance application of ameliorants • Weed control if topsoil is poor, weeds are adjacent to the area or vegetation establishment is slow.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 8

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Hydromulching–Bonded fibre matrix

Hydraulic Mulch (Hydromulch) consists of various types of organic fibrous materials (eg – paper / wood pulp, wood fibre, straw fibre or milled cane fibre) mixed with water and sprayed onto the soil surface in slurry form that sets to provide a layer of temporary protection from wind and water erosion. There are three broad types of Hydromulching: Standard (Fact Sheet 7), Bonded fibre matrix (this Fact Sheet) and Hydrocompost (Fact Sheet 9).

Bonded fibre matrix (BFM) Hydromulches contain a high percentage of long fibres and are generally applied at a rate of 4,000 to 6,000 kilograms per hectare. BFMs should not be applied immediately before, during or immediately after rainfall or if the soil is saturated. They are generally manufactured containing around 2-4 percent cross-linked adhesive, around 1 percent polymer tackifier (see Fact Sheet 3) and soil ameliorants. The cross-linked adhesive should be biodegradable and should not dissolve or disperse upon rewetting. Food-based dyes are commonly added to provide a blue or green colouring.

BFM is designed to provide increased performance compared to Standard Hydromulch. This includes longer term erosion protection by providing complete soil surface cover, improved seed germination and hence revegetation outcomes and a greater ability to suppress weeds.

Figure FS8a: Correctly applied BFM Hydromulch – note 100% coverage. (Source: Landloch Pty Ltd)

Figure FS8b: Poorly applied BFM Hydromulch – note ineffective coverage. (Source: Landloch Pty Ltd)

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FACTOR	DETAIL
Slope	≤ 1h:1v On steep slopes the BFM Hydromulch can be anchored or covered using a suitable supplementary stabilisation technique (eg – open weave organic blanket, turf re-enforcement mat) to increase likelihood of success.
Level of erosion protection	Raindrop splash erosion or sheet flow. May withstand concentrated flow if combined with a supplementary stabilisation technique (see above).
Growing media	Topsoil.
Soil amelioration	Moderate. Only a small quantity of ameliorants can be retained in the mulch. Ameliorants can be washed off the slope and re-application may be required. The quality of the growing media and the Vegetation Type will determine the type and quantity of ameliorants that are required.
Bioregion	BFM hydromulch is appropriate for use in all NSW bioregions, but success will depend on the seed mix and application of seeds prior to covering with BFM. It is best used in areas prone to erosion from weather events, and with seed mixes that are aggressive pioneer species.
Access	Installation – Access will be required for Hydromulch machines to apply the mulch (and seed, where used). Proximity will depend on the application distance of the specific machine – truck-mounted units are fixed and will need to be immediately adjacent to the batter, whereas machines fitted with hoses may be able to apply mulch up to 100 metres from the access point. Maintenance – Access may be required for re-application, watering, applications of ameliorants or weed control.
Duration	BFM Hydromulch will remain effective for 6–12 months. Much longer stabilisation will be achieved if vegetation is established with the BFM Hydromulch – duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	BFM Hydromulch alone provides little value for visual amenity or ecological outcomes. Good outcomes can be achieved if vegetation is established with the BFM Hydromulch, but will vary according to the Vegetation Type (see below).
Vegetation type	Cover crops, grasses, legumes, native ground covers, shrubs and trees.
Establishment time until erosion protection	BFM Hydromulch will provide erosion protection as soon as the mulch sets (24 - 48 hours), and offers a medium to high level of protection. Vegetation (if used) will provide further erosion protection once established.
Cost (at time of publication)	Moderate if suitable weed free topsoil is available in the immediate area: • $2.50 - $4.50/m² depending on location and area treated • Additional $3 - $5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for seed, watering in dry conditions and weed suppression (where necessary).
Preparation	Soil scarification and amelioration of subsoil and topsoil.
Rate of vegetation establishment	Vegetation establishment is moderate to rapid.
Quality assurance and surveillance	Soil preparation; soil testing; soil amelioration; seed germination and purity; seed application rate; mulch type and application rate; application coverage by multiple passes in different directions; binder type and application rate; soil ameliorant application rate; soil surface cover.
Establishment and maintenance	Establishment and maintenance requirements are dependent on site conditions, and could include: • Reapplication if heavy rain or flow washes materials off the slope • Watering vegetation during dry periods • Maintenance application of ameliorants • Weed control if topsoil is poor, weeds are adjacent to the area or vegetation establishment is slow (although BFM Hydromulch generally provides good weed suppression).

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 9

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Hydromulching – Hydrocompost

Hydraulic Mulch (Hydromulch) consists of various types of organic fibrous materials (eg – paper / wood pulp, wood fibre, straw fibre or milled cane fibre) mixed with water and sprayed onto the soil surface in slurry form that sets to provide a layer of temporary protection from wind and water erosion. There are three broad types of Hydromulching: Standard (Fact Sheet 7), Bonded fibre matrix (Fact Sheet 8) and Hydrocompost (this Fact Sheet).

Hydrocompost combines approximately 4,000kg / hectare of finely screened compost into the hydromulch slurry. Specified seed can also be added to the mix. Some proprietary products are available that combine these ingredients into a pre-packaged blend. Hydrocompost is particularly useful as an in-fill for three-dimensional batter surface stabilisation techniques, such as Turf reinforcement mats (see Fact Sheet 15).

Many Australian soils have extremely low organic carbon levels, which can limit vegetation establishment and growth in new stabilisation projects. However, when combined with other appropriate soil ameliorants, Hydrocompost can often improve the organic carbon levels and the soils biological properties enough to accelerate seed germination and growth and achieve an acceptable revegetation outcome. The heavy mulch and likely good revegetation outcomes can result in good weed suppression.

The compost used in hydrocompost is screened to remove particle sizes that would block the pumps in the hydromulching equipment. The quality of the compost is critical and it must comply with relevant specifications (eg – Australian Standard 4454: Compost, Soil conditions and Mulches). Poor quality compost can result in high nitrogen draw down, contain heavy metals, plastics and glass fragments and have elevated salinity.

Figure FS9a: Application of Hydrocompost on the Kempsey Bypass. (Source: Matthew Easton)

Figure FS9b: Vegetation establishment from Hydrocompost on the Kempsey Bypass. (Source: Matthew Easton)

FACTOR	DETAIL
Slope	No limits. Hydrocompost is limited by the ability of the topsoil over which it is applied to hold on a slope. On steep slopes the Hydrocompost can be anchored or covered using a suitable supplementary stabilisation technique (eg – open weave organic erosion control blanket, turf re-enforcement mat) to increase likelihood of success.
Level of erosion protection	Raindrop splash erosion or sheet flow. May withstand concentrated flow if combined with a supplementary stabilisation technique (see above).
Growing media	Topsoil and sub-soil (assuming sufficient organic carbon can be applied to the sub-soil in the compost).
Soil amelioration	Moderate. Only a small quantity of ameliorants can be retained in the mulch.
Bioregion	Hydrocompost is bested suited to bioregions that can supply the required materials and will return the appropriate organics to the affected areas. As it can be used on steep slopes and often in conjunction with additional slope stabilisation techniques, it is suitable for forest and woodland environments and areas with regular heavy rain events.
Access	Installation – Access will be required for Hydromulch machines to apply the Hydrocompost (and seed, where used). Proximity will depend on the application distance of the specific machine – truck-mounted units are fixed and will need to be immediately adjacent to the batter, whereas machines fitted with hoses may be able to apply the material up to 100 metres from the access point. Maintenance – Access may be required for re-application, watering, applications of ameliorants or weed control.
Duration	Hydrocompost will remain effective for 6–12 months. Much longer stabilisation will be achieved if vegetation is established with the Hydrocompost –duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	Hydrocompost alone provides little value for visual amenity or ecological outcomes. Good outcomes can be achieved if vegetation is established with the Hydrocompost, but will vary according to the Vegetation Type (see below).
Vegetation type	Cover crops, grasses, legumes, native ground covers, shrubs and trees.
Establishment time until erosion protection	Hydrocompost will provide erosion protection as soon as the mulch sets (24–48 hours), and offers a medium to high level of protection. Vegetation (if used) will provide further erosion protection once established.
Cost (at time of publication)	Moderate if suitable weed free topsoil is available in the immediate area. Low if applied directly to subsoil and an acceptable vegetation outcome can be achieved. • $3.50-$6.50/m² depending on location and area treated • Additional $3-$5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for seed, watering in dry conditions and weed suppression (where necessary).
Preparation	Soil scarification and amelioration of subsoil and topsoil.
Rate of vegetation establishment	Vegetation establishment is slow and variable.
Quality assurance and surveillance	Soil preparation; soil testing; seed germination and purity; seed application rate; mulch type and application rate; application coverage by multiple passes in different directions; compost quality and application rate; binder application rate; soil ameliorant application rate; soil surface cover.
Establishment and maintenance	Establishment and maintenance requirements are dependent on site conditions, and could include: • Reapplication if heavy rain or flow washes materials off the slope • Watering vegetation during dry periods • Maintenance application of ameliorants • Weed control if topsoil is poor, weeds are adjacent to the area or vegetation establishment is slow (although Hydrocompost generally provides good weed suppression).

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 10

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Erosion control blanket – Organic fibre

Erosion control blankets (ECBs) are rolled erosion control products designed to protect the soil surface from various degrees of erosion.

They range from open meshes to thick dense mats, and can be manufactured from organic fibres (this fact sheet) or synthetic materials (Fact Sheet 11). There are many different Organic fibre ECBs available, so this fact sheet only describes general information.

Organic fibre ECBs are biodegradable and are suitable to be left in-situ if vegetation is also established. Organic fibre ECBs can be divided into two broad types:

- Grass promotion blankets – generally open meshes or thin mats and made of straw fibre, wood shavings or coir. Seed should be applied under the blanket to ensure intimate soil contact
- Weed suppression blankets – generally thick mats and made of jute or recycled fibre. Seedlings can be planted into the soil below the blanket using slits.

To function correctly and avoid being undermined, all ECBs require intensive soil preparation and correct installation. They must be adequately anchored at the top of the batter, pinned (stapled) and secured down the batter face (≤300mm spacing) to ensure intimate soil contact, and be overlapped the correct way (≥100mm, with each length over the top of the one below, like roof tiles). Installation should also achieve 100 percent coverage to ensure water cannot ingress and undermine the ECB.

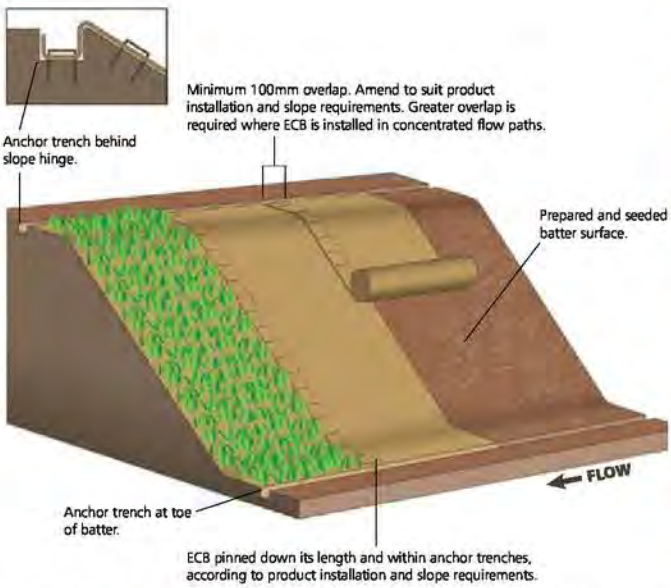

Figure FS10a: Correct ECB installation for a grass promotion blanket using seed. See Fact Sheet 11 for correct ECB installation for a weed suppression blanket using planting.

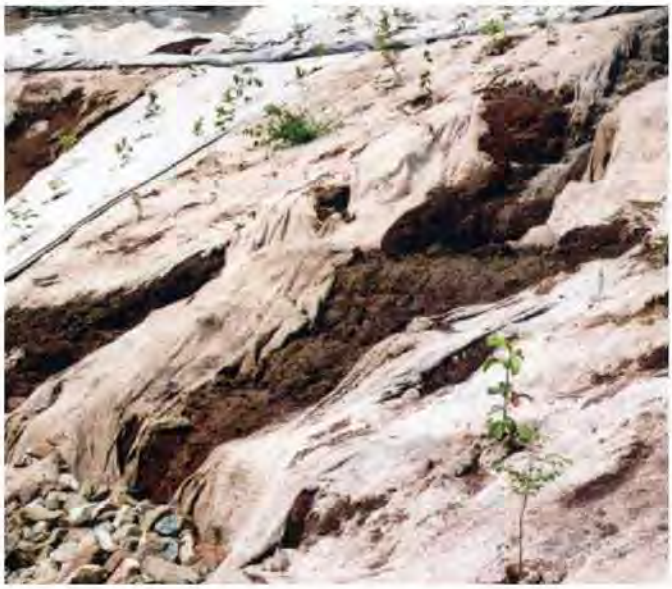

Figure FS10b: ECB failure due to poor surface preparation and water ingress through tree planting cuts. (Source: Landloch Pty Ltd)

FACTOR	DETAIL
Slope	There is no limit to the slope that Organic fibre ECBs can be applied to, as they are anchored to the slope surface with pins. They will be limited by the ability of the topsoil below to hold on the slope.
Level of erosion protection	Raindrop splash impact and sheet flow.
Growing media	Topsoil.
Soil amelioration	Organic fibre ECBs provide no soil amelioration. If vegetation is to be established through the ECB, soil amelioration might need to be undertaken prior to installation to provide suitable conditions for the desired vegetation type.
Bioregion	Organic fibre ECBs are suitable for use in all NSW bioregions, but the climate and level of exposure to weather (especially wetting and drying cycles) will affect the longevity and integrity of the material.
Access	Installation – intensive slope preparation and anchoring is required and access is needed down the entire batter. On steep slopes where safety is an issue, this may require the use of a cherry picker and/or other machinery. Maintenance – Access may be required for watering vegetation, anchoring repairs, replacing any damaged ECB and weed control.
Duration	Organic fibre ECBs will last up to 12 months before biodegrading - thickness and density are the biggest factors influencing duration. Much longer stabilisation will be achieved if vegetation is established with the ECB – duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	Organic fibre ECBs are made from natural materials that provide minimal visual impact, but alone they provide little ecological value. The establishment of vegetation will improve the visual amenity and has the potential to improve ecological outcomes.
Vegetation type	Grass promotion blankets – cover crops, grasses and legumes. Weed suppression blankets – native ground covers, shrubs and trees.
Establishment time until erosion protection	Erosion protection is provided immediately upon installation. This will be enhanced if vegetation is established with the ECB.
Cost (at time of publication)	High: • $5-$10/m² for materials, plus intensive soil preparation and labour costs • Additional $3-$5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for plants, watering in dry conditions and weed suppression (where necessary).
Preparation	Soil amelioration and intensive soil preparation to provide a uniform surface free of obstructions, tree stumps or rubble and create intimate contact between the ECB and soil surface. Preliminary weed control is essential before laying the material. If using a grass promotion blanket, seed should be applied before laying the material.
Rate of vegetation establishment	Vegetation establishment is generally slow.
Quality assurance and surveillance	Soil testing; soil amelioration; soil preparation; seed germination and purity; seed application rate; mulch type and application rate; compost quality and application rate; binder application rate; soil ameliorant application rate; soil surface cover.
Establishment and maintenance	Establishment and maintenance requirements are generally low to moderate, and could include: • Reapplication if heavy rain or flow washes materials off the slope • Watering vegetation during dry periods • Maintenance application of ameliorants • Weed control if topsoil is poor, weeds are adjacent to the area or vegetation establishment is slow.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 11

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Erosion control blanket – Synthetic

Erosion control blankets (ECBs) are rolled erosion control products designed to protect the soil surface from various degrees of erosion. They range from open meshes to thick dense mats, and can be manufactured from organic fibres (Fact Sheet 10) or synthetic materials (this fact sheet). There are many different Synthetic ECBs available, so this fact sheet only describes general information.

Figure FS11a: Erosion control blanket with cuttings for plantings. (Source: Geofabrics Australasia Pty Ltd)

Synthetic ECBs are manufactured from a variety of polymers and are not biodegradable. As such, they can generate a waste problem and must be removed and appropriately disposed of once they are no longer required for stabilisation. Synthetic ECBs can be divided into two broad types:

- Grass promotion blankets - generally open meshes or thin mats. Seed should be applied under the blanket to ensure intimate soil contact
- Weed suppression blankets – generally thick mats. Seedlings can be planted into the soil below the blanket using small slits (see Figure FS11a).

To function correctly and avoid being undermined, all ECBs require intensive soil preparation and correct installation. They must be adequately anchored at the top of the batter, stapled and secured down the batter face (≤300mm spacing) to ensure intimate soil contact, and be overlapped the correct way (≥100mm, with each length over the top of the one below, like roof tiles). Installation should also achieve 100 percent coverage to ensure water cannot ingress and undermine the ECB.

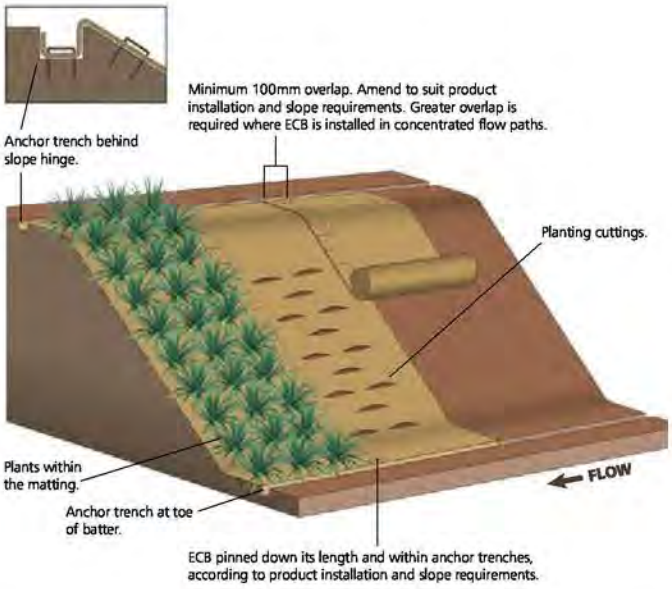

Figure FS11b: Correct ECB installation for a weed suppression blanket using planting. See Fact Sheet 10 for correct ECB installation for a grass promotion blanket using seeding.

FACTOR	DETAIL
Slope	There is no limit to the slope that synthetic ECBs can be applied too, as they are anchored to the slope surface with staples. They will be limited by the ability of the topsoil below to hold on the slope.
Level of erosion protection	Synthetic erosion control blankets are designed to withstand sheet flow up to ~1.5 metres / second.
Growing media	Topsoil.
Soil amelioration	Synthetic ECBs provide no soil amelioration. If vegetation is to be established through the ECB, soil amelioration might need to be undertaken prior to installation to provide suitable conditions for the desired vegetation type.
Bioregion	Synthetic ECBs are suitable for use in all bioregions, but the should consider aspect and temperature. If left uncovered or unshaded, synthetic ECBs may increase the soil temperature in the upper root zone for newly germinated plants, which can inhibit vegetative establishment. Ensure that the ECB is UV-stable for use in exposed areas.
Access	Installation – intensive slope preparation and anchoring is required and access is needed down the entire batter. On steep slopes where safety is an issue, this may require the use of a cherry picker and/ or other machinery. Maintenance – Access may be required for watering vegetation, anchoring repairs, replacing any damaged ECB and weed control.
Duration	Synthetic ECBs will last up to 2 years before starting to break down - thickness and density are the biggest factors influencing duration. Much longer stabilisation will be achieved if vegetation is established with the ECB – duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	Synthetic ECBs are often neutral colours that provide minimal visual impact, but alone they provide little ecological value. The establishment of vegetation will improve the visual amenity and has the potential to improve ecological outcomes.
Vegetation type	Grass promotion blankets – cover crops, grasses and legumes. Weed suppression blankets – native ground covers, shrubs and trees.
Establishment time until erosion protection	Erosion protection is provided immediately upon installation. This will be enhanced if vegetation is established with the ECB.
Cost (at time of publication)	Very high: • $5-$10/m² for materials, plus intensive soil preparation and labour costs • Additional $3-$5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for plants, watering in dry conditions and weed suppression (where necessary).
Preparation	Soil amelioration and intensive soil preparation to provide a uniform surface free of obstructions, tree stumps or rubble and create intimate contact between the ECB and soil surface. Preliminary weed control is essential before laying the material. If using a grass promotion blanket, seed should be applied before laying the material.
Rate of vegetation establishment	Vegetation establishment is generally slow.
Quality assurance and surveillance	Soil testing, soil amelioration, soil preparation; seed germination and purity; seed application rate; seed application method; mulch type and application rate; binder application rate; soil ameliorant application rate; soil surface cover.
Establishment and maintenance	Establishment and maintenance requirements are generally low to moderate, and could include: • Reapplication if heavy rain or flow washes materials off the slope • Watering vegetation during dry periods • Maintenance application of ameliorants • Weed control if topsoil is poor, weeds are adjacent to the area or vegetation establishment is slow.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 12

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Cellular confinement systems

Cellular confinement systems are either a permanent or biodegradable product with the primary purpose to uniformly contain soil and other materials over an area and provide geotechnical strength with low strength materials and/or environments. The permanent cellular confinement systems are constructed from HDPE and the biodegradable ones from coconut fibre.

Cellular confinement systems were originally designed to contain material for temporary or permanent low cost, load-bearing access tracks over soft or unstable ground such as sand dunes, river beds and water logged areas. They can be effective for some batter surface stabilisation situations, where they confine fill material to resist flows, minimise erosion and prevent the downward migration of the materials. They are also suitable as a channel liner in some low velocity situations.

For batter surface stabilisation and the establishment of vegetation, they can be filled with topsoil or compost. Seed can either be applied with the growing media, or as a secondary application on top of the growing media. To protect seeds and assist with germination and establishment, compost blankets or bonded fibre matrix Hydromulch products can be used in conjunction with the cellular confinement system.

Cellular confinement systems require intensive slope preparation and fastening, and the edges of the system should be installed at or below ground level to minimise scouring at the edges by run on stormwater. Incorrect installation can result in dramatic failures, as one weak point can drag the entire batter down the slope.

Figure FS12a: Installation of cellular confinement system – backfilling with unbound granular material beneath the pavement and imported topsoil on the batter slope. (Source: Queensland Department of Transport and Main Roads)

Figure FS12b: Cellular confinement that has been installed and planted out on an extremely steep slope, and begun to slump due to insufficient anchoring.

FACTOR	DETAIL
Slope	≤1h:1v
Level of erosion protection	Raindrop splash erosion, sheet flow and low velocity concentrated flow.
Growing media	Topsoil or compost.
Soil amelioration	Soil amelioration is completely dependent on the material used to fill the cellular confinement system. If topsoil is used, it should be tested and ameliorated (if necessary) to ensure it is appropriate for any vegetation that is to be established. If compost is used, it can provide good soil amelioration for the existing topsoil / subsoil below.
Bioregion	Cellular confinement systems are generally able to be used in all NSW bioregions, but their effectiveness and installation depends on the geotechnical conditions. Avoid using cellular confinement systems in vegetation systems with buttressing roots that can "heave" the system off the ground surface. Cellular confinement systems made with thick synthetic materials may also absorb extra heat in exposed aspects.
Access	Installation – intensive slope preparation and anchoring is required and access is needed down the entire slope. On steep slopes where safety is an issue, this may require the use of a cherry picker and/ or other machinery. Maintenance – Access may be required for watering, re-application of seed, anchoring repairs and weed control.
Duration	HDPE cellular confinement systems can be installed as permanent fixtures. Coconut fibre cellular confinement systems will last up to 4 years.
Visual amenity and ecological outcome	HDPE cellular confinement systems can be visually obtrusive and provide little ecological value. Coconut fibre cellular confinement systems can also be visually obtrusive, but provide a more natural appearance, but still provide little ecological value. The establishment of vegetation will improve the visual amenity of both products and has the potential to improve ecological outcomes.
Vegetation type	Cover crops, grasses, legumes, native ground covers, shrubs and trees. The cell size (ranges from ~200–400mm diameter) will limit the growth of trees and should be considered when selecting species so as not to cause ring-barking.
Establishment time until erosion protection	Erosion protection is immediate once appropriately installed, and will improve as vegetation (if used) establishes. Cellular confinement systems should not be used on dispersive soils unless suitably ameliorated with gypsum.
Cost (at time of publication)	Very high: • $20-$30/m² for supply of cellular confinement system and installation • Additional cost for soil anchors (eg – duck billed anchors, soil nails) • Additional $3-$5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for seed, watering in dry conditions and weed suppression (where necessary).
Preparation	Soil amelioration may be required when topsoil is used. Intensive soil preparation is required to provide intimate contact between the cellular confinement system and the soil surface. If vegetation is to be established, seeding will be required.
Rate of vegetation establishment	Vegetation establishment will be variable if topsoil alone is used. Vegetation establishment will be rapid if installation is combined with compost, a compost blanket or topsoil with BFM hydromulch.
Quality assurance and surveillance	Soil testing and amelioration; cellular confinement system type and installation; soil preparation; seed germination and purity; seed application rate; seed application method; mulch type.
Establishment and maintenance	Establishment and maintenance requirements can be intensive and long-term, and could include: • Watering in dry conditions and re-seeding any failed areas • Long term maintenance of slopes with plastic matrix in place • Long term observations of tree establishment to ensure they are not strangled by cells • Ongoing observations of anchoring • Weed control if topsoil is poor, weeds are adjacent to the area or vegetation establishment is slow.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 13

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Compost blanket

A compost blanket consists of high quality compost, organic tackifiers (normally Guar), biological stimulants (bacteria and fungi foods), wetting agents, soil ameliorants and (usually) a seed mix, that is applied to the surface of the batter. They have many potential applications, but can be particularly useful when slopes are too steep for topsoil application, there is insufficient topsoil, the topsoil is of poor quality (including weed infested), or the topsoil is inaccessible for amelioration.

The compost production process results in a stable growing media that is high in organic carbon, has low potential for viable weed seeds (due to pasteurisation) and will not result in nitrogen drawdown. The compost provides slow release nutrients for vegetation establishment, has good water holding capacity and can be used on compacted and dispersible (with amelioration) soils. To ensure the quality of the compost, it is normally recommended that it be produced according to Australian Standard 4454.

Compost blankets are usually applied with pneumatic blowers at thicknesses ranging from 25 - 100 millimetres depending on slope conditions and desired vegetation outcome. Thin compost blankets are normally used for grass establishment and/or low rainfall environments and thick compost blankets are normally used for native vegetation establishment and/or high rainfall environments. The installation must achieve 100 percent soil surface cover with a uniform thickness, and must extend over the top of the batter to ensure water does not undermine the blanket.

Figure FS13a: Application of a compost blanket on a steep batter. This application also included the addition of woodchip to provide additional erosion protection. (Source: Leighton Contractors)

Figure FS13 b: Watering of compost blanket after application. (Source: The Hills Bark Blower)

FACTOR	DETAIL
Slope	≤ 2h:1v ≤ 1h:1v if used with a supplementary stabilisation technique (eg – open weave organic blanket, turf re-enforcement mat).
Level of erosion protection	Raindrop splash erosion and sheet flow. May withstand low velocity concentrated flow if combined with a supplementary stabilisation technique (see above).
Growing media	The compost is supplied as the growing media, and is best applied over subsoils and where topsoil does not exist (eg – over rock).
Soil amelioration	The compost blanket provides medium-long term, slow release amelioration to the soil over which it is placed. However the compost itself normally provides all of the required properties to establish the desired vegetation.
Bioregion	Compost is appropriate for use in any NSW bioregion.
Access	Installation – Access requirements will depend on the application method. If applied by earthmoving machinery, the machines will need suitable access to the batter itself. Truck-mounted pneumatic blowers can apply compost up to 100 metres from the truck access point. Maintenance – Access may be required for watering and re-application in any failed areas.
Duration	The compost blanket itself will remain effective for 6 – 12 months. Much longer stabilisation will be achieved if vegetation is established with the compost blanket – duration will be dependent on the Vegetation Type (see below).
Visual amenity and ecological outcome	The compost blanket itself provides little visual amenity or ecological outcomes. However the vegetation, once established, can provide significant outcomes – this will be dependent on the vegetation type (see below).
Vegetation type	Cover crops, grasses, legumes, native ground covers, shrubs and trees.
Establishment time until erosion protection	Compost blankets will provide a medium to high level of erosion protection as soon as the tackifier sets (24-48 hours). Vegetation (if used) will provide further erosion protection once established.
Cost (at time of publication)	High upfront cost: • $3.50-$12/m² – depending on distance from suitable compost supply, area to be treated, depth of application and additives (eg – seed, ameliorants) required • However topsoil is not required, and maintenance costs are often minimal, so lifecycle costs should be considered.
Preparation	The batter surface (soil or rock) must be contour scarified and all loose rocks, roots, clods, stumps and debris over 50mm in diameter must be removed. Ameliorants must be applied to dispersive soils.
Rate of vegetation establishment	Vegetation establishment is usually rapid.
Quality assurance and surveillance	Soil preparation; soil testing; soil ameliorant application rate; seed germination and purity; seed application rate; application coverage by multiple passes in different directions; tackifier type and application rate; compost quality and application rate; soil surface cover.
Establishment and maintenance	Establishment and maintenance requirements are usually low, but could include: • Initial watering and in dry conditions • Replacing any washed out areas (must be done immediately) • Weed control if weeds are adjacent to the area.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 14

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Placed turf

Turf refers to growing grass, root and soil material that is harvested from the field in rolls. The rolls are placed on the ground providing immediate erosion protection from wind, raindrops and light surface flow.

Freshly laid turf is susceptible to lifting by strong sheet flows, and should be laid perpendicular to the path of flow to prevent scouring between rolls and pinned into place. The spacing and depth of anchor pins depends on the slope gradient and estimated surface water flow. Turf is easily cut to shape at junctions, around drains and culverts.

All turf requires mowing, but different turf species will grow at different speeds, have a variety of grass blade lengths, and a range of microclimate tolerances. Slow-growing, low maintenance turfs may be intolerant to wear or high flows, whereas fast-growing turfs may be more tolerant to wear or high flows but will require more frequent mowing or slashing.

Figure FS14a: Turf strip at top of seeded batter to spread sheet flow, Kempsey Bypass.

Figure FS14b: Turf placed on variable slopes, Bega Bypass.

April 2015

FACTOR	DETAIL
Slope	Although turf can thrive on very steep slopes, it is usually limited by the angle of access of mowing or slashing, which is ≤ 3h:1v.
Level of erosion protection	Raindrop splash erosion, sheet flow and concentrated flow.
Growing media	Turf should be laid on 50 – 150mm of sandy loam over cultivated subsoil for fastest root establishment. Turf may be pinned directly onto heavily cultivated subsoil to prevent eroding of growing media prior to establishment, but the quality and evenness of turf cover will be poorer.
Soil amelioration	Turf will grow in all soils except those with high acid or alkaline levels. Turf responds quickly to ameliorated growing media.
Bioregion	Turf is best suited to warmer climates for rapid growth and coverage. Most turfs are resistant to light frosts. Few turfs are drought tolerant, however dead turf will provide erosion control for a limited period if undisturbed.
Access	Installation – Turf rolling machinery can only access slopes ≤ 1v:4h. Turf can be laid by hand, so installation will only be limited by the ability to safely access the slope. Maintenance – machines to mow or slash the turf can only operated on slopes ≤ 1v:3h. Access may be required for watering, application of fertiliser and re-application in any failed areas.
Duration	If an appropriate turf variety is selected for the bioregion and it is not subject to excessive climate differentials, wear or compaction, turf can provide permanent stabilisation. Some cultivar turfs have sterile seed, so if the turf is worn or patchy, it will not recover.
Visual amenity and ecological outcome	Turf provides reasonable visual amenity outcomes, with a neat, uniform batter surface cover. Turf is excellent for late-finishing works and provides instant effect. Most turf grasses are exotic and low-growing, with little ecological benefit. There are significant environmental benefits in using turf to reduce ground surface heat, provide a temporary access surface and to keep areas open for sightlines or hazard clearance.
Vegetation type	Turf. Some grass species can be left to grow wild or managed as turf. There are some native turfs that are slow growing and will not require regular mowing, but these can be sensitive to frosts and frequent inundation.
Establishment time until erosion protection	Erosion protection from wind, raindrop and low sheet flow is immediate. Protection from concentrated flows will be provided after root establishment in 1-6 weeks, depending on bioregion, season and turf variety. Most turfs are much slower to establish in cold seasons and climates.
Cost (at time of publication)	High: • $4-$12/m², depending on location and availability of turf • Additional $3-$5/m² to strip, ameliorate and respread topsoil if required • Additional cost allowances should be made for watering in dry conditions and weed suppression (where necessary).
Preparation	Soil amelioration may be required when topsoil is used and cultivation of subsoil will be required to ensure it is free-draining. Intensive soil preparation is required to provide a level and uniform surface free of obstructions, debris and materials that prevent intimate contact between the turf roots and the soil surface.
Rate of vegetation establishment	Turf is installed as a mature product, and only requires the roots to establish in the sites growing media. Rate of vegetation establishment is dependant on the species, quality of bed preparation, climate and watering, but is generally rapid. Warm weather, frequent watering and preventing use or access over the new turf will increase the rate of establishment.
Quality assurance and surveillance	Turf type and installation; soil testing and amelioration; soil preparation; soil ameliorant application rate; soil surface cover; watering.
Establishment and maintenance	Establishment and maintenance requirements are generally moderate, but can be high for exotic turfs laid in peak warm seasons, and could include: • Watering in dry conditions and re-application in any failed areas • Mowing (~every 8-12 weeks after initial establishment) • Weed control if growing media is poor or weeds are adjacent to the area.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

Fact Sheet 15

Guideline for Batter Surface Stabilisation using vegetation

Roads & Maritime

Turf reinforcement mats

Turf Reinforcements Mats (TRMs) are primarily used as an alternative to hard armours in channel lining situations. In slope stabilisation situations TRMs are used when overland flows are present or the slope gradients are too steep to hold topsoil or compost.

TRMs are two- or three-dimensional rolled mats made from a dense mesh of synthetic polymers (ie – not biodegradable) that are placed on the soil surface to protect it from medium to high velocity flows.

Two-dimensional non-soil filled TRMs are flat and are used in situations where suitable topsoil exists but an overland flow could erode it. The topsoil is seeded prior to the application of the TRM. Once established, the plant stems intertwine with the TRM to form a strong surface that withstands flow.

Soil filled TRMs are up to 10mm thick and are considered the most appropriate for slope stabilisation solutions. They can be used where the slope is too steep to hold topsoil or compost. Following installation of the TRM, topsoil or compost is applied using a slinger or blower truck to fill the voids in the three-dimensional mat. Seed is either mixed in with the growing media or applied on top of it. The mat then assists to hold the soil and seed in place while the plants establish and intertwine with the TRM to form a strong surface that withstands flow. Other stabilisation techniques (eg – BFM Hydromulch) can be applied over the surface of TRMs to provide an additional level of erosion protection for critical sites.

Like other rolled batter surface stabilisation techniques (eg – erosion control blanket, cellular confinement systems), correct installation of TRMs is critical to ensure success. It requires a smooth and uniform soil surface to ensure intimate soil contact, sufficient anchoring at the top of the batter, stapling down its length (≤300mm spacing) and sufficient overlapping (≥100mm).

Figure FS15a: Soil-filled turf reinforcement mat. (Source: Wally Butman – Profile Products)

Figure FS15b: Non-soil filled turf reinforcement mat.

FACTOR	DETAIL
Slope	TRMs can be applied on slopes ≤ 3h:1v. It may be possible to apply a TRM to slopes <1h:1v if a complementary measure (eg – BFM Hydromulch) is used to help stabilise the slope.
Level of erosion protection	Raindrop splash erosion, sheet flow and concentrated flow.
Growing media	The growing media is dependent on the type of TRM that is used. Two-dimensional TRMs are laid on the slope surface and rely on an existing growing media. Three-dimensional TRMs are laid on the slope surface and topsoil (existing or imported) or compost is then applied to fill the voids in the matting.
Soil amelioration	No soil amelioration is provided when two-dimensional TRMs are applied over existing topsoil. Soil amelioration can be provided when imported topsoil (variable and reliant on quality of source material) or compost (usually high levels of amelioration) are applied to three-dimensional TRM's. Both topsoil and compost can be artificially ameliorated prior to application. If BFM Hydromulch is used with a TRM it can provide moderate additional levels of amelioration.
Bioregion	TRMs are appropriate for use in any NSW bioregion. If made with thick synthetic materials they may also absorb extra heat in exposed aspects.
Access	Installation – intensive slope preparation and anchoring is required and access is needed down the entire slope. On steep slopes where safety is an issue, this may require the use of a cherry picker and/or other machinery. Maintenance – Access may be required for watering, re-application of seed, anchoring repairs and weed control.
Duration	TRMs are designed as a permanent stabilisation technique. Each product will eventually break down (longevity is dependent on the materials used), however established vegetation will continue to provide some level of stabilisation.
Visual amenity and ecological outcome	TRMs are often a natural or unobtrusive colour that provides minimal visual impact, but alone they provide little ecological value. The establishment of vegetation will improve the visual amenity of both products and has the potential to improve ecological outcomes.
Vegetation type	TRM's can be used with either temporary or permanent vegetation, however the cost will likely limit the application of TRM's for temporary solutions. Vegetation type will be limited by the pore size of the given TRM, and will be restricted to cover crops, grasses, legumes and possibly some small native ground covers.
Establishment time until erosion protection	The erosion protection provided by a two-dimensional TRM is limited until vegetation establishes, as the soil underneath is not held in place. The erosion protection provided by a three-dimensional TRM is instant, and will be enhanced when vegetation establishes.
Cost (at time of publication)	Very high: • $12 - $35/m² to supply and install • For three-dimensional TRMs, additional costs should be allowed to either strip, ameliorate and re-apply topsoil, or import, ameliorate and apply topsoil or compost.
Preparation	Intensive soil preparation is required to ensure a smooth and uniform surface (free of obstructions, tree stumps, clods and rubble) and intimate contact between the TRM and slope surface. Soil amelioration may also be required to ensure the growing media (existing or imported) is suitable for the vegetation that is to be established with the TRM. Preliminary weed control is essential before laying the TRM.
Rate of vegetation establishment	Vegetation establishment is dependent on the vegetation type and the quality of the growing media. Rate of establishment with topsoil is extremely variable, but will generally be rapid if compost is used. The use of BFM Hydromulch with any growing media will generally speed up the rate of establishment, by shielding seed from rain drop impact and regulating soil temperature and moisture levels.
Quality assurance and surveillance	TRM type and installation; soil testing and amelioration; compost quality; soil preparation; seed germination and purity; seed application rate; seed application method; mulch type.
Establishment and maintenance	Establishment and maintenance requirements are usually low, but could include: • Watering in dry conditions and re-seeding any failed areas • Ongoing observations of anchoring and repair where necessary • Weed control if topsoil is poor, weeds are adjacent to the area or vegetation establishment is slow.

This fact sheet has been prepared to be complementary to Section 3, Factors to consider, of the Guideline for Batter Surface Stabilisation using vegetation.

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2.18

GENERIC PROVISIONS

LANDSCAPING AND OPEN SPACES

MARRICKVILLE council

Contents

2.18 Landscaping and Open Spaces

Landscaping can integrate new development into the neighbourhood and improve the level of amenity and quality of life for new and existing residents. Any new development must preserve and protect any existing trees on site.

Landscaping can reduce the impacts of urban development on the natural environment by minimising increased stormwater run off, preserving indigenous species and biodiversity, providing habitat and food sources, retaining natural micro-climatic conditions and reducing household energy consumption.

Landscaping can make outdoor spaces useful, enjoyable and attractive, contributing greatly to the amenity and comfort for people working and visiting the area.

Landscaping in industrial areas can soften the large expanses of built up and paved areas. Vegetation can define movement patterns and discourage undesirable uses such as graffiti.

2.18.1 Objectives

O1 To promote site landscaping that conforms and complements the character of the individual building and the character of the area.

O2 To retain and enhance any existing significant trees and established planting found on site.

O3 To provide dwellings with outdoor recreation space.

O4 To minimise the extent of hard paved areas and facilitate rainwater infiltration.

O5 To improve the appearance, amenity and energy efficiency of development through integrated landscape design.

O6 To ensure private open space and landscaping provided in association with new dwellings within business centres meets user requirements for privacy, safety, access and outdoor activities.

O7 To provide private open space areas which act as an extension of the living area of a dwelling and, where practicable, receive adequate sunlight.

O8 To blend new development into the streetscape and neighbourhood and encourage the integration of buildings and landscape elements.

O9 To ensure industrial sites have adequate landscaped areas to present a softer and more interesting street presentation and to facilitate rainwater infiltration.

O10 To create a vegetated buffer between residential and industrial uses.

O11 To encourage green corridors and to require the retention of indigenous vegetation – and, in the case of new plantings, to encourage planting locally indigenous species.

O12 To encourage green roofs and green walls particularly for large scale developments.

2.18.2 Water efficient landscaping

Design principles

1. The water used to irrigate landscaping in households, on average, accounts for 25% of all residential water use in Sydney. Reduced water consumption in the yard areas of households can be achieved through more efficient landscaping.
2. Water efficient landscaping can also improve infiltration into the ground, which can reduce the amount of stormwater entering Council's drainage system. Marrickville LGA's built environment provides major constraints due to infiltration of a limited amount of private open space. The predominant clay soil type of Marrickville LGA is also a deterrent to the degree of infiltration. Nonetheless, the encouragement of water efficient landscaping practices, combined with conventional on-site detention tanks can only improve the overall impact on Council's drainage system.

Good design practice

1. Water efficient landscaping practices include:
    - Reducing the lawn area (lawns are generally water and fertiliser hungry) with appropriate planting;
    - Planting low water use vegetation;
    - Hydrozoning, or grouping species with similar water needs together;
    - Maximising the capture of rainfall and preventing runoff;
    - Placing controls on hoses and fixtures to prevent over-watering; and
    - Watering for longer periods at a reduced frequency to promote deeper root growth and drought tolerance.
2. Soil management techniques can reduce the amount of run-off flowing into Council's drainage system, particularly through infiltration. Principles include:
    - Enhancing the soil structure of landscaped areas through plant growth;
    - Planting roots bind soil particles into aggregates to improve permeability;
    - Deep rooting plants to increase infiltration;
    - Using decaying organic matter to improve the soil structure (mulches, green manure and compost);
    - Using earthworms to enhance the soil structure;
    - Not compacting soils which decreases the rate of infiltration;
    - Avoiding modern gardening practices that are harmful to soil organisms (such as fertilising chemicals); and
    - Thoroughly analysing the soil type for natural drainage systems as some soils have poor infiltration rates, such as clay.
3. The following functions of plants can reduce the amount of stormwater flowing into Council's drainage system and should be considered:
    - A small proportion of rain evaporates directly from a plant's surface, even during rainfall;
    - In many trees, water is collected in the upper canopies and flows down eventually into the soil;
    - During rainfall, water is stored on the surface of leaves and stems, gradually making its way into the soil;
    - During the growth of vegetation, water is removed from the soil by transpiration, where the water is then evaporated from the plants into the atmosphere, replenishing the original source of rainfall;
    - Trees with large leaf areas and deep roots have higher rates of transpiration; and
    - Transpiration helps to dry out soils; during rain, water will infiltrate more readily into dry soil.

2.18.3 Landscape plan

A landscape plan and maintenance schedule must be submitted with any development application for residential, commercial and industrial development that requires landscaping. Exemptions from this requirement may be considered on a case by case basis.

C1 The landscape plan must include:

i. Drawings at a scale of 1:100 or 1:250 that include north point, lot boundaries and an outline of adjoining buildings along common boundaries;

ii. Water efficient landscaping principles include:

   a. Low water use plant species. Refer to the list of preferred native plant species at Section 2.18.13;

   b. Hydrozoning, or grouping species of similar water needs together;

   c. Efficient use of lawn areas;

   d. Use of mulch or similar treatments of garden beds with mulch depth not less than 100mm;

   e. Landscaping designed to maximise capture of rainfall and prevent runoff; and

   f. Deciduous trees to control solar access in summer and winter.

iii. Total landscaping area in square metres and percentage of whole site;

iv. Contour lines and levels for sites in excess of 600m^2;

v. Current and proposed building layout (external walls, windows and roof), location of driveways and other paved areas;

vi. Details of all fencing, including style (manufacturer, product code, name), materials, colour/s and installation method;

vii. Location, species and size of existing vegetation within the site and on adjacent properties;

viii. All trees identified as either retained, trimmed, transplanted or removed and numbered to correspond with any text relating to that tree;

ix. A planting schedule detailing location and botanical names of all trees, shrubs or ground covers;

x. Height of proposed trees and vegetation at the time of planting and expected mature height;

xi. Treatment of paved areas (parking and pedestrian areas);

xii. Construction methods that may reduce the impacts of development on existing trees and landscaped area;

xiii. Internal dimensions of planter boxes with details of irrigation system;

xiv. Any court walls facing a communal area or public place or road (that must be constructed of a material similar in type and colour to that used for the development found on site); and

xv. If a corner site, landscaping details along the secondary frontage.

2.18.4 Landscape concept plan

For multi dwelling housing, residential flat buildings, mixed use development (shop top housing) and large industrial complexes a landscape concept plan may also be submitted for Council's initial consideration.

C2 The landscape concept plan must include:

i. Applicant, lot and address details;

ii. Total lot and building areas in square metres;

iii. Total landscaping area in square metres and percentage of whole site;

iv. Contour lines and levels for sites in excess of 600m^2;

v. Current and proposed building layout (external walls, windows and roof), property boundary, location of driveways and other paved areas;

vi. Location, species and size of existing vegetation within the site and on properties adjacent to site boundaries.

vii. All trees within the site, identified as being either retained, trimmed, transplanted or removed;

viii. Planting schedule showing location of all trees, shrubs and ground covers and their mature height; and

2.18.5 Designing landscaped areas

C3 The design of a landscaped area must consider:

i. Existing buildings and any proposed developments;

ii. The requirement to landscape sections of the site not built upon with trees, shrubs and ground cover;

iii. How site landscaping can complement and reinforce the locality in terms of plant selection or choice of materials by accounting for the role of the street, solar access, soils and existing services;

iv. Where a strong landscape theme exists, the need to complement and reinforce any existing theme;

v. How to reduce the visual impact of development, both to the street and to adjoining development;

vi. Making paved areas:

   a. Semi-porous to maximise on-site infiltration of stormwater;

   b. Complementary materials and colours; and

   c. With non-slip finishes and with gradients and dimensions suitable for use by people with disabilities; and

vii. Varying the alignment of paved areas and driveways to create opportunities for landscaping.

2.18.6 Designing open spaces for recreational use

C4 Proposed open spaces (for private recreational use) must:

i. Take advantage of the orientation, outlook and any natural features of the site;

ii. Comply with solar access requirements under Section 2.7 (Solar Access and Overshadowing) of this DCP;

iii. Serve as an extension of internal living/dining areas;

iv. Be clearly defined for private use;

v. Not be steeper than 1 in 10 gradient;

vi. Minimise adverse impacts such as loss of privacy;

vii. Improve surveillance and security;

viii. If a communal open space area, be located in large aggregated areas capable of active use by residents; and

ix. If above basements, and in planter boxes, be of a sufficient soil depth, contain appropriate irrigation devices and have drainage connected to the stormwater system.

2.18.7 Landscaped areas over podiums or basement car parking areas

C5 Landscaping over podiums or basement car parking must not exceed 30% of the required total landscape area component.

C6 Where landscaping over the roof of underground parking areas is proposed, it must support soil of sufficient depth, contain appropriate irrigation devices and have drainage connected to the stormwater system that supports the growth of medium sized plants species (up to 2 metres) with details shown on the landscaping plan.

2.18.8 Existing gardens and landscaped areas

C7 Significant gardens, or remnants of gardens with original planting schemes and hard landscape elements such as paving and associated decorative elements must not be removed.

NB *For controls and objectives relating to any works to or around an existing tree, including its removal, refer to Section 2.20 (Tree Management) of this DCP.*

2.18.9 Access and mobility

C8 Pathways and other public areas within a new landscaped area must be accessible for person with a disability in accordance with objectives and controls under Section 2.5 (Equity of Access and Mobility) of this DCP.

2.18.10 Community safety

C9 All proposed landscaping must demonstrate consistency with the provisions of Crime Prevention Through Environmental Design (CPTED) discussed under Section 2.9 (Community Safety) of this DCP.

C10 The landscape plan must consider community safety guidelines including:

i. Ensuring good visibility and lighting at pedestrian entries and along paths and driveways;

ii. Avoiding dense landscaping near thoroughfares; and

iii. Providing suitable paving to driveways and walkways in the vicinity of garbage bin enclosures, letter boxes, clothes lines, children's playground equipment, seating and shade structures.

2.18.11 Landscaping and open space controls based on development types

2.18.11.1 Dwelling houses, attached dwellings and semi-attached dwellings

C11 Landscaped area

The entire front setback must be of a pervious landscape with the exception of driveways and pathways.

C12 Private open space

i. The greater of 45m² or 20% of the total site area with no dimension being less than 3 metres, must be private open space.

ii. A minimum 50% of private open space must be pervious.

NB *The area within the front setback will not be accepted as a parcel of private open space.*

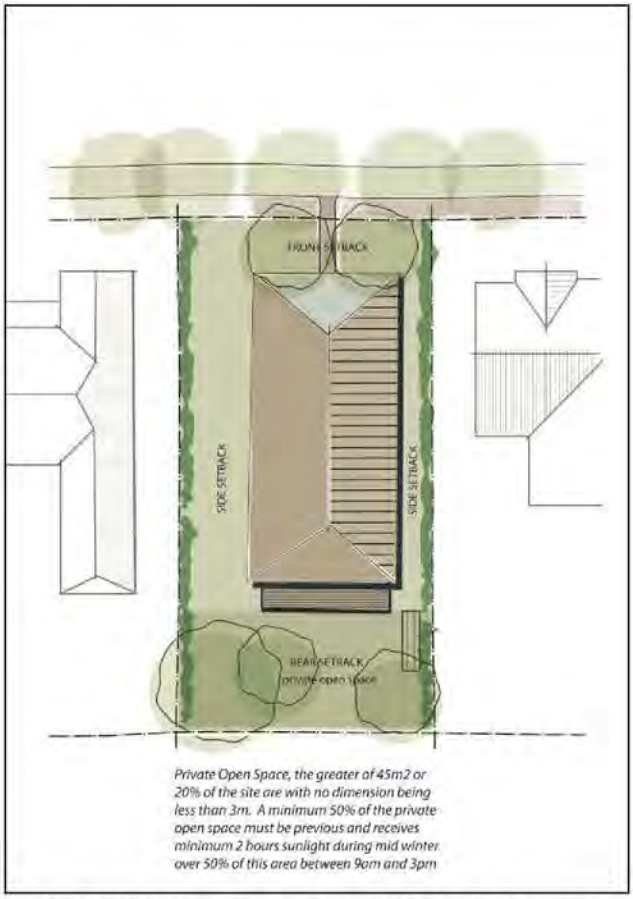


Figure 1: The location of private open space for a dwelling house, attached dwelling house or a semi-attached dwelling house

2.18.11.2 Secondary dwellings

C13 Landscaped area

i. The entire front setback must be of a pervious landscape with the exception of any driveway or pathway.

ii. The lesser of 4 metres wide or prevailing rear setback must be kept as pervious landscaped area.

iii. A minimum 4 metres wide landscaped area must be provided between the detached secondary dwelling and the principal dwelling house when they are located in tandem style.

iv. A minimum 1.8 metres wide landscaped area must be provided between the detached secondary dwelling and the principal dwelling house where the detached secondary dwelling is located beside the principal dwelling house.

C14 Private open space

A clearly defined area with minimum dimensions of 4 metres by 4 metres must be provided for both attached and detached secondary dwellings as private open space.

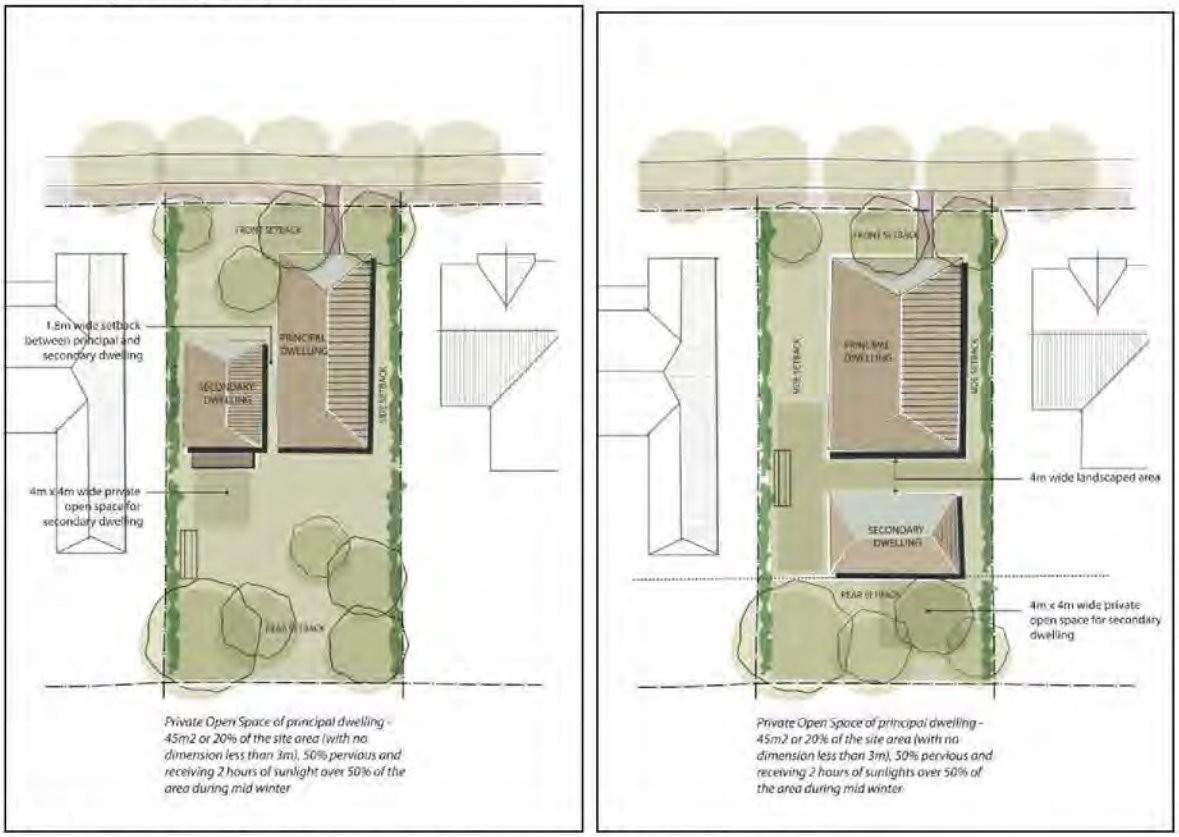


Figure 2: The landscaped areas and private open space for secondary dwellings

NB *An attached secondary dwelling has a common wall or walls with the principal dwelling house on the lot or may be located within the principal dwelling house. A detached secondary dwelling has no common wall with the principal dwelling house on the lot.*

2.18.11.3 Backpackers' accommodation, hostels, residential care facilities and seniors' housing

C15 Landscaped area

i. The entire front setback must be of a pervious landscape with the exception of driveways and pathways.

ii. The greater of 4 metres or a prevailing rear setback must be kept as pervious landscaped area.

C16 Communal open space

i. The greater of 45m² or 20% of the total site area, with a minimum dimension of 3 metres, must be provided as communal open space.

ii. Communal open space should be provided within rear setback offering space for relaxation, outdoor dining and entertainment.

iii. A minimum of 50% of communal open space must be pervious landscape.

2.18.11.4 Boarding Houses

C17 Landscaped area (Residential zones)

i. The entire front setback must be of a pervious landscape with the exception of driveways and pathways.

ii. The greater of 4 metres or a prevailing rear setback must be kept as pervious landscaped area.

iii. In addition to the front setback, a minimum of 45% of the site area is to be landscaped area at ground level.

iv. A minimum of 50% open space must be pervious landscape.

C18 Communal open space (all zones)

i. Communal open space is to be a minimum 20m2.

ii. Communal open space where the capacity is 20 – 29 is to be a minimum 20m2 plus an extra 2.8m2 per person.

iii. Communal open space where the capacity is 30+ is to be a minimum 48m2 or 10% of open space on the site (whichever is the greater).

iv. Communal open space should be provided within rear setback (if one is required) and provide space for relaxation, outdoor dining and entertainment.

v. Communal open space is to have a minimum dimension of 3 metres.

vi. Communal open space is not to be located in the required front setback.

vii. Design communal open space so that it can accommodate outdoor furniture such as chairs, tables and shade structures.

viii. Communal open space may include drying area and smoking area.

ix. Provide adequate space and separation between different activities so that activities do not impinge on the effective use and enjoyment of the open space for recreation (for instance the open space should not be dominated by clothes lines, and non smokers should be able to enjoy a smoke-free outdoor area.

NB Fully dimensioned indicative outdoor furniture layouts are to be provided with the development application

x. Locate communal open space adjacent to, and connected to, the communal living area and/or kitchen/dining area if one is provided.

2.18.11.5 Multi dwelling housing

C19 Landscaped area

i. The entire front setback must be of a pervious landscape with the exception of driveways and pathways.

ii. In addition to front setback, a minimum 45% of the total site area must be a landscaped area at ground level.

C20 Private open space

i. Each unit must have private open space at ground level with minimum dimensions of 4 metres by 4 metres.

ii. Private open space must be directly accessible from a principal living area at ground level.

iii. Maximum gradient of private open space must be 1 in 10.

C21 Communal open space

Multi dwelling housing with more than 12 dwellings must provide a minimum of 10% of the required landscaped area as communal open space. This area must be suitably landscaped and provided with active and passive recreation facilities such as playground equipment, seating and shade structures.

2.18.11.6 Residential flat buildings

C22 Landscaped area

i. The entire front setback must be of a pervious landscape with the exception of driveways and pathways.

ii. In addition to front setback, a minimum of 45% of the total site area must be landscaped area at ground level.

C23 Private open space

Each dwelling must have a private open space in the form of a deck or balcony accessible from the principal living area of the dwelling with a minimum area of $8m^2$ and a minimum width of 2 metres.

C24 Communal open space

Residential flat buildings with more than 12 large dwellings (a large dwelling has a floor area of $85m^2$ or more) must provide a minimum 10% of the required landscaped area as communal open space. This area must be suitably landscaped and provided with active and passive recreation facilities such as playground equipment, seating and shade structures.

2.18.11.7 Mixed use development

NB *Mixed use development refers to a building that contains dwellings attached to a commercial or industrial land use, for example, shop top housing. Another newer form of mixed use development is live/work buildings.*

C25 Landscaped area

Landscape areas for mixed use developments will be determined on merit and depend on the overall streetscape and the desired future character for the area/precinct.

C26 Private open space

Each dwelling in a mixed use development must have a private open space in the form of a deck or balcony accessible from the principal living area of the dwelling with a minimum area of $8m^2$ and a minimum width of 2 metres.

C27 Communal open space

Shop top housing with more than 12 large dwellings (a large dwelling has a floor area of 85m² or more) must provide a minimum 10% of the site area as communal open space. The area must be suitably landscaped and provided with active and passive recreation facilities such as playground equipment, seating and shade structures.

2.18.11.8 *Industrial development*

C28 Landscaped area

i. A continuous minimum landscaped area 1.5m wide across the entire frontage of the property, excluding driveways, must be provided. This width must be increased to 2 metres where the site exceeds 600m² and to 3 metres when the site exceeds 1,000m².

ii. For corner sites, a continuous minimum landscaped area 1.5 metres wide across the entire secondary frontage of the property, excluding driveways, must be provided.

iii. If an existing site is to be refurbished or is subject to a change of use application, the required landscaped area will be sought where it is possible without structural alterations.

C29 Communal open space

i. A minimum of 5% of the site area must be provided as communal open space to cater for staff recreation and informal social interaction.

ii. Communal open space must be located close to indoor dining areas (if applicable) to encourage greater use of the outdoors.

iii. If an existing site is to be refurbished or is subject to a change of use application, the 5% communal open space will be sought if there is unused land available or excess parking.

NB *If suitably designed, these outdoor recreation areas will be gathering points for staff providing a source of pride and subsequent value-added benefits to the organisation.*

2.18.11.9 *Internal landscaping for multi unit industrial complex*

C30 Multi-unit industrial complexes must provide internal landscaped areas in addition to front landscaping, in accordance with the following requirements:

i. Multi-unit industrial complex must avoid long blank walls and paved surfaces by introducing internal landscaped areas.

ii. Trees or shrubs must be located to allow traffic movement and sight lines along access ways and driveways.

iii. Shrubs and plants must not obscure visibility through front fences.

2.18.11.10 *Warehouses/industrial buildings conversions*

C31 As the conversion of warehouses or industrial buildings involves an existing building envelope, minimum private open space or landscaped area requirements are not specified. A certain level of private open space and landscaped area must be provided for future residents.

2.18.11.11 Landscaping in car parks

C32 All outdoor parking areas must incorporate landscaped areas in accordance with the following requirements:

i. Any outdoor ground level car park containing five or more parking spaces must provide one shade tree for every five car spaces, with foliage or canopy with a clean trunk to 2 metres. Tree root barriers must be installed around the edge of planter beds to reduce future maintenance and damage to under ground services.

ii. Parking and circulation areas must be delineated by planter beds at the ends of parking bays. Planter beds must be a minimum width of 1.5 metres, surrounded by a 150mm concrete kerb and must contain both trees and shrubs.

iii. Trees in parking bays must be located in areas no less than the size of one car space or, preferably, in a continuous planter bed at least 1.5 metres wide separating the bays.

iv. Car parks must be paved with unit pavers using permeable pavers where possible.

v. A fully automatic irrigation system is required in all car park planter beds.

2.18.11.12 Development within business centres

C33 For major development projects within business centres, the applicant may have to provide mature street trees along the public street including protection grilles and guards, as advised by Council's landscape architect. In this regard:

i. All costs associated with street tree planting must be borne by the applicant.

ii. An awning setback or cut-away to facilitate the planting of trees is not permitted.

iii. Applicants must not plant street trees under existing awnings.

2.18.12 Advisory notes

1. Council may vary some of the requirements of this section, provided applicants can demonstrate that a reduced area of open space is able to serve the needs of the proposed occupants.
2. Applicants are encouraged to:
   i. Use native deciduous trees with large canopies, climbers and shrubs on the northern side of buildings;
   ii. Retain existing significant trees which may reduce site landscaping costs;
   iii. Shade west and east aspects with planting;
   iv. Use ferneries, planted pergolas and vines near dwellings to assist the cooling effect of air entering dwellings; and
   v. Provide landscaping to screen development and frame desirable views.

NB *For any works to or around 4 metres from the trunk of an existing tree, including its removal, refer to Section 2.20 (Tree Management) of this DCP.*

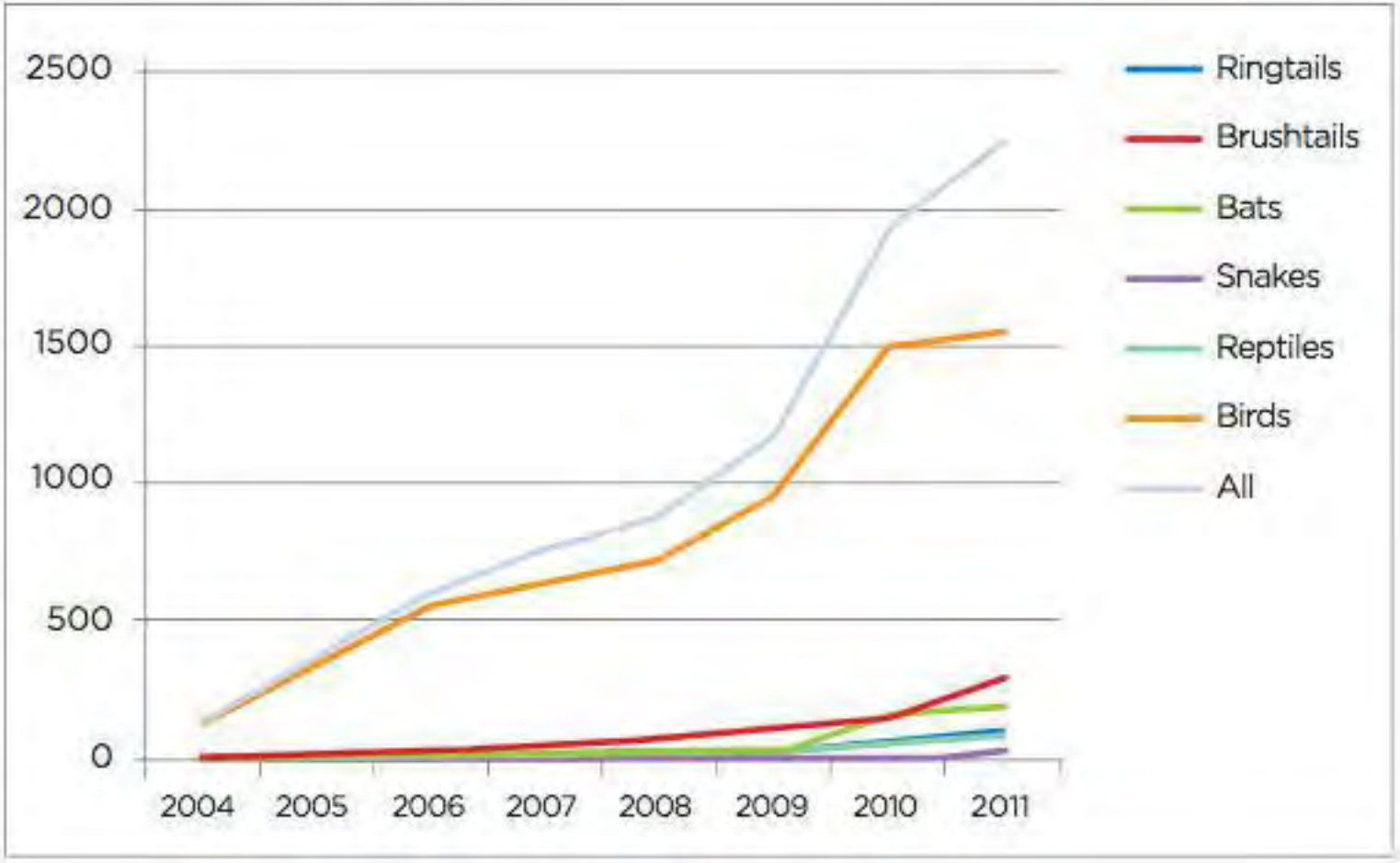
2.18.13 List of preferred native plant species

Type of plant	Botanical name	Common name	Suitable for Suburbs
Tree	*Acacia binervia*	Coast Myall	All
	Acacia decurrens	Sydney Green Wattle	All
	Acacia floribunda	Sally Wattle	All
	Acacia parramattensis	Parramatta Green Wattle	All
	Acmena smithii	Lillypilly	All
	Angophora costata	Sydney Red Gum	Marrickville
	Angophora floribunda	Rough-barked Apple	Marrickville, Marrickville South
	Banksia integrifolia	Coastal Banksia	Marrickville, Marrickville South
	Banksia serrata	Old Man Banksia	Marrickville, Marrickville South
	Callicoma serratifolia	Black Wattle	All
	Callistemon citrinus	Crimson Bottlebrush	All
	Casuarina glauca	Swamp She-oak	Marrickville, Marrickville South, Tempe
	Ceratopetalum gummiferum	NSW Christmas Bush	All
	Elaeocarpus reticulatus	Blueberry Ash	All
	Eucalyptus botryoides	Bangalay	Marrickville, Marrickville South, Tempe
	Eucalyptus haemastoma	Scribbly Gum	Marrickville, Marrickville South
	Eucalyptus paniculata	Grey Ironbark	Marrickville, Dulwich Hill, Stanmore, Petersham, Lewisham
	Eucalyptus punctata	Spotted Gum	Marrickville, Dulwich Hill, Stanmore, Petersham, Lewisham
	Eucalyptus robusta	Swamp Mahogany	Marrickville, Marrickville South, Tempe, Sydenham
	Glochidion ferdinandi	Cheese Tree	All
	Melaleuca decora	White Cloud Tree	Marrickville, Marrickville South, Tempe, Sydenham
	Melaleuca linariifolia	Snow-in-Summer	Marrickville, Marrickville South, Tempe, Sydenham
	Melaleuca styphelioides	Prickly-leaved Paperbark	Marrickville, Marrickville South, Tempe, Sydenham
	Notelaea longifolia	Mock Olive	Marrickville, Marrickville South
	Omalanthus populifolius	Bleeding Heart	All
	Pittosporum revolutum	Yellow Pittosporum	All
	Pittosporum undulatum	Sweet Pittosporum	All
	Syncarpia glomulifera	Turpentine	Marrickville, Dulwich Hill, Stanmore, Petersham
	Syzygium paniculatum	Magenta Lillypilly	All
	Tristaniopsis laurina	Water Gum	Marrickville, Marrickville South, Tempe, Sydenham
Shrubs	*Acacia falcata*	Sickle Wattle	All
	Acacia longifolia	Sydney Golden Wattle	All
	Acacia myrtifolia	Myrtle Wattle	All
	Acacia ulicifolia	Prickly Moses	All
	Angophora hispida	Dwarf Apple	All
	Baeckea linifolia	Heath-myrtle	All

	Banksia spinulosa	Hair-pin Banksia	All
	Bauera rubioides	River Rose	All
	Boronia polygalifolia	Milkwort Boronia	All
	Bossiaea heterophylla	Bossiaea	All
	Brachyloma daphnoides	Daphne Heath	All
	Breynia oblongifolia	Breynia	All
	Bursaria spinosa	Blackthorn	All
	Callistemon linearis	Narrow-leaved Bottlebrush	All
	Clerodendron tomentosum	Hairy Clerodendron	All
	Conospermum longifolium	Cone-seed	All
	Correa reflexa	Correa	All
	Dillwynia sieberi	Prickly Parrot-pea	All
	Dodonaea triquetra	Hop Bush	All
	Epacris longiflora	Native Fuchsia	All
	Epacris pulchella	Coral Heath	All
	Grevillea buxifolia	Grey Spider-flower	All
	Grevillea sericea	Pink Spider-flower	All
	Hakea dactyloides	Broad-leaved Hakea	All
	Hakea sericea	Bushy Needlebush	All
	Indigofera australis	Native Indigo	All
	Kunzea ambigua	Tick Bush	All
	Lambertia formosa	Mountain Devil	All
	Leptospermum polygalifolium	Lemon Tea-tree	All
	Leptospermum trinervium	Paperbark Tea-tree	All
	Leucopogon juniperinus	Beard-heath	All
	Lomandra longifolia	Matt-rush	All
	Ozothamnus diosmifolium	Everlasting	All
	Polyscias sambucifolia	Elderberry	All
	Panax		
	Pultenaea villosa	Bush Pea	All
Vines	*Billardiera scandens*	Apple Berry	All
	Cissus hypoglauca	Native Grape	All
	Clematis aristata	Old Man's Beard	All
	Clematis glycinoides	Old Man's Beard	All
	Eustrephus latifolius	Wombat Berry	All
	Hardenbergia violacea	Purple Twining Pea	All
	Hibbertia scandens	Guinea Flower	All
	Kennedia rubicunda	Dusky Coral Pea	All
	Pandorea pandorana	Wonga Wonga Vine	All
	Rubus parvifolius	Native Raspberry	All
	Smilax glyciphylla	Native Sarsparilla	All
Groundcovers	*Astroloma humifusum*	Native Cranberry	All
	Bossiaea prostrate	Bossiaea	All
	Dichondra repens	Kidney Weed	All
	Glycine clandestine	Love Creeper	All
	Goodenia hederacea	Goodenia	All
	Hibbertia diffusa	Guinea Flower	All
	Pelargonium inodorum	Wild Geranium	All
	Pimelea linifolia	Rice Flower	All
	Pomax umbellata	Pomax	All
	Poranthera microphylla	Poranthera	All
	Pratia purpurascens	White Root	All
	Senecio hispidulus	Rough Groundsel	All

	Stackhousia viminea	Slender Stackhousia	All
	Stylidium graminifolium	Trigger Plant	All
	Veronica plebeia	Speedwell	All
	Wahlenbergia gracilis	Native Bluebell	All
	Xanthosia pilosa	Woolly Xanthosia	All
			All
Grasses, Sedges and Rushes	*Agrostis avenacea*	Blown Grass	All
	Aristida vagans	Three-awn Speargrass	All
	Austrodanthonia tenuior	Wallaby Grass	All
	Cymbopogon refractus	Barbed-wire Grass	All
	Cyperis difformis	Sedge	All
	Dichelachne micrantha	Plume Grass	All
	Echinopogon caespitosus	Hedgehog Grass	All
	Entolasia stricta	Wiry Panic	All
	Eragrostis brownii	Brown's Love Grass	All
	Imperata cylindrica var major	Blady Grass	All
	Isolepis nodosa	Club-rush	All
	Juncus usitatus	Rush	All
	Microlaena stipoides	Weeping Grass	All
	Oplismenus imbecillis	Basket Grass	All
	Poa affinis	Tussock Grass	All
	Stipa rudis	Speargrass	All
	Themeda australis	Kangaroo Grass	All
Ferns	*Adiantum aethiopicum*	Maidenhair Fern	All
	Asplenium australasicum	Birds Nest Fern	All
	Asplenium flabellifolium	Necklace Fern	All
	Blechnum cartilegineum	Gristle Fern	All
	Blechnum indicum	Bungwall Fern	All
	Calochlaena dubia	False Bracken Fern	All
	Cheilanthes sieberi	Mulga Fern	All
	Cyathea australis	Rough Treefern	All
	Gleichenia dicarpa	Coral Fern	All
	Histiopteris incisa	Batswing Fern	All
	Psilotum nudum	Skeleton Fork-fern	All
	Todea barbara	King Fern	All

WIRES database – Inner West branch



DPESYDMET Scanned

From: [redacted]
Sent: Sunday, 5 November 2017 11:00 AM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Isabelle Benton (object)
Attachments: 230519_Corner window_2017Nov05_1058.pdf; 230519_Outlook_2017Nov05_1058.pdf

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From: system@accelo.comOn Behalf OfIsabelle Benton
Sent: 05 November 2017 10:59:29 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Isabelle Benton (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Isabelle Benton
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
In 2016 after making enquiries about the clearing of the proposed site, we were advised it was due to contamination of the land.

If we had known there was going to be a building there, we may not have done our renovation this year (due to finish before Christmas) that is centred around the open view to the sky and trees (not a view to a substation). (See attached pic of our planned view, soon to be taken).

The community garden, planted out and tended to by neighbours, was unceremoniously razed. We would like to restore this valuable amenity that enriches the neighbourhood.

Our concerns are primarily around the visual amenity:
View of trees and open sky becomes a view to a substation
Noise during and after construction. We believe the substation produces a consistent hum.

Requests:
Move substation to a different location that will not negatively impact the rear of Albermarle Street properties as well as Randall St.
If this is not possible:
Reduction in height of the substation. Apparently it is currently 4.5 m high.
Screening of substation using native landscaping e.g. flowering gums
Reduction in noise level during construction and operation

Can you confirm size and location of the proposed substation?

[redacted]
Submission: Online Submission from Isabelle Benton (object)
https://majorprojects.accelo.com/?action=view_activity&id=230519

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

DPESYDMET Email

From: [redacted]
Sent: Monday, 6 November 2017 8:20 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Isabelle Benton (object)

From: system@accelo.comOn Behalf OfIsabelle Benton
Sent: 06 November 2017 20:20:09 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Isabelle Benton (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Isabelle Benton
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards because the project is unnecessary and will have incredibly destructive impacts on Dulwich Hill during the long five-year construction phase.
The improvements brought through the Metro line - such as increased service regularity and disabled access to Dulwich Hill station - can be delivered by upgrades to the existing Sydney Trains network.
In effect, the main benefit of the Metro line is that it frees up capacity in the City Circle for other train services across the rest of the city.
This means that Dulwich Hill and other stations on the Sydenham to Bankstown corridor are being forced to sacrifice for the rest of Sydney.
Lack of justification
The Metro conversion of this line is not justified because:
* We already have a train service in this corridor, which could be improved by alternative means including signalling and timetable upgrades, bringing in modern rolling stock and installing disabled access to stations.
* It is bringing unwanted and destructive urban renewal to our community.
* The Government has not adequately considered alternative infrastructure options
* It is a waste of billions of government dollars
* Aspects of the Metro will bring reduced services, including the comparative lack of seating compared to existing Waratah Trains and the fact we will lose access to a number of important stops currently on our route, including CBD stops.
* The requirement to shut down the Bankstown line for 46 weeks during the construction period will make commuting a living hell.
Impacts of construction
The five-year construction process will be enormously disruptive to the residents of Dulwich Hill.
This is largely because of the extraordinary complications of trying to build a new railway line in place of an existing operational line. This will require intensive and noisy works to take place at night or weekends (in other words the most sensitive time for the community) or force unwanted and highly inconvenient shutdown periods.
It is arguable this has never before been attempted in the history of NSW - and for good reason. It simply doesn't make sense to rip up our existing railway line to build a new one.
Severe impacts on Dulwich Hill
Impacts on Dulwich Hill include:
* A total of 1,221 properties will be exposed to noise at a level which breaches the potential for sleep disturbance

criteria (background noise level plus 15 decibels from 10pm to 7am) during the construction period from 2019 to 2024.
* This includes 783 properties which would experience noise from earthworks which exceeds the criteria for 30 weeks during the construction period.
* Dulwich Hill is the worst affected suburb in the corridor for sleep disturbance in the Sydenham to Bankstown Corridor.
* Some 74 properties, including 24 heritage properties in streets such as Wilga, Keys and Challis Avenues, would be put at risk of damage from excessive vibration levels caused by the use of intensive construction equipment.
* New Canterbury Rd at Dulwich Hill will be packed with up to 1,020 buses a day during rail shutdown periods (eight weeks a year from 2019 to 2024 plus on an unspecified number of weekends).
* Other streets with significant bus impacts include Marrickville Rd at Dulwich Hill shops (1,020 buses a day), Bayley St (495 buses), Beauchamp St (495 buses), Ewart St (495 buses).
* Destruction of historic wooden railway station ticket office, which EIS reports state may be State significant.
* A total of 27 commuter parking spots lost from the carpark to the south of the station, and nine out of the 17 parking spots in Bedford Crescent removed, during the construction period.
* Up to 130 construction workers will want to park in local streets during rail shutdown periods, and up to 60 at other times.
* During rail shutdown periods, even after mitigation measures, the average vehicle delay for the intersection of Wardell Rd and Ewart St will increase from 32 seconds to 55 seconds.
* Residential streets such as Wilga, Keys, Challis Avenues and Albermarle, Beauchamp and Ewart Sts will be used as construction haulage routes.

Based on the above, it is clear that the pain is not worth the gain.

Avoiding or mitigating these impacts

We oppose the Metro but ask that if it is approved that:
* No works are undertaken after 10pm or before 7am or after hours on weekends
* Pre-dilapidation surveys are provided to the 74 Dulwich Hill homes potentially affected by vibration and funds are set aside to repair these homes if monitoring shows that damage is happening
* Noise attenuation works (such as those offered to homes under the flight path) are offered to properties set to suffer severe noise exceedances
* Alternative accommodation is provided to any resident who requests it, or alternatively the criteria for alternative accommodation is dramatically reduced from the currently proposed 30 decibels above the relevant noise criteria
* The Sydenham to Bankstown urban renewal strategy is abandoned to reduce the cumulative construction impacts in the corridor - the impact of railway and housing construction at the same time is not adequately addressed in the submission and a disaster waiting to happen.
* Councils are provided funds to hire additional rangers to monitor construction worker parking and to set up residential parking schemes

Community consultation

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

Heritage

The planned heritage destruction and diminution along the line is reckless:
* the demolition of rare, exceptional and high-value heritage-listed items (such as the destruction of the historic wooden station building at Dulwich Hill) is wasteful
* station designs do not represent local character and reflect a branding exercise by the NSW Government

Conclusion

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature Isabelle Benton Peter Garran

[redacted]

Submission: Online Submission from Isabelle Benton (object)
https://majorprojects.accelo.com/?action=view_activity&id=230689

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

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Personal Submission to the Environmental Impact Statement (EIS) Sydney Metro Sydenham to Bankstown Upgrade

Mail to :

Major Projects – Metro EIS Submission
DPE
GPO Box 39
Sydnev. NSW. 2001

Name: [redacted]

Address:

Application number: SSI 17_8256

-□ I consent to my name being published

-☑ I do not consent to my name being published

-☑ I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.

Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.

Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.

The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.

The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:

- potential vibrational damage to dwellings

- properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
- some properties, including heritage-listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
- streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
- The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

- increased greenhouse gas emissions
- the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to highlight the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor.

Signature [redacted]

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Director Infrastructure Projects

Major Projects Assessment

Dept Planning and Environment

GPO Box 39

Sydney, NSW 2001

Personal Submission to the Environmental Impact Statement Sydney Metro Sydenham to Bankstown Upgrade

Name: GEOFF JONES

Address: 63 MELFORD ST HURLSTONE PARK.

Application No: SSI17_8256

I do not consent to my name being published

I have no reportable donations to disclose

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

It is not necessary to solve the problems of congestion in the Sydney rail network. There are alternative ways which would not involve the replacement of a functioning line and would allow the Metro to be diverted from Sydenham to suburbs not as well served by public transport.

The Metro is not necessary to meet the transport needs of the current already increasing population. Additional housing, at the level being proposed, is increasingly controversial. The corridor is already densely populated. In any case the claim that the Metro would carry significantly more peak hour passengers in questionable.

Stations can be made more accessible and safer without a metro conversion. This has already occurred at Marrickville.

Stations along the line include buildings of heritage significance, some of which would be demolished, to meet the requirements of Metro trains. The station design proposed for Hurlstone park station does not suit the local character.

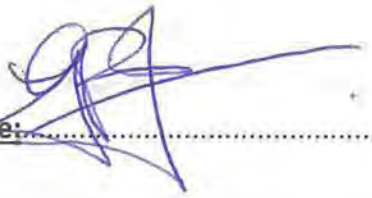
I object to the huge disruption and inconvenience residents and commuters would have to tolerate for the five years of construction.

The alternative transport required for 8 weeks a year in school holidays plus more than 4 weekends for 5 years, as well as at least 3 to six months at the end of the project is inadequate. The additional buses required to carry 100,000 passengers a day would increase traffic congestion and the delays involved cause stress to commuters.

In Hurlstone Park the disruptions would include:

- Extra noise, especially for those closest to the railway line, sometimes at night
- Possible damage to buildings due to the vibration of heavy machinery
- Heavy truck traffic, noise and dust for those living on streets used as "haulage routes". This includes my own street, which would lead to a work site.

The Metro is not in the interest of residents of the corridor or for those in suburbs served poorly by public transport.



Signature:.....

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From: [redacted]
Sent: Monday, 6 November 2017 2:19 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Heather Davie of Ms (object)
Attachments: 230592_pdf Submission for Sydenham to Bankstown Metro EIS_2017Nov06_1417.pdf

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From: system@accelo.comOn Behalf OfHeather Davie
Sent: 06 November 2017 14:18:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Heather Davie of Ms (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Heather Davie
Organisation: Ms (2204)
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
Submission is attached below.

[redacted]
Submission: Online Submission from Heather Davie of Ms (object)
https://majorprojects.accelo.com/?action=view_activity&id=230592

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Submission for Sydenham to Bankstown Metro EIS

I wish to oppose the conversion of the Sydenham to Bankstown T3 rail line to the Sydney Metro. My opposition is based on concerns regarding information, which is to be found in the Environmental Impact Statement (EIS).
As a long term resident of Marrickville and a regular public transport rail customer I believe that Sydney needs a good integrated, public transport system, however the Metro Project as presented in the EIS does not provide the best value for taxpayers' money, nor is it an improvement to an already well functioning rail service, considering the disruption over 6/7/8/? years and forfeits the opportunity to expand the public transport system to suburbs without a rail link.

Project Cost (Chapter 1)

- Estimated cost of $11.5b to 12.5b(Chatswood to Bankstown) $8.3b Sydney Metro Northwest. Final cost to be confirmed once all major contracts confirmed.
- Considering cost blowouts on other contracted projects such as West Connex & Light rail, concern that this cost may be considerably increased.
- Surely this money would be better spent on Public transport where there is a great need, but currently not available such as a rail link to Badgery's Creek

Estimated Timeframe

- The Light rail project in the city is currently a long way over schedule and is a much less complex project.
- Time estimation for Metro from end of 2018 -2024 Is hardly feasible considering the enormity of work to be done on 10 stations and 13.5 kms of track.
- Work to include: stations, demolition, rebuilding & straightening, platform levelling, new concourses and entrances, construction of canopies, demolition of buildings and construction of new buildings, 5 upgrades with lifts, security screens on all platforms, track adjusting alignments, installing Metro rail systems, & upgrading overhead wires, 23 bridge upgrades and 2 rebuilds, installing security measures including fences along the corridor for security and between the Freight line from Marrickville to Campsie, trackside intruder alarm system, noise barriers where required, modification of access gates, augmentation of existing power supply with new traction substation & new feeder cables, utility & rail system protection, relocation works & drainage works to reduce flooding & manage stormwater (very important for Marrickville Station)

Heritage impacts are unacceptable and project shows a reckless indifference to historical character of the rail line, heritage values and disregard for community values.

- All 10 stations are heritage listed, however all will lose a substantial amount of heritage due to demolitions, new canopies and new work imposed on top.
- Statement of heritage impact (Chapter 14) in regard to Marrickville station says "Overall visual impact would be major as new elements would diminish views & significant platform buildings, impact the context & introduce clutter."
- A full heritage analysis of the corridor was not conducted for the EIS.
- Demolition of heritage buildings on Dulwich Hill, Hurlstone Park and Wiley Park Stations.
- Station upgrades, including disability access, can occur while maintaining heritage and respecting local character
- Heritage principles have not been considered in new station designs, which are not sympathetic to local character.
- Demolition of the Illawarra Rd. overbridge and two thirds of the Marrickville Station platforms are of particular concern.

- Anyone who has renovated an old house understands the risks involved in demolishing old walls so unplanned building collapse of heritage listed station buildings with demolition of brick platforms is of major concern
- The Sydenham/Bankstown Urban renewal Strategy, linked to The Metro Project requires 6,000 new dwellings within 800 metres on Marrickville Station.
- Thousands of historic, heritage/period are targeted for demolition to be replaced by medium density/high rise developments that will destroy the character of Marrickville.
- Without the Metro there would not be such a need for the above.
- Ask that heritage demolitions not be approved as it is not in the public interest to destroy the heritage, character and history of the suburbs along the corridor

Removal of Vegetation

- The biodiversity assessment was undertaken on the assumption that all vegetation within the rail corridor would need to be removed, with the exception of areas of threatened species of Downey Wattle that are located in the rail corridor between Punchbowl & Bankstown.
- 9.4.5 reveals "Potential 13.8 hectares of vegetation, including mature trees will be removed along the banks & rail lines to be replaced by security fence up to 2.4 m in height for the full length of the line."
- Altogether 17.8 hectares may need to be removed including 873 trees (native & exotic) 68 at Marrickville Station, 176 at Bankstown.
- Chapter 28, Page 40 states that "29.8 hectares of vegetation would need to be removed but only 1 hectare of native vegetation", so how much will be removed?
- There are so few well established trees in this area the decision to remove so many trees should be reviewed as replacement trees take many years to be established

Climate Change

- Chapter 24 .1.2 statement that Climate Change "has potential for direct & indirect impact on the project and whilst the types of impacts are relatively well known the severity & extent is uncertain."
- Climate variables identified included annual rainfall, extreme rainfall, extreme temperature, extreme wind, storms (cyclones, hail, dust and lightning) sea level rise and fire danger.
- All of the above variables have the potential to also impact in the form increase costs.
- Will the Metro carriages stand up to the elements as well as heavy rail carriages?

Greenhouse Gas Emissions

- The annual electricity consumption during operation is estimated to be 86,576 tonnes of CO2 equivalent.
- Operation & maintenance would result in increased emissions of greenhouse gas as a result of increased use. This is not how we should be planning for the future as all new projects should be designed to reduce Carbon emissions.
- The EIS states that the "Project has the potential to reduce greenhouse emissions by providing a comfortable & efficient alternative to private car travel" however this cannot be assumed as a definite outcome as other factors such as fare increases & discomfort of standing long distances in very close proximity to other commuters may encourage car use.
- Chapter 24 Mitigation measures states that 100% of greenhouse gas emissions associated with consumption of electricity during operation would be offset, but who would pay for this? The customer through a levy or higher fares?
- Recommendation that sustainable initiatives must be reviewed & updated & relevant initiatives implemented including the use of renewable energy to minimise greenhouse gas emissions.

Metro Impacts on Residents in Marrickville

Rail possession

Marrickville Residents will be severely inconvenienced due to rail line "possessions.
9.7.2 outlines the indicative rail possession program, which would be reviewed during detailed design in line with construction planning & schedule of possessions reviewed to reduce the overall impact on the community. These include:

- Standard Possessions 4 weekends per annum
- 10 School Holiday Possessions 6 week Christmas possessions & 2 week July between 2019 &2024
- Freight track possessions – 4 weekends & as needed after consultation with ARTC
- Final possession – between 3-6 months Community will be informed of any proposed changes
- 9.7.3 Temporary station closures – temporary closure of individual stations outside of possession periods would be considered & could potentially occur overnight between possessions.
- Estimate of 71 weeks is uncertain considering that EIS states that "the timescales of many of these (cumulative construction impacts) are unknown at this time"

Alternative transport arrangements (9.11) & Temporary transport strategy outlines a number of components for alternative public transport arrangements by rail and bus during construction, station closures and possession periods.

- **These arrangements will severely inconvenience Marrickville residents.**
- Regular commuters know that current weekend possessions require careful planning and additional time and it is tiring changing bus to train & vice versa, waiting for connections in all weather conditions and uncomfortable travelling on overcrowded old buses.
- **71 + weeks of these arrangements will impact heavily on commuters and their families.**

Noise & Vibration

Suburbs with the worst noise impacts will be Marrickville, Dulwich Hill, Belmore & Bankstown because of number of residential properties along the track. Approximately 7,000 residents along the corridor are at risk of sleep disturbance.
Residents around Marrickville Station would suffer from impact of noise & vibration over long periods of time.

- Page 19 "Highest noise levels were generally found to result from activities which require the use of noise intensive plant such as a hydraulic breaker, rock saw and ballast tamper.
- This includes the following activities around the station: earthworks with hydraulic breaker, corridor works-ground & track earthworks with hydraulic tamper & trackform with ballast tamper, station works with hydraulic breaker & rock saw & Illawarra Rd bridge needing demolition with hydraulic breaker & rock saw.
- From Table of suburb by suburb breakdown of impacts Marrickville would have * 998 Sleep disturbance exceedances, * Earthworks sleep disturbance noise impacts over 30 weeks for 684 properties, * 40 buildings at risk of excessive vibration impacts, * 3 heritage buildings at risk of excessive vibration & *"Vesbar" Café at Warburton St would experience sensitive receivers 20 decibels over the noise management level.
- 24 hour works would at times be required and could include use of heavy noise intensive equipment such as rock breakers
- Construction traffic noise levels would exceed the relevant criteria on some roads in Marrickville, with majority of exceedances occurring during the night, due to temporary bus services during possession periods

- Along the corridor, a total of 360 properties (including 39 heritage buildings) have been identified for possible cosmetic damage however there is no strategy for dealing with vibration nor a plan for pre-dilapidation reports

Road Network

- Potential changes to the road network around the stations, including location of compounds and work sites & involve temporary road and lane closures will impact heavily on already congested roads in Marrickville as stated in the EIS.
- Station St will be a construction compound & work site and would occupy part of the new station forecourt & shared road for unknown number of years severely inconveniencing Marrickville residents. N.B.once Metro work is completed, compound site will be redeveloped as mixed use high rise, further inconveniencing residents for a few more years.
- Congestion will be a major problem during construction and there will be significant travel impacts
- Construction haulage vehicles (light and heavy trucks), work vehicles, rail replacement bus services, additional bus services will increase traffic congestion throughout Marrickville, impacting on intersection performance, the existing bus services & increasing hazards for motorists, pedestrians and cyclists sharing the roads.
- Road work performance Table 10.40 Intersection performance concludes that "The modeling results indicate that the addition of construction vehicles would not change the level of service" which is hard to believe & contradicted elsewhere in the EIS
- "The results predicted that operation of the Marrickville Road/ Victoria Road & Marrickville Road/Illawarra Road intersections would deteriorate during weekday peak periods as a result of the implementation of rail replacement buses."
- An extraordinary number of replacement buses will be required to move 100,000 commuters per day when the line is shut down for construction
- Buses going to and from Sydenham Station will need to pass through Marrickville & Marrickville Rd between Illawarra Rd & Silver St Marrickville will be the worst affected, with a minimum of 825 buses and a maximum of 1,515 replacement commuter buses forced on the road between 7am to 10pm.
- Commuter buses together with construction vehicles will cause traffic gridlock.

Road network performance in Marrickville For construction haulage, the volume of materials that would need to be moved was analyzed to estimate the total number of haulage vehicles required the following which will impact greatly on traffic through Marrickville.

- 20 light construction vehicle trips per hour
- 20 heavy construction trips per hour
- 15 to 55 bus trips per hour

Bridge works

Twenty three out of twenty five bridges along the corridor will need to be modified and two in Marrickville rebuilt.
Marrickville Indicative closures and road network changes include;

- Charlotte Avenue underbridge, Marrickville – partial closure (14 weeks) Full closure (3days) – Alternate crossing Illawarra Rd overbridge
- Illawarra Rd – partial closures (28 days -14 per side) Full closure 2 days – however information in text indicates that "potentially longer closures (up to one month) are being investigated" –Alternate crossing Charlotte Avenue underbridge

- Livingstone Rd overbridge Narrow lanes (8months during weekends/nights) Full closure (2 days) – Alternative crossing Illawarra Rd
- Albermarle St overbridge – Full closure (1 month) Combination of partial &full closures during weekend & nighttime works over a 7 month period. Alternate crossing Livingstone Rd overbridge

It is important to note that all of these bridges are currently very well used & highly congested in AM & PM peaks and their closure will have a major impact on traffic in the surrounding areas.

- The Illawarra Rd. Bridge has an Average Daily Traffic (ADT) of 11,900 & will have an expected 220 Heavy Vehicles per day during construction.
- This will lead to deterioration of traffic performance on surrounding road network due to construction vehicles and operation of rail replacement buses (10.4.1 Risk Assessment)
- Table 10.50 shows that 7 major Marrickville intersections all predicted to experience deterioration of the level of service to F in AM & PM as a result of partial closures.
- The right turning movement from Marrickville Road west approach onto Victoria Rd is the worst, with a degree of saturation of 1.88., experiencing almost twice the level of demand compared to capacity.
- This assessment does not include impacts on parking for residents near stations and the large numbers of workers requiring parking (Marrickville 60).
- It does not include the cumulative affect of 6,000 medium/High Rise Developments which will be constructed within 800 metres of the station.

Loss of use Community Open Space in McNeilly Park Marrickville

- To alleviate existing flooding of the rail corridor new drains, buried trunk stormwater system and underground detention basin system are planned in the vicinity of Marrickville Station
- One proposal is to construct an 8,000m3 underground detention basin system in McNeilly Park which is a very popular open space for families and dog owners. There are very few open spaces in Marrickville and residents will be severely inconvenienced by the loss of open space due to its partial closure during construction.

Cumulative Impacts

In Chapter 27 "Projects with potential for Cumulative Impacts" only one development is listed on Illawarra Rd (401) however there are many more developments planned or in progress under the current Marrickville LEP 2011.

- The impact of the Sydenham/Bankstown Urban Renewal Strategy is not considered as part of the Cumulative Impact Assessment due to the "draft nature of the plan" and the fact that the "construction timeframe is unknown"

- This is a most unacceptable omission considering that the expectation is that 35,400 new homes will be built, 6,000 of them within 800 metres of Marrickville Station.

Commuter/Residents' concerns

- Claim that Metro is needed in order to upgrade stations with lifts and create better access, however upgrades have been undergone in a timely fashion along all other train lines without the expense or disruption of The Metro.

- Design of Metro described as having a mix of seating and standing, however the majority of the passengers will be standing.

- Claim that trip will be more comfortable, however not if you are elderly, short statured, tired, travelling with young children or unwell and have to stand all the way from any station to the city or to Chatswood or on the journey home you will not consider your trip as comfortable.

- Commuters have expressed concern that there will be no driver or conductor on Metro. and fear for commuter safety on long underground stretches. The fact that commuters can see through the length of the carriage does not allay security fears. There is supposed to be CCTV however it is implied that commuters will be responsible for "active surveillance"

- Security issues are also of concern to commuters and include "What happens if someone lights a fire while underground? What happens if the computer control system is hacked and customers are underground & locked inside? What happens when power black outs occur? How would wheelchair customers be removed from a Metro without the guidance of on-board staff? What will happen in the event of racial abuse, fighting breaking out, aggressive behaviour from drug affected customers (which I have personally witnessed) or terrorist threats/acts without trained on board staff?

- "Customer assistants are promised at every station and moving through the network during day and night" however with constant cuts to the rail network workforce, what guarantee can be given that this will be the case long term?

- On Metro trains there are only 2 multipurpose areas for prams, luggage and bicycles, whilst on current trains there are 2 per carriage and they are very congested on weekends when extended families travel to the city.

- Commuters are concerned that the initial use of 6 carriage trains will create overcrowding and that overcrowding will continue to be a problem as population densities increase along the line. With 2026 passenger demand forecast of daily customer movement of 23,800 for Bankstown, 13,800 f0r Punchbowl, 11,400 for Wiley Park, 14,800 for Lakemba, 13,00 for Belmore, 13,800 for Campsie,14,200 for Canterbury how much space will there be left for the 14,200 for Canterbury, 9,400 for Hurlstone Park, 13,800 at Dulwich Hill, 13,800 for Marrickville and unknown number at Sydenham and Waterloo?

- Travel time reductions are not believable considering that commuters west of Bankstown, may have several train changes, and any commuter going to Circular Quay (a popular work, family, ferry, Cruise line and Opera House stop) may have difficulty walking 800 metres. Passengers from Marrickville to Central would save up to 4 minutes, however if they needed to change trains for a city circle train their 4 minutes would be quickly lost.

- Alternative transport arrangements during possession periods will have a major impact on commuters and their families. These include loss of kiss & ride, potential loss of dedicated & informal commuter parking areas, road closures and road network changes, leaving earlier, getting home later, with longer journeys needing to be planned for and family routines changed over a long periods of time adding to the stresses of daily life.

- 10.4.3 Changes to parking states that "there are 1,200 unrestricted on street parking spaces within 400 metres of Marrickville station with 81% utilisation and that there would be capacity to absorb temporary loss of space during construction. (Local residents would doubt these statistics), This statement does not however consider all the other construction work that will be happening at the same time within the 400m mark

- 10.5.3 notes that "alternate transport arrangements will have the potential to result in noise & air quality impacts and for an increase in public safety risks due to the increase in vehicles on the road network.

- The need for noise barriers is stated but where will the noise barriers be needed? No mention of location along line.

- The Metro will be developed by a Hong Kong developer and there are fears that the line will be privatised and expensive as the private T2 airport line is.

Chapter 11 P.16 Road Network Claim that the "enhanced customer service provided by the Metro, including travel time savings is expected to result in growth in the use of rail services. This increased growth would potentially result in a reduction in the dependence on motor vehicles as the primary travel mode in the study area." This assumes that everyone will be travelling in a North /South direction, an assumption that cannot be made. If trains are overcrowded or residents work east or west of the line and suburbs have to be crossed then car usage will probably continue to be high and the statement that " introduction of the Metro would benefit local communities by providing a viable alternative to the car with benefits for the local road network." may not be realised.

Conclusion & Recommendations

- Construction of the Sydenham to Bankstown conversion to a Metro service will be costly and the money would be better spent developing a line where there is no public transport.
- A Metro to Badgery's Creek new Airport may be a better investment of public and private funds.
- Station upgrades to improve accessibility can be made without the expense of the Metro.
- Should the Metro be approved an embargo should be placed on planning "upzonings" and medium/high rise development until after the completion of the Metro Line and other infrastructure needed for increased population densities is in place.
- Recommendation that sustainable initiatives must be reviewed & updated & relevant initiatives implemented including the use of renewable energy to minimise greenhouse gas emissions.
- A full heritage analysis of the corridor should be conducted for the EIS.
- The brick walls on the Illawarra Rd overbridge and the platforms East of Marrickville Station buildings should be retained.
- Any residents affected by vibration, noise, light and dust during the construction period be appropriately compensated and facilities made available to ensure they can maintain healthy lives.
- Residents should be notified as to where noise barriers will be needed?
- Dilapidation reports should be done for all properties that will possibly be affected by construction works.
- Need to clarify how many hectares of vegetation will need to be removed and minimise the number of trees to be removed.

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DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 5:16 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Jon Atkins (comments)
Attachments: 230873_Jon Atkins & Glenn Redmayne Sydney Metro submission 7Nov2017_2017Nov07_1714.pdf

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From: system@accelo.comOn Behalf OfJon Atkins
Sent: 07 November 2017 17:15:22 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Jon Atkins (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Jon Atkins
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
The attached submission has been written by Jon Atkins and Glenn Redmayne.

[redacted]
Submission: Online Submission from Jon Atkins (comments)
https://majorprojects.accelo.com/?action=view_activity&id=230873

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Sydney Metro - Comments on the Sydenham to Bankstown Environmental Impact Statement (EIS)

1. Introduction

The Project

The NSW Government's Sydney Metro program - the largest infrastructure scheme in Australia - sees the construction of a high frequency, autonomous metro rail service across Sydney. The program is being delivered over three stages: (1) Northwest, (2) City and Southwest, and (3) West.

(a) Sydney Metro - Northwest ($8.3 billion)

Sydney Metro Northwest, formerly the North West Rail Link, is the first stage of Sydney Metro and will be the first fully-automated metro rail system in Australia.

Three major contracts were awarded in 2013 and 2014 to deliver and operate Sydney Metro Northwest. These include:

(a) Tunnels and Stations Civil works ($1.15 billion);
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(b) Sydney Metro - City & Southwest (circa $12.5 billion)

This is the second stage of the broader Sydney Metro program. This stage will see a new 30 kilometre metro line extending from Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown.

The estimated $12.5 billion project will be delivered in two components:

(i) Chatswood to Sydenham: New 15.5 kilometre twin tunnels from Chatswood to Sydenham, and construction of seven new stations; and
(ii) Sydenham to Bankstown upgrade: The upgrade of 13.5 kilometres of rail line and conversion of all 11 stations between Sydenham and Bankstown to metro standards.

(c) Sydney Metro - West (circa $10 billion)

The NSW Government has yet to confirm the alignment for the proposed Western extension from the Sydney CBD to Parramatta, or release a business case, but it is intended that new stations will be constructed at key precincts along the route including:

- Parramatta;
- Sydney Olympic Park;
- The Bays Precinct; and
- Sydney CBD.

The capital cost of the project is estimated to be $10 billion.

Overall Cost of the Sydney Metro Program

The table below indicates that the estimated overall cost of the program is $30.8 billion.

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1	Sydney Metro - Northwest	$8.3 billion
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Total		**$30.8 billion**

Privatisation of Public Transport

The Sydney Metro represents the largest privatisation of public transport in Australian history. While the construction of the transport infrastructure will be government funded (with the government assuming all of the risks) the rail network, once completed, will be run by a private operator.

Sydney Metro - City & Southwest Project - Environmental Impact Statement

The Sydenham to Bankstown Environmental Impact Statement (EIS) covers the upgrade and conversion of the existing Bankstown Line to metro standards. The EIS is on public exhibition from 13 September to 8 November 2017. Council staff have been invited to comment on the EIS by Friday 13 October 2017.

2. Scope of Comments

These comments aim to cover the following issues and social impacts:

- Assessment of Project as a Whole:
  - Design and network compatibility issues;
  - Single-decker versus double-decker trains;
  - Affordable housing;
  - Accessibility standards.
- Mitigation of Impacts:
  - Fares and the public interest;
  - Bicycle racks at stations to match demand.

3. Assessment of Project as a Whole

Design and network compatibility issues

Reports have noted that the Sydney Metro needed to meet the following requirements:

- It had to be highly automated and driverless;
- It needed to use curtain wall doors to end track fall deaths;
- It had to be run by a different, 'more efficient' workforce with much diminished union involvement;
- Its design needed to facilitate its eventual lease or sale to private operators.

A fundamental criticism of Sydney Metro is that it is designed to use single-deck carriages rather than double-deck carriages currently used on Sydney's rail network. This means that it will be incompatible with the existing train network.

As a result, the single-deck system requires modifications to overhead wiring, the power supply, signalling, communications and fire systems etc. to make it compatible with the new rail link. The cost of these extensive modifications is significant.

In addition, maintaining different rail networks will also impose higher costs over time.

It should be noted that setting up an entirely independent system within the wider metropolitan rail network will facilitate a future sale of the Sydney Metro to a private consortium.

Single-decker v double-decker trains

One of primary justification of the Sydney Metro rests upon its purported capacity to carry more people without delays or longer 'dwell times' compared with double-decker trains.

This is what the NSW Premier said in favour of the Sydney Metro in 2014; "Single-deckers ... can carry more people, travel more quickly, and disembark those people more quickly without people having to come down from those difficult steps that exist on our double deckers and that delay people at railway stations."

For example, improvements to signalling would allow 24 double-deck trains per hour to carry a peak load of 33,000 passengers. Alternately, it would also allow for 26 single-deck services an hour, with a peak load of 29,200 passengers. Refer to the table below.

This fundamental justification for the Sydney Metro has been called into question by transport experts.

Double-deck v single-deck train capacity, peak load per hour

Type	Existing signalling	Enhanced signalling
Double-deck	20 trains, 28,000 passengers	24 trains, 33,600 passengers
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Source: Douglas Economics

Equally, other improvements foreseen in the new "metro" single deckers can also apply to double-deckers.

Dr Phillip Laird, a rail transport expert at the University of Wollongong, says double-deckers are better for long distances, while single-deckers are better for short trips in the CBD and to the airport. He also argues that the new line would be better served by double-deckers given the distance from the city.

So, after examination, one of the crucial justifications of the Sydney Metro proves to be flawed.

Affordable housing

One major concern about the Sydney Metro and the Sydenham to Bankstown Urban Renewal Corridor relates to its impact on affordable rental housing.

Around 36,000 apartments are to be built near train stations on Sydney's Bankstown rail line over the next 20 years. The development of new unit blocks near 11 stations including Marrickville, Canterbury, Campsie, Belmore and Bankstown would coincide with the conversion of the current double-decker train line to a single-decker line which would prevent it being used by double-decker carriages.

The Sydenham-to-Canterbury corridor is home to one of the largest concentrations of lower-income renters in Sydney, compounded by a large population of retirees on fixed, low incomes. The plans for the re-zoning and high density development of the station precincts, in particular, is likely to displace these lower income households while making rental housing less affordable. This is likely to worsen existing levels of high housing stress for low and vulnerable households throughout the corridor.

The need for affordable rental housing targets

Both the Sydney Metro Bankstown Line and the Sydenham to Bankstown Urban Renewal Corridor proposals lack plans that ensure the adequate provision of affordable housing. This deficiency is extraordinary given the affordable housing crisis that exists in the Inner West and throughout most of the metropolitan area more generally.

Council's research strongly indicates that virtually no new housing constructed in the future will be affordable to any very low or low income households, or to moderate income families, without strong intervention through the planning system including a policy to share land value uplift, particularly in larger brownfield and redevelopment sites as well as major State urban renewal projects

An Affordable Rental Housing Target should have been set in the strategy for the Sydenham to Bankstown Urban Renewal Corridor from the outset so that it would be very clear to developers how much they need to factor into site acquisitions. The inclusion of an affordable rental housing target in the original strategy would have also helped as a means of containing land speculation and prices in the urban renewal corridor.

It is contended that the only way to achieve affordable housing that will help to address the immediate housing and homelessness crisis is to set a 15% affordable rental housing target for all residential precincts within the Sydenham to Bankstown Urban Renewal Corridor together with a 30% affordable rental housing target on State owned land.

Joint Communiqué on affordable housing

In order to address the chronic lack of affordable housing, a Joint Communiqué issued on 23rd August 2017 by Southern Sydney Regional Organisation of Council (SSROC), Planning Institute of Australia (PIA) and Community Housing Providers called on the State Government to recognise affordable housing as essential infrastructure for a sustainable, inclusive and productive city.

Measures in the Joint Communiqué designed to help boost the supply of affordable housing included the following:

- recognise Sydenham-Bankstown Corridor as a priority target for affordable housing in the Central and South Districts that should be subject to Growth Infrastructure Compact agreement;
- expand SEPP 70 to enable more councils to embed inclusionary zoning schemes within local planning frameworks, particularly in growth areas or areas undergoing renewal;
- enable councils to include a mandatory requirement for affordable housing in their LEPs where there is land value uplift to support its application, including in Government land.

These additional measures should also be supported by the State government to help address the affordable housing crisis.

Accessibility standards

Any new infrastructure project needs to fully comply with Disability Standards for Accessible Public Transport (DSAPT).

So with respect to an entirely new rail project (well beyond an upgrade) the accessibility alone is not really a valid selling point for its business case, unless modifications to the existing network cannot be made compliant. In short, if the aim is to address accessibility, there are other more affordable ways to do that which would have greater benefit for the network.

Even though around half the stations from Sydenham to Bankstown require major upgrades before 2022 to meet the DSAPT timeframe, only one station on that line in the Inner West local government area (LGA) - Dulwich Hill - requires a major upgrade to provide adequate access. This contrasts with the other six stations in the LGA that are inaccessible and have yet to be nominated for any access improvements.

While enhancements can always improve a station, the point is there is a significant difference between upgrading stations with lifts and other primary access features and constructing a completely new rail system independent of the existing one. So while a new system potentially enables access to be better integrated, from a cost perspective more could be done across the whole Sydney network (including the Inner West local stations) to improve access if that was the major driver.

Also if the system is to be privatised then a lot of public money is being expended to assist a private operator comply with DSAPT.

A cursory look at Sydney Metro's design guidelines shows they do pick up broad aspects of universal access. This is welcomed and provides confidence that compliance will be achievable. The realisation of best practice, however, is a little harder to gauge. For example, with respect to comprehensive design approaches, it is less clear how well access issues for people with cognitive, sight/vision impairment will be addressed.

Extensive use of glass, reflective surfaces combined with lighting (natural and added) may serve many aesthetic and environmental performance goals but could also present a very confusing array

of glare or abstract shadowing. These approaches need to give attention to orientation effects for those with low vision and different sight conditions, including those that rely on levels of audio prompt/echo etc. for orientation. If it has not occurred already, I would recommend that designs at this level be peer reviewed by professionals and representative groups that possess expertise across a broad range of accessibility needs.

Features such as tactile ground indicators and raised lettering would be of assistance in this regard. But as indicated above, there are other design considerations associated with universal access and that complement wayfinding. These additional design considerations would be addressed if best practice was incorporated into the approach.

4. Mitigation of Impacts

It is our view that the project should not proceed until it has been subjected to a re-evaluation in the context of a properly integrated transportation plan for Sydney. If, however, the State government does go ahead with the Sydney Metro program, than consideration should be given to mitigating social and environmental impacts as outlined below.

Fares and the public interest

The issue of ticketing which is both affordable and priced to encourage commuters to use trains rather than cars is significant given the congestion and long car commute times afflicting Sydney commuters. Obviously the use of trains rather than cars makes a valuable contribution to reducing greenhouse emissions which should be an essential aspect of the EIS.

According to the 'Sydney Metro: City and South West – Final Business Case', Summary, October 2016, the following policy will apply:

> *Opal ticketing will work on Sydney Metro and provide a seamless connection to other transport modes for customers. Fares will be set on the same basis as for Sydney Trains and controlled by the NSW Government. TfNSW will perform fare enforcement, ticketing equipment operation and maintenance. To assist with fare enforcement all new underground stations will be closed gate stations.*
>
> *Net public transport fare analysis includes an assessment of the impact of the Project on the Sydney Metro, Sydney Trains, NSW Trains, light rail, bus and ferry networks. Overall the Project increases total public transport patronage and public transport fare revenue. It is forecast that there will be a considerable diversion of patronage from Sydney Trains and NSW Trains to Sydney Metro, and relatively minor diversions from light rail, ferry and bus services.*

Of interest to the public is the actual fares to be charged and how these compare with the existing train fares. The report states:

> *Key outcomes of this analysis include:*
>
> - *the annual incremental public transport fare revenue would cover nearly 61 per cent of the incremental operating cost in 2026 and more than the operating cost in 2036*

- *the additional fare revenue on Sydney Metro services would more than cover the incremental operating costs of these services (net profit of $(redacted) in 2026 and $(redacted) in 2036).*

The ticketing information relating to the 'key outcomes' above has been redacted from the report so it is not clear if the ticketing policy will conform with existing ticketing determination which entails some reference to the public interest and social impacts or whether it will be primarily geared to ensuring an operating profit for the private operator of the network.

The statement above, namely that "(f)ares will be set on the same basis as for Sydney Trains and controlled by the NSW Government" suggests otherwise. However the submission to the EIS should request that this matter be clarified.

Bicycle racks at stations to match demand

Use of bicycles within the Inner West has markedly increased in recent years. Commuters who use bicycles to travel to stations need adequate bicycle racks at stations in order to securely park their bicycles while at work. Bicycle rack provision at the recently upgraded Sydenham station does not match demand which regularly exceeds bicycle rack capacity.

Not only should bicycle rack provision match demand but provision should also be made for the bicycle racks to be extended in order to cater for future demand when needed.

5. Conclusion

As Roderick Simpson has argued, NSW Government is planning to spend billions of dollars on transport infrastructure – ranging from motorways and metros to light rail, airports and intermodal terminals – in response to current capacity and congestion concerns. However, there is no evidence that these projects have been properly integrated or will make Sydney a better city.

The Sydney Metro is one of these problematic projects. It is therefore recommended that the project not proceed until a new city wide properly integrated transportation plan is devised in keeping with social, economic and environmental sustainability principles.

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Jon Atkins
Glenn Redmayne
7 November 2017

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 6:16 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details for Jon Atkins (comments)
Attachments: 230893_Jon Atkins & Glenn Redmayne Sydney Metro submission amended 7Nov2017_2017Nov07_1814.pdf

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From: system@accelo.comOn Behalf OfJon Atkins
Sent: 07 November 2017 18:15:22 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Jon Atkins (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Jon Atkins
[redacted]

Address:
[redacted]

Marrickville, NSW
2204

Content:
The submission attached is a revised version of a submission originally made at 5.15pm today. Please use this version and discard the original one. It has been written by Jon Atkins and Glenn Redmayne - address details of authors are included in submission.

[redacted]
Submission: Online Submission from Jon Atkins (comments)
https://majorprojects.accelo.com/?action=view_activity&id=230893

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
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Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Attention: Director, Transport Assessments

Name & address (1)	**Jon Atkins, 2/44 Ruby St, Marrickville NSW 2204**
Name & address (2)	**Glenn Redmayne, PO Box 337, Broadway NSW 2007**
Application name	**Sydney Metro - Comments on the Sydenham to Bankstown Environmental Impact Statement (EIS)**
Application number	**SSI 17_8256**
Brief statement	**We oppose the proposed project**
The reasons why	**Refer to comments below**

1. Introduction

The Project

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The capital cost of the project is estimated to be $10 billion.

Overall Cost of the Sydney Metro Program

The table below indicates that the estimated overall cost of the program is $30.8 billion.

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In order to address the chronic lack of affordable housing, a Joint Communiqué issued on 23rd August 2017 by Southern Sydney Regional Organisation of Council (SSROC), Planning Institute of Australia (PIA) and Community Housing Providers called on the State Government to recognise affordable housing as essential infrastructure for a sustainable, inclusive and productive city.

Measures in the Joint Communiqué designed to help boost the supply of affordable housing included the following:

- recognise Sydenham-Bankstown Corridor as a priority target for affordable housing in the Central and South Districts that should be subject to Growth Infrastructure Compact agreement;
- expand SEPP 70 to enable more councils to embed inclusionary zoning schemes within local planning frameworks, particularly in growth areas or areas undergoing renewal;
- enable councils to include a mandatory requirement for affordable housing in their LEPs where there is land value uplift to support its application, including in Government land.

These additional measures should also be supported by the State government to help address the affordable housing crisis.

Accessibility standards

Any new infrastructure project needs to fully comply with the Disability Standards for Accessible Public Transport (DSAPT).

So with respect to an entirely new rail project (well beyond an upgrade) the accessibility alone is not really a valid selling point for its business case, unless modifications to the existing network cannot be made compliant. In short, if the aim is to address accessibility, there are other more affordable ways to do that which would have greater benefit for the network.

Even though around half the stations from Sydenham to Bankstown require major upgrades before 2022 to meet the DSAPT timeframe, only one station on that line in the Inner West local government area (LGA) - Dulwich Hill - requires a major upgrade to provide adequate access. This contrasts with

the other six stations in the LGA that are inaccessible and have yet to be nominated for any access improvements.

While enhancements can always improve a station, the point is there is a significant difference between upgrading stations with lifts and other primary access features and constructing a completely new rail system independent of the existing one. So while a new system potentially enables access to be better integrated, from a cost perspective more could be done across the whole Sydney network (including the Inner West local stations) to improve access if that was the major driver.

Also if the system is to be privatised then a lot of public money is being expended to assist a private operator comply with DSAPT. From a budget perspective this has potential to jeopardise the completion of other access improvements on the remaining stations across the network within the DSAPT timeframe agreed to by all governments and the disability sector.

A cursory look at Sydney Metro's design guidelines shows they do pick up broad aspects of universal access. This is welcomed and provides confidence that compliance will be achievable. The realisation of best practice, however, is a little harder to gauge. For example, with respect to comprehensive design approaches, it is less clear how well access issues for people with cognitive, sight/vision impairment will be addressed.

Extensive use of glass, reflective surfaces combined with lighting (natural and added) may serve many aesthetic and environmental performance goals but could also present a very confusing array of glare or abstract shadowing. These approaches need to give attention to orientation effects for those with low vision and different sight conditions, including those that rely on levels of audio prompt/echo etc. for orientation. If it has not occurred already, I would recommend that designs at this level be peer reviewed by professionals and representative groups that possess expertise across a broad range of accessibility needs.

Features such as tactile ground indicators and raised lettering would be of assistance in this regard. But as indicated above, there are other design considerations associated with universal access and that complement wayfinding. These additional design considerations would be addressed if best practice was incorporated into the approach.

4. Mitigation of Impacts

It is our view that the project should not proceed until it has been subjected to a re-evaluation in the context of a properly integrated transportation plan for Sydney. If, however, the State government does go ahead with the Sydney Metro program, than consideration should be given to mitigating social and environmental impacts as outlined below.

Fares and the public interest

The issue of ticketing which is both affordable and priced to encourage commuters to use trains rather than cars is significant given the congestion and long car commute times afflicting Sydney commuters. Obviously the use of trains rather than cars makes a valuable contribution to reducing greenhouse emissions which should be an essential aspect of the EIS.

According to the 'Sydney Metro: City and South West – Final Business Case', Summary, October 2016, the following policy will apply:

> *Opal ticketing will work on Sydney Metro and provide a seamless connection to other transport modes for customers. Fares will be set on the same basis as for Sydney Trains and controlled by the NSW Government. TfNSW will perform fare enforcement, ticketing equipment operation and maintenance. To assist with fare enforcement all new underground stations will be closed gate stations.*
>
> *Net public transport fare analysis includes an assessment of the impact of the Project on the Sydney Metro, Sydney Trains, NSW Trains, light rail, bus and ferry networks. Overall the Project increases total public transport patronage and public transport fare revenue. It is forecast that there will be a considerable diversion of patronage from Sydney Trains and NSW Trains to Sydney Metro, and relatively minor diversions from light rail, ferry and bus services.*

Of interest to the public is the actual fares to be charged and how these compare with the existing train fares. The report states:

> *Key outcomes of this analysis include:*
> - *the annual incremental public transport fare revenue would cover nearly 61 per cent of the incremental operating cost in 2026 and more than the operating cost in 2036*
> - *the additional fare revenue on Sydney Metro services would more than cover the incremental operating costs of these services (net profit of $(redacted) in 2026 and $(redacted) in 2036).*

The ticketing information relating to the 'key outcomes' above has been redacted from the report so it is not clear if the ticketing policy will conform with existing ticketing determination which entails some reference to the public interest and social impacts or whether it will be primarily geared to ensuring an operating profit for the private operator of the network.

The statement above, namely that "(f)ares will be set on the same basis as for Sydney Trains and controlled by the NSW Government" suggests otherwise. However the submission to the EIS should request that this matter be clarified.

Bicycle racks at stations to match demand

Use of bicycles within the Inner West has markedly increased in recent years. Commuters who use bicycles to travel to stations need adequate bicycle racks at stations in order to securely park their bicycles while at work. Bicycle rack provision at the recently upgraded Sydenham station does not match demand which regularly exceeds bicycle rack capacity.

Not only should bicycle rack provision match demand but provision should also be made for the bicycle racks to be extended in order to cater for future demand when needed.

5. Conclusion

As Roderick Simpson (Environment Commissioner, Greater Sydney Commission) has argued, NSW Government is planning to spend billions of dollars on transport infrastructure – ranging from motorways and metros to light rail, airports and intermodal terminals – in response to current

capacity and congestion concerns. However, there is no evidence that these projects have been properly integrated or will make Sydney a better city.

The Sydney Metro is one of these problematic projects. It is therefore recommended that the project not proceed until a new city wide properly integrated transportation plan is devised in keeping with social, economic and environmental sustainability principles.

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Jon Atkins
Glenn Redmayne
7 November 2017

DPESYDMET Scanned

From: [redacted]
Sent: Tuesday, 7 November 2017 8:30 PM
To: DPESYDMET Scanned
Subject: FW: Submission Details
Attachments: 230906_SP submission to the Metro Env Impact Statement Dulwich Hill_2017Nov07_2028.pdf

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From: system@accelo.comOn Behalf Of[redacted]
Sent: 07 November 2017 20:29:20 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details

Confidentiality Requested: yes

Submitted by a Planner: no

Disclosable Political Donation: no

Name: [redacted]
Organisation: [redacted]
Email: [redacted]

Address:
[redacted]

[redacted]

Content:
Please see attached

IP Address: - [redacted]
Submission: Online Submission from [redacted]
https://majorprojects.accelo.com/?action=view_activity&id=230906

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501

Submission re Metro Environmental Impact Statement with particular reference to Dulwich Hill

I wish to register my strong objection to the proposal to upgrade the Bankstown train line from Sydenham to Bankstown to metro standards. The project is unnecessary and will have incredibly destructive impacts on Dulwich Hill during the long five-year construction phase and utilise vast amounts of tax payers money which could be better spent elsewhere. The improvements brought through the Metro line – such as increased service regularity and disabled access to Dulwich Hill station – can also be achieved via upgrades to the existing Sydney Trains network.

It appears that the main benefit of the Metro line is that it frees up capacity in the City Circle for other train services across the rest of the city. This means that Dulwich Hill and other stations on the Sydenham to Bankstown corridor are being forced to sacrifice for the rest of Sydney.

Lack of justification

The Metro conversion of this line is not justified because:

- There is an existing train service in this corridor, which could be improved by alternative means including signalling and timetable upgrades, bringing in modern rolling stock and installing disabled access to stations.
- It is bringing unwanted and destructive urban renewal and development to our community.
- The Government has not adequately considered alternative infrastructure options.
- It is a waste of billions of government dollars.
- Aspects of the Metro will cause reduced services, including the comparative lack of seating compared to existing Waratah Trains and the loss of a number of important stops currently on our route, including CBD stops. This is a significant impact.
- The requirement to shut down the Bankstown line for 46 weeks during the construction period will make commuting a living hell.

Impacts of construction

The five-year construction process will be enormously disruptive to the residents of Dulwich Hill.

This is largely because of the extraordinary complications of trying to build a new railway line in place of an existing operational line. This will require intensive and noisy works to take place at night or weekends (in other words the most sensitive time for the community) or force unwanted and highly inconvenient shutdown periods.

It is arguable this has never before been attempted in the history of NSW – and for good reason. It simply doesn't make sense to rip up our existing railway line to build a new one.

Severe impacts on Dulwich Hill

Impacts on Dulwich Hill include:

- A total of 1,221 properties will be exposed to noise at a level which breaches the potential for sleep disturbance criteria (background noise level plus 15 decibels from 10pm to 7am) during the construction period from 2019 to 2024.
- This includes 783 properties which would experience noise from earthworks which exceeds the criteria for 30 weeks during the construction period.
- Dulwich Hill is the worst affected suburb in the corridor for sleep disturbance in the Sydenham to Bankstown Corridor.

- Some 74 properties, including 24 heritage properties in streets such as Wilga, Keys and Challis Avenues, would be put at risk of damage from excessive vibration levels caused by the use of intensive construction equipment.
- New Canterbury Rd at Dulwich Hill will be packed with up to 1,020 buses a day during rail shutdown periods (eight weeks a year from 2019 to 2024 plus on an unspecified number of weekends).
- Other streets with significant bus impacts include Marrickville Rd at Dulwich Hill shops (1,020 buses a day), Bayley St (495 buses), Beauchamp St (495 buses), Ewart St (495 buses).
- Destruction of historic wooden railway station ticket office, which EIS reports state may be State significant.
- A total of 27 commuter parking spots lost from the carpark to the south of the station, and nine out of the 17 parking spots in Bedford Crescent removed, during the construction period.
- Up to 130 construction workers will want to park in local streets during rail shutdown periods, and up to 60 at other times.
- During rail shutdown periods, even after mitigation measures, the average vehicle delay for the intersection of Wardell Rd and Ewart St will increase from 32 seconds to 55 seconds.
- Residential streets such as Wilga, Keys, Challis Avenues and Albermarle, Beauchamp and Ewart Sts will be used as construction haulage routes.

Based on the above, it is clear that the pain is not worth the gain.

Avoiding or mitigating these impacts

We oppose the Metro but ask that if it is approved that:

- No works are undertaken after 10pm or before 7am or after hours on weekends
- Pre-dilapidation surveys are provided to the 74 Dulwich Hill homes potentially affected by vibration and funds are set aside to repair these homes if monitoring shows that damage is happening
- Noise attenuation works (such as those offered to homes under the flight path) are offered to properties set to suffer severe noise exceedances
- Alternative accommodation is provided to any resident who requests it, or alternatively the criteria for alternative accommodation is dramatically reduced from the currently proposed 30 decibels above the relevant noise criteria
- The Sydenham to Bankstown urban renewal strategy is abandoned to reduce the cumulative construction impacts in the corridor – the impact of railway and housing construction at the same time is not adequately addressed in the submission and a disaster waiting to happen.
- Councils are provided funds to hire additional rangers to monitor construction worker parking and to set up residential parking schemes

Community consultation

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months.

Community information sessions have been poorly attended, reflective of a lack of community engagement.

Heritage

The planned heritage destruction and diminution along the line is reckless:

- the demolition of rare, exceptional and high-value heritage-listed items (such as the destruction of the historic wooden station building at Dulwich Hill) is wasteful
- station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

The metro is not in the public interest but is enabling the over development of the corridor and is not justified.

Dulwich Hill resident

DPESYDMET Email

From: [redacted]
Sent: Wednesday, 8 November 2017 1:01 PM
To: DPESYDMET Email
Subject: FW: Submission Details for Nicole Mather (object)

From: system@accelo.comOn Behalf OfNicole Mather
Sent: 08 November 2017 13:00:13 (UTC+10:00) Canberra, Melbourne, Sydney
To: [redacted]
Subject: Submission Details for Nicole Mather (object)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Nicole Mather
[redacted]

Address:
[redacted]

Hurlstone Park, NSW
2193

Content:
TO WHOM IT MAY CONCERN

I object to the proposal to upgrade the Bankstown Line from Sydenham to Bankstown to metro standards.

The Metro conversion of this line is not justified because:

-Capacity and congestion issues are over-stated and could be resolved by alternative means including signalling and timetable upgrades, tunnelling for short lengths in the existing system, and improving (not privatising) bus services.
-Accessibility (including lifts) and safety issues can and should be addressed now, without a Metro conversion. Marrickville station has recently been upgraded with lifts and lifts can be installed at Dulwich Hill and Hurlstone Park stations without a Metro.
-Justifications based on growth and the need for increased housing supply are contested particularly because this corridor is already densely populated.
-The Government has not considered other infrastructure options such as decentralisation, and rural investment or a strategy for Parramatta Rd, in need of renewal and a rapid bus transit system.
-The temporary transport strategy set out in the EIS is insufficient and will cause delays and stress to the 100,000 commuters who travel the corridor each day during the construction period. The EIS notes that the estimated 101 extra buses per hour required will not be feasible as they would cause traffic congestion through Marrickville and Sydenham. How will people travel to work and school in reasonable time?

The construction process will be enormously disruptive to the residents of Hurlstone Park. These disruptions include:
*potential vibrational damage to dwellings
*properties close to the railway line will be impacted by extra noise during construction, sometimes at night and by noisy heavy machinery. This includes many schools and child care centres, as well as homes and businesses. The EIS has flagged that construction is likely to occur outside standard hours.
*some properties, including heritage listed properties, close to the project may suffer "cosmetic" damage from vibration. This includes the Sugar House and the new units backing onto Canterbury Rd
*streets in Hurlstone Park acting as "haulage routes", such as sections of Crinan, Garnet, Kilbride, and Melford Streets will have heavy truck traffic, noise and dust during construction periods.
*The lack of a clear strategy for the already congested Canterbury Rd which will be rendered almost impassable for many months.

Community consultation has been inadequate and information biased and misleading. The brochures and EIS do little to explain the negative impacts of the EIS such as the huge disruption for commuters. The EIS is largely inaccessible to the public due to its length, complexity and the short time allowed to make a consultation, only 2 months. Community information sessions have been poorly attended, reflective of a lack of community engagement.

The environmental impacts are unacceptable, including:

*increased greenhouse gas emissions
*the environmental cost of demolition of structures that have stood for more than 100 years, and new construction with a significantly reduced life-span and aesthetic.

The planned heritage destruction and diminution along the line is reckless:

*the demolition of rare, exceptional and high-value heritage-listed items is wasteful
*station designs do not represent local character and reflect a branding exercise by the NSW Government

In summary, the plans to replace the existing, historic Sydenham-Bankstown rail line represents a missed opportunity to showcase the corridor's heritage, to celebrate its diversity, and to explore and develop public transport options in other areas lacking this facility.

THE METRO IS NOT IN THE PUBLIC INTEREST BUT IS ENABLING THE OVER-DEVELOPMENT OF THE CORRIDOR.

Nicole Mather

[redacted]

Submission: Online Submission from Nicole Mather (object)
https://majorprojects.accelo.com/?action=view_activity&id=231053

Submission for Job: #8256 Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
https://majorprojects.accelo.com/?action=view_job&id=8256

Site: #3501 T3 Bankstown Line between Sydenham and Bankstown
https://majorprojects.accelo.com/?action=view_site&id=3501