



Pre-Construction Minor Works Approval Form

Minor Works are defined as any low impact activities that are undertaken prior to the commencement of 'construction' as defined in the project's applicable planning approval. However if Minor Works affect or potentially affect heritage items, threatened species, populations or endangered ecological communities, these works are defined as 'construction' unless otherwise determined by the applicable planning authority.

Minor Works approvals do not remove any obligation to comply with the project's applicable planning approval conditions (including requirements prior to 'any works' commencing) or obtain any other applicable permits, licenses or approvals as necessary.

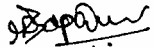
This application and all supporting information must be submitted to TfNSW/the Environmental Representative as one (1) PDF file at least 10 business days prior to the commencement of the proposed Minor Works.

Part 1: Application	
Contractor:	Laing O'Rourke
Project:	Sydney Metro City and Southwest - Northern Corridor Works Project
Application Title: (e.g. Smith St trenching works)	Mid-Week 52 Night Site Survey and Investigation Works – Portion 7a Mid-Week 02 Night Site Survey and Investigation Works – Portion 7a
Application Number:	NCW-001
Application Date:	Revision 1 – 13 th June 2017
Planning Approval:	SSI 15_7400
Minor Works Categories: <ul style="list-style-type: none"> Highlight as applicable. If Items 4, 8 or 11 are applicable, this form must be endorsed by an Environmental Representative. 	<ol style="list-style-type: none"> Survey, survey facilitation and investigations works (including road and building dilapidation survey works, drilling and excavation). Treatment of contaminated sites. Establishment of ancillary facilities (excluding demolition), including construction of ancillary facility access roads and providing facility utilities. Operation of ancillary facilities that have minimal impact on the environment and community. Minor clearing and relocation of vegetation (including native). Installation of mitigation measures, including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments. Property acquisition adjustment works, including installation of property fencing and utility relocation and adjustments to properties. Utility relocation and connections. Maintenance of existing buildings and structures. Archaeological testing under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010) or archaeological monitoring undertaken in association with other Minor Works to ensure there is no impact on heritage items. Any other activities that have minimal environmental impact, including construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access.
Planning Authority Determination: Will the proposed works affect or have the potential to affect heritage items, threatened species, populations or endangered ecological	No. The proposed works do not have potential to impact on heritage items, threatened species, populations or endangered ecological communities.



communities?					
Part 2: Details					
<p>Describe the proposed Minor Works: Including work methodologies, site location(s) and site description(s) (e.g. landscape type, waterways, etc.).</p>	<p>The scope of work is to be carried out in the rail corridor between the south of Chatswood Station and to the north of Artarmon Station (Brand St, Artarmon to Albert Ave, Chatswood) and will include:</p> <ul style="list-style-type: none"> - Survey - Site Walk - This work will require use of light vehicle, hand tools and measuring equipment (no noise) <p>Dates and Time:</p> <ul style="list-style-type: none"> - 26 to 30 June 2017; 2000 to 0430 - 10 to 14 July 2017; 2000 to 0430 				
Planned Commencement Date:	26 th June 2017				
Local Sensitivities: Describe the presence (if any) of local sensitive environmental areas and community receptors.	Community – Residents on Brand St, Drake St, Hawkins St, Hampden Rd, Hopetoun Ave have direct line of site to the works.				
Part 3: Environmental Risk Assessment and Management					
<p>Prepare an Environmental Risk Assessment (in accordance with the <i>Sydney Metro Risk Management Standard</i>) and an Environmental Control Map for the proposed Minor Works and attach as Appendix 1.</p> <p>If an Environmental Risk Assessment and/or an Environmental Control Map for the proposed Minor Works is/are already contained in existing documentation, attach the relevant section(s) as Appendix 1.</p>					
Documentation: List any existing documents (including those referenced above) that the proposed Minor Works will be undertaken in accordance with and attach as Appendix 2 (e.g. plans, procedures, procedures, etc.).	<ul style="list-style-type: none"> - Sydney Metro Construction Environmental Management Framework - Sydney Metro City and Southwest, Chatswood to Sydenham, Planning approval SSI 15_7400 				
Part 4: Workforce Notification					
How will the environmental and community risks and associated mitigation measures of the proposed Minor Works be communicated to the contractor's workforce?	<p>All workers will undertake NCW Project specific induction.</p> <p>In addition, there will be a pre-start briefing undertaken by the worksite manager at the start of shift for all work groups. This will detail the environmental and community risks.</p>				
Part 5: Community Consultation					
What community consultation has been undertaken already?	The works will be covered by the notification issued by Sydney Metro in conjunction with LOR (for existing Portion 6 delivered under MNNSCW).				
What community consultation is planned to be undertaken?	<p>Planned:</p> <ul style="list-style-type: none"> - The works will be covered by the notification issued by Sydney Metro in conjunction with LOR (for existing Portion 6 delivered under MNNSCW). 				
If drafted already, attach applicable Community Notification as Appendix 3.					
Part 6: Contact Details					
Nominate contractor's project manager, environmental and communications contact(s).					
Name:	Tony Deacy	Position:	Project Manager	Phone:	0467 762 987
	Maulik Bapodara		Environmental Manager		0433 494 595
	Susan Alton		Communications Manager		



Part 7: Signature			
This signature acknowledges that the proposed Minor Works will be undertaken in accordance with this application, have minimal environmental impact and are not defined as 'construction' in accordance with the applicable planning approval.			
Name:	Maulik Bapodara		
Signature:		Date:	13/06/2017



Determination Page

(TfNSW/Environmental Representative Use Only)

12. Endorsement/Approval			
These signatures represent formal endorsement/approval for the proposed Minor Works to commence in accordance with this application and the applicable planning approval requirements (subject to any determination from the applicable planning authority as may be required by the planning approval conditions).			
	TfNSW Principal Manager, Communication & Engagement – Endorsement (required for all applications)	TfNSW Principal Manager, Sustainability, Environment & Planning – Approval (required for all applications)	Environmental Representative – Endorsement (required as necessary in accordance with the applicable planning approval, optional for all other circumstances)
Signature:			
Name:	MICHAEL LLOYD OBO. ANITA BROWN	FIL CERONI	
Date:	22/6/17	21/6/17	
Comments:			Supporting letter attached as Appendix 4 if necessary.
Conditions:			Supporting letter attached as Appendix 4 if necessary.
<input checked="" type="checkbox"/>	Approved (by TfNSW)		
<input type="checkbox"/>	Endorsed (by Environmental Representative)		
<input type="checkbox"/>	Rejected		



Appendix 1: Environmental Risk Assessment and Environmental Control Map.

Risk Assessment Rankings: >17 = Extreme 10 - 16 = High 5 - 9 = Medium 1 - 4 = Low

Issues or activities that represent an Extreme risk after the application of control measures are not to be undertaken

Aspect	Potential Environmental Impact	Initial Risk Rating			Control Measures	Residual Risk Rating		
		P X	C =	Risk		P X	C =	Risk
Approvals and Licensing								
Not identifying appropriate approvals / licenses required or proceeding without them.	Works delayed, infringements, prosecution and reputational loss.	P	3	M	Planning approval has been granted for the Sydney Metro - Chatswood to Sydenham works (SSD 15_7400). This minor works application is being completed to ensure appropriate documentation is completed to management environmental risk of the project. Only investigative works are being undertaken. No permanent construction works are to be completed.	U	3	M
Noise								
Noise from investigation activities.	Disturbance to residents or neighbouring businesses. Potential for complaints.	P	3	M	Control measures as per Community Consultation Strategy (CCS) are to be implemented. Consult with the community in relation to upcoming activities that may result in concern (completed by Sydney Metro). Site walks, survey and visual inspections will be inaudible at surrounding receivers.	U	3	M
Noise from investigation activities required to be undertaken out of standard working hours.	Disturbance to residents or neighbouring businesses with potential for complaints.	P	3	M	Control measures as per Community Consultation Strategy (CCS) are to be implemented. Consult with the community in relation to upcoming activities that may result in concern (completed by Sydney Metro in conjunction with LOR). Site walks, survey and visual inspections will be inaudible at surrounding receivers.	U	3	M



Vibration								
Vibration intensive activities undertaken on the site in proximity to sensitive heritage structures and community.	Damage to listed heritage items. Disruption, annoyance and nuisance to residents. Potential damage to adjacent residential and commercial residences and structures. Disruption to businesses as a result of vibration nuisance	U	4	M	Consult with potentially affected parties prior to commencement of works for any activities that may create vibration impacts caused by the works.. No heritage structures within close proximity of proposed minor works. No vibration intensive works to be undertaken.	R	4	M
Water Quality, Erosion & Sedimentation								
Sediment laden runoff from investigation works leaving site.	Degradation of local watercourses. Increased turbidity in local water ways resulting in impact on aquatic life. Fines for sediment escaping site.	U	3	M	No excavation work is proposed as part of these works. All vehicle wheels to be clean prior to exiting site.	R	3	L
Non-compliant water from investigation works discharged from site	Non-compliant water entering stormwater system waterways (i.e. polluting - not compliant with discharge criteria).	P	3	M	No water discharge anticipated for minor works.	U	3	M
Ground water	Ground water entering excavations Without appropriate safeguards onsite could lead to ground water contamination	U	2	L	Proposed works are visual inspections only and will not be affecting groundwater table.	R	2	L
Waste								
Waste disposal during works.	Incorrect disposal of waste, further costs incurred for classifications and disposal, fines may be issued.	P	2	M	No waste is anticipated to be generated from these works.	U	2	L
Contamination								
Potential for discovery of unexpected contaminated spoil during investigation works involving excavation and	Health effects resulting from airborne contamination, e.g. asbestos.	P	3	M	No excavations/soil movements are proposed as part of these works.	U	2	L



drilling.	Complaints received from odours.							
Hazardous Materials								
Storage of hazardous substances, leaking plant and equipment and spillage from refuelling.	Localised ground contamination / pollution of stormwater and requiring clean-up and/or receiving fines. Risk of igniting volatile substances.	U	3	M	No fuels or hazardous materials to be stored on site for minor works. Spill kits to be onsite when using plant/equipment. No major servicing of equipment to be undertaken onsite. Pre-mobilisation checks on all plant/equipment to come to site, including check of fuel and hydraulic leaks.	R	3	L
Biodiversity								
Vegetation trimming / clearing required outside approved work area.	Unauthorised works / removal of vegetation outside defined work area, possibility of removing threatened species, fines incurred.	R	3	L	No vegetation removal/trimming to be undertaken as part of the minor works.	R	1	L
Clearing and grubbing of vegetation within work site.	Erosion of soils, uncontrolled runoff, sediment deposited into surrounding vegetated areas and watercourses, and invasion of weeds. Wrong vegetation removed. Potential for injury to native fauna.	R	3	L	No vegetation removal/trimming to be undertaken as part of the minor works.	R	1	L
Air Quality								
General works; investigative excavations	Dust activity in close proximity to residential and commercial premises, complaints received.	U	3	M	No excavations are proposed as part of these works.	R	3	L
Exhaust from plant and equipment.	Emissions resulting in air pollution.	U	3	M	Well maintained plant/ equipment and pre-start checks and servicing. Non-complaint vehicles removed from site / repaired.	R	3	L



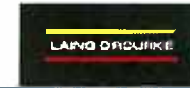
Heritage								
Unexpected heritage items encountered.	Work delays, additional studies, approvals required, damage to heritage item.	P	3	M	General inductions on heritage management 'stop-works' protocol. If suspected heritage item encountered. Works to stop immediately and Environment Manager contacted. Label any known heritage items on Environmental Control Maps.	U	3	M
Flora & Fauna								
Removal of flora without approval.	Failure to identify flora prior to removal.	R	3	L	No vegetation removal/trimming to be undertaken as part of the minor works.	R	1	L
Traffic								
Loss of on-street car parking in adjacent residential streets and commercial areas during investigation works.	Loss of parking availability to adjacent residential and commercial properties could result in community complaints.	P	3	M	Community notifications. Site vehicles shall be parked within the rail corridor and not affect public parking area No road/lane closures required.	U	3	L
Management of heavy vehicles / access routes.	Complaints from sensitive receivers due to increased level and frequency of noise.	P	4	M	Deliveries of plant and materials shall be undertaken outside of peak periods where possible Site vehicles shall be parked within the rail corridor and not affect public parking areas Scheduled road movements shall be minimised where possible Oversized deliveries would be undertaken in accordance with the requirements of NSW Police or Roads and Maritime Services. Designated access routes given to contractors/suppliers. Community Notifications. Pedestrian management with traffic controller in place where required.	U	4	L



Truck deliveries out of normal working hours (un-approved).	Noise impact to community / potential complaints.	P	3	M	Induction on approved working hours for deliveries. Communication of delivery times to suppliers. Community Notifications on project activities occurring locally. Approved traffic/access routes. Planning and staging of works in approved hours as much as practical.	U	3	M
Resources and Energy Use								
Energy consumption by plant and equipment.	Inappropriate energy use, waste of energy resources, energy wastage costs, increased greenhouse gas emissions.	U	2	L	No idling of plant equipment where possible onsite. Equipment / plant equipment inspections must be undertaken prior to use on site.	R	2	L
Resource usage (e.g. building materials, water, fuels, packaging), waste generation and disposal	Depletion of resources due to wastage (e.g. wastage of water / no recycling, poor management of procurement, ineffective removal of off-cuts, waste, i.e. no recycling).	U	2	L	No materials are required to be imported for these minor works.	U	2	L

For each identified issue, consider the ‘maximum credible’ (not absolute worst case) risk that could result with **minimal or no controls** other than existing and using normal work practices.

Note: Any one of the listed consequences must result in the use of the applicable consequence grading.

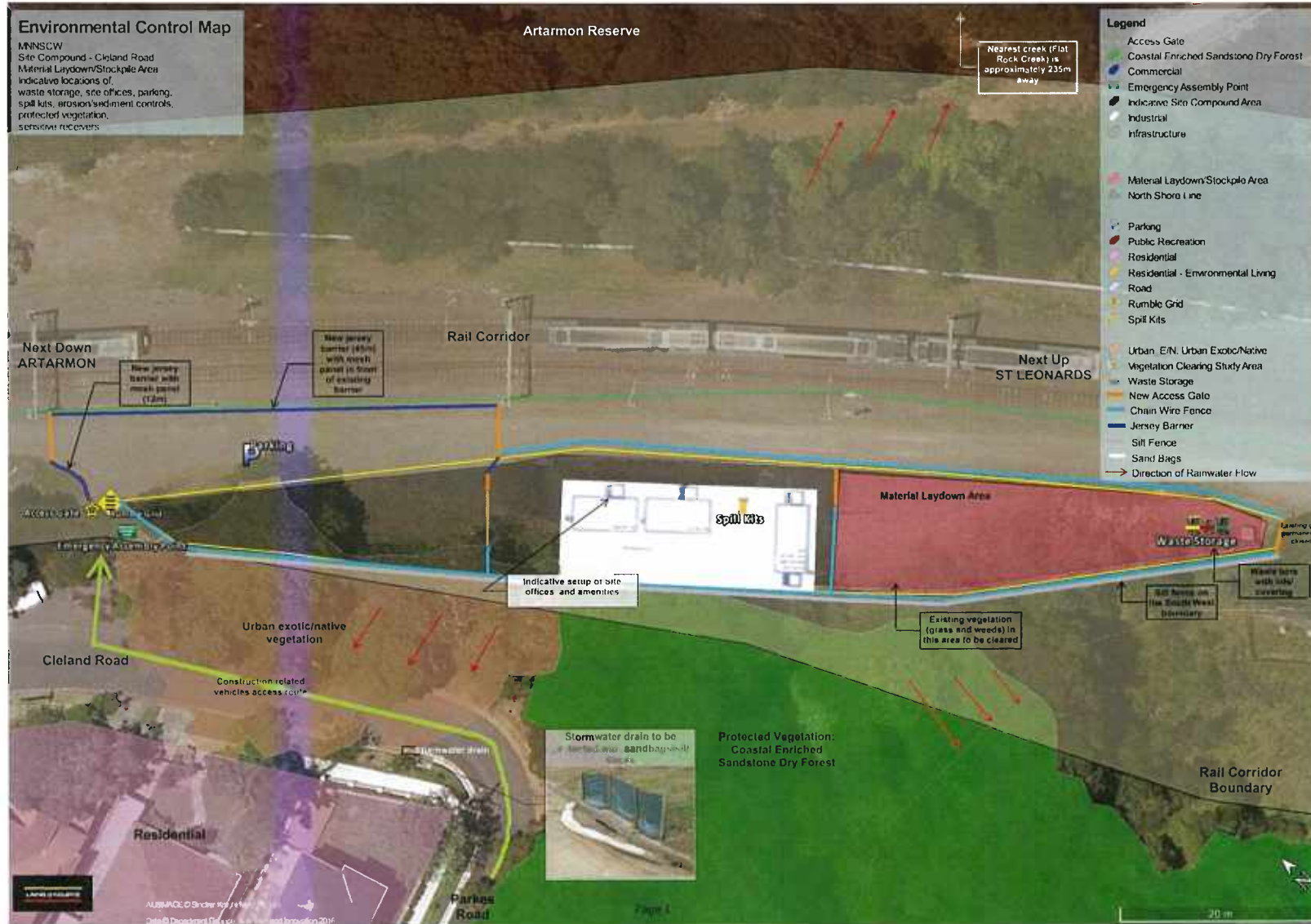


Probability:			Consequence:		
5 = Certain 4 = Likely 3 = Possible 2 = Unlikely 1 = Rare			5 = Severe 4 = Major 3 = Moderate 2 = Minor 1= Incidental		
1- 4 Acceptable 5 - 9 Acceptable with control measures 10 - 16 Requires the implementation of best practice 17 and Above = UNACCEPTABLE					
5	Certain	<ul style="list-style-type: none"> Common or repeating occurrence Consequence can reasonably be expected to occur in life of Project. 	5	Severe	<ul style="list-style-type: none"> Major pollution incident causing significant and widespread damage or potential to health or the environment Persistent reduction in ecosystem function and value. Ongoing disruption and loss of protected species. Major prosecution likely, outcome in excess of \$500,000
4	Likely	<ul style="list-style-type: none"> Known to have occurred / "has happened" Conditions may allow the consequence to occur on the Project during its lifetime The event has occurred within the Business Unit within the previous 5 years. 	4	Major	<ul style="list-style-type: none"> Significant widespread and persistent changes to habitat, species or environmental media Significant pollution incident causing damage or potential damage to health or the environment external to the site. Potential for prosecution. Potential outcome between \$50,000 - \$500,000 Numerous substantial complaints Actual material environmental harm
3	Possible	<ul style="list-style-type: none"> Could occur / "heard of it happening" Exceptional conditions may allow consequences to occur on the Project, or has occurred nationally within the Australian Business. 	3	Moderate	<ul style="list-style-type: none"> Localised irreversible habitat loss or effects on habitat, species or environmental media Reportable incident to the relevant environmental regulator or other authority. Demonstrated breach of legislative, licence or guideline requirements. Likely infringement notice or fine, potential for prosecution up to \$50,000. Will cause complaints.
2	Unlikely	<ul style="list-style-type: none"> Not likely to occur Reasonable to expect that the consequence will not occur on the Project. Has occurred in industry but not in Business Unit. 	2	Minor	<ul style="list-style-type: none"> Localised degradation of habitat or short term impacts to habitat, species or environmental media. Pollution incident that marginally exceeds licence conditions or guidelines for acceptable pollution. Fine unlikely. Potential for complaints.



1	Rare	<ul style="list-style-type: none"> Practically impossible Not known to have occurred in industry or unheard of. 	1	Incidental	<ul style="list-style-type: none"> Localised or short term effects on habitat, species or environmental media. Fully contained on site and can be fully remediated. Little potential for fine or complaints. Insignificant or trivial incident 	
Probability ►		CERTAIN	LIKELY	POSSIBLE	UNLIKELY	RARE
▼ Consequence		5	4	3	2	1
5 – Severe		25	20	15	10	5
4 – Major		20	16	12	8	4
3 – Moderate		15	12	9	6	3
2 – Minor		10	8	6	4	2
1 – Incidental		5	4	3	2	1

Environmental Control Map







Environmental Control Map		
ID	Environmental Aspect	Description
1	Project	This ECM applies to Pre-Construction Minor Works for Portion 7a delivered under Northern Corridor Works (Enabling works for Sydney Metro City and Southwest, Chatswood to Sydenham).
2	Site Access	<ul style="list-style-type: none"> Site access will be from Drake St and Hopetoun Ave rail corridor access gates.
3	Program of works	<ul style="list-style-type: none"> Refer Pre-Construction Minor Works Application Section 2 "Occasions" for possession program.
4	General	<ul style="list-style-type: none"> The team will be trained on this ECM, OOHW requirements, general environmental issues, and location of sensitive areas. Works will be subject to inspections by the ER, Sydney Metro Environment and Planning Manager and LOR Environmental Manager. This ECM will be displayed on site sheds.
5	Contamination	<ul style="list-style-type: none"> No excavations are proposed as part of these works.
6	Air Quality	<ul style="list-style-type: none"> No air quality related issues are expected to be encountered.
7	Waste	<ul style="list-style-type: none"> No waste materials are expected to be generated from these works.
8	Soils and water	<ul style="list-style-type: none"> No soil and water related issues are expected to be encountered.
9	Heritage	<ul style="list-style-type: none"> Unexpected finds of heritage items must be reported to LOR Environmental Manager and Sydney Metro.
10	Noise and Vibration	<ul style="list-style-type: none"> Noise monitoring will be carried out to validate noise predictions and also during any complaints. All works will be completed in compliance with Sydney Metro CEMF, SSD 15_7400 Planning Approval, Construction Noise Strategy and EPL 12208 requirements. All plant will have non-tonal alarms. Community notifications will be drafted and sent to Sydney Metro Community Liaison team separately.
11	Traffic and Transport	<ul style="list-style-type: none"> Access to the site will be from existing access gates. All delivery drivers will be given an induction covering relevant environmental controls to their activities. No additional traffic controls are required for the works.
12	Utilities	<ul style="list-style-type: none"> Any impacts to utilities will be reported to site HSE Manager, supervisors, Sydney Trains and Sydney Metro.
13	Biodiversity	<ul style="list-style-type: none"> If vegetation other than grass and weeds needs to be trimmed or removed, further assessment would be undertaken and approval sought from Sydney Metro prior to trimming or removal. If threatened flora or fauna species are identified on site, work in the vicinity of these species would stop immediately. A spotter/catcher/botanist would be engaged to survey the site and advise on species management. Where trenching or excavation is required, the location or route would be modified to avoid any damage to trees or tree roots, where possible. Trenches/excavations would be covered at the end of each day and inspected before they are backfilled to ensure no fauna species are harmed. Stockpiles, plant, equipment and materials will be located on existing cleared areas, away from the drip zone of trees and native vegetation. Soil and vegetation that could contain weed material should be removed from machinery prior to any movements off site.
14	Chemical, fuel storage and use	<ul style="list-style-type: none"> No fuels and chemicals are expected to be brought to site as part of these works. All plant and equipment will be checked daily to ensure there is no leaking oil, fuel or other liquids.
15	Imported materials	<ul style="list-style-type: none"> No materials to be imported for these minor works.
16	No-go zones	<ul style="list-style-type: none"> Construction activities will be restricted to the rail corridor. All construction activities outside the NCW site boundary will undergo a review for potential environmental impacts and require approval from Sydney Metro.



Contact Information		
Position	Name	Phone
LOR Regional Environmental Manager	Jason Ambler	0415 737 750
LOR Project Leader	Tony Deacy	0467 762 987
LOR Construction Manager	Susan Alton	
LOR Environment Manager	Maulik Bapodara	0433 494 595
LOR WHS Manager	Clive Hunter	0428 412 130
ER	Alice Pryke	0451 084 390
Sydney Metro Environmental Manager	Andrew Hendy	0475-983-494 <i>04040 71860</i>
Sydney Metro Northwest Info Line	<i>Adam Koutoukianis</i>	1800 019 989
Sydney Trains Info Line		131 500
Environmental Line / Pollution Incident Response Line		131 555
Office of Environment & Heritage Pollution Line		131 555
Emergency		000 or 112 (mobiles)
WIRES		1300 094 737
Standard Working Hours		
Audible construction works unless otherwise approved by the Environmental Manager will be restricted to:		
<ul style="list-style-type: none"> • 7:00AM to 6:00PM - Monday to Friday • 8:00AM to 1:00PM - Saturdays • No work on Sundays or public holidays 		
Any works outside of the hours above require OOHW and Sydney Metro and LOR Environmental Manager's Approval		
As per Sydney Trains EPL, "High noise impact works and activities must only be undertaken:		
<ul style="list-style-type: none"> a) between the hours of 8:00am to 6:00pm Monday to Friday; b) between the hours of 8:00am to 1:00pm Saturday; and c) in continuous blocks not exceeding 3 hours each with a minimum respite from those activities and works of not less than 1 hour between each block" 		
Out-of-Hour Works		
Monday to Friday, 26 to 30 June 2017 2000 to 0430; Monday to Friday 10 to 14 July 2017 2000 to 0430		



Appendix 2: Cover Page

Environmental Management Documentation - Not Used



Appendix 3: Cover Page

Community Notification - Undertaken by Sydney Metro in conjunction with LOR. Combined letter to be issued which will cover MNNSCW Portion 6 and NCW Portion 7a works.



Appendix 4: Cover Page

Environmental Representative Supporting Letter - Refer to Section 12 Determination Page above

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

A new stand-alone railway network, Sydney Metro is the solution to clearing the city's public transport bottlenecks and will deliver a quality of rail service never before seen in Australia.

Sydney Metro City & Southwest extends the new metro network from the end of the Sydney Metro Northwest at Chatswood, under Sydney Harbour, through new railway stations in the CBD and west to Bankstown – a total of 66 kilometres of metro rail.

Fencing and Cable Installation (Rail Corridor from Albert Avenue, Chatswood to Brand Street, Artarmon)

Fencing and cable installation works will be undertaken as night works within the rail corridor from **Monday 10 July, 2017 for a period of up to one week**, weather and site conditions permitting (see map overleaf).

These works will include:

- Installing fencing on the western side of the rail corridor
- Modifying aboveground conduits at Brand Street Bridge, Artarmon
- Installing cables in the rail corridor between Albert Avenue, Chatswood and Brand Street, Artarmon
- Excavating within the rail corridor between Drake Street and Hopetoun Avenue to locate services.

Work hours

These works will be completed during Sydney Trains rail possessions, and will be undertaken within the rail corridor when trains are not in operation. Work hours will be:

- **Monday to Friday 8.00pm to 4:30am**
- **Saturday 15 July from 5am to Monday 17 July at 2.00am (continuous works)**

What to expect

- Due to the nature of the work, some of these activities will be noisy. The project team will limit these impacts wherever possible by reducing the number of machines operating at the same time and turning off equipment when not in use. Non-tonal reversing beepers will be used and workers will be instructed to keep noise to a minimum.
- Rail corridor access will be via Drake Street, Hopetoun Avenue and the Cleland Road compound. Traffic control will be in place at these locations.
- Due to access requirements, there will be temporary parking restrictions on Drake Street and Hopetoun Avenue.
- Equipment will include light vehicles, trucks, cranes, power and hand tools, generators and lights.
- Lighting towers will be directed away from residential areas where possible.

Thank you for your cooperation during these essential works.

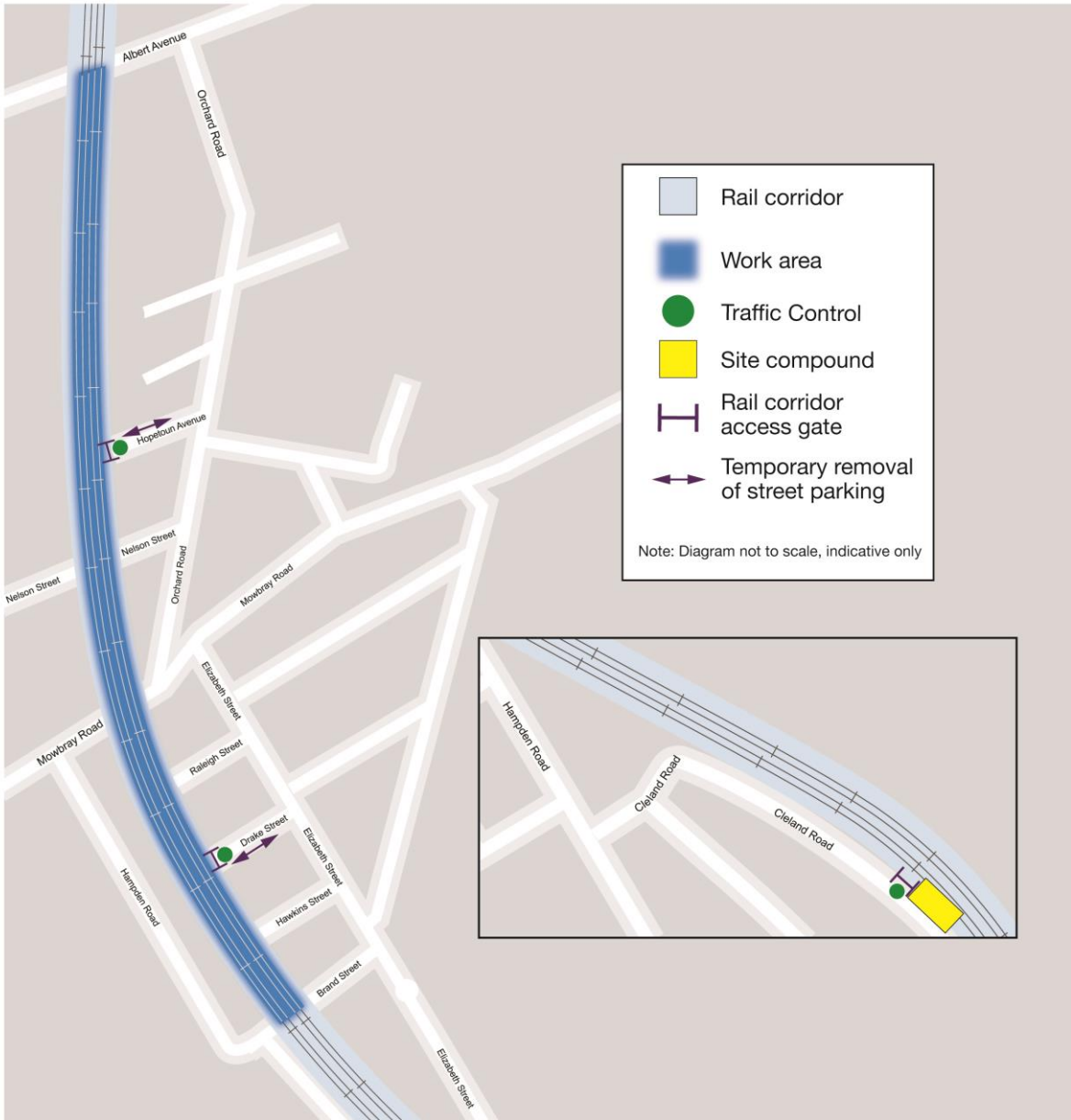
For enquiries, complaints or to register for project updates please contact us on:

1800 171 386

sydneymetro.info

sydneymetro@transport.nsw.gov.au

Fencing and Cable Installation (Rail Corridor from Albert Avenue, Chatswood to Brand Street, Artarmon)



If you require the services of an interpreter, please contact the **Translating and Interpreting Service on 131 450** and ask them to call **Sydney Metro on 1800 171 386**. The interpreter will then assist you with translation.



Transport for NSW

