

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)	January 22 nd – February 16 th 2018 (Mid-Week 30 - 33) Drake Street Minor Ancillary Facility Establishment & Operation, Site Establishment and Deliveries for Possession Works – NCW Portion 7a
Application Number:	NCW-006
Application Date:	Revision 1 – 24 th November 2017 Revision 2 – 7 th December 2017 Revision 3 – 15 th December 2017 Revision 4 – 22 nd December 2017 Revision 5 – 18 th January 2018
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	No. The proposed works do not have potential to impact on heritage items, threatened species, populations or endangered ecological communities.



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or have the potential to affect heritage items, threatened species, populations or endangered ecological communities?

Part 2: Details

Describe the proposed Minor Works:

Including work methodologies, site location(s) and site description(s) (e.g. landscape type, waterways, etc.).

The scope of work is to be carried out in the rail corridor between the south of Chatswood Station and to the north of Artamon Station (Brand St, Artamon to Albert Ave, Chatswood) Chainages 10.500km to 11.650km:

Specifically the scope between Midweek 30 to midweek 33 (January 22nd – February 16th 2018) includes:

Establishment of Drake St Minor Ancillary Facility

A Minor Ancillary Facility will be established at Drake Street for the works in accordance with condition A18 of Sydney Metro City and Southwest - C2S Conditions of Approval (SSI 15_7400).

Establishment of the Minor Ancillary Facility will include the following works;

1. Establishment of laydown area at the Drake St Minor Ancillary Facility. Clear any existing materials stored and remove general waste from site to make space for site sheds and laydown areas
2. Installation of environmental controls at the Drake Street Minor Ancillary Facility. Sediment fence is already in place, further sand bagging and geofabric to be introduced as required. Appropriate screening will also be established.
3. Delivery/movement of site sheds, amenities, generator and office equipment for the Drake St Minor Ancillary Facility. Deliveries to be undertaken in Drake St using traffic control adhering to Traffic Control Plans (TCPs). All deliveries will be undertaken in normal working hours.
4. Delivery/movement of supplies and equipment to the Drake St Minor Ancillary Facility. Deliveries to be undertaken in Drake St using traffic control adhering to TCPs. All deliveries will be undertaken in normal working hours.

In accordance with the Conditions of Approval (CoA), the Minor Ancillary Facility must meet a number of requirements. In particular, Conditions A18 will apply to the establishment and operation of the Drake Street Minor Ancillary Facility.

A compliance review for the condition A18 in included in Table 1.

Table 1 Condition A18 Compliance Review

Condition A18	Compliance
(a) have no greater environmental and amenity impacts than those that can be managed through the implementation of environmental measures detailed in the CEMP required under Condition C1 of this approval	Yes – The measures outlined within the Construction Environmental Management Plan (CEMP) are sufficient to control environmental risks associated with the establishment and operation of the Minor Ancillary Facility
(b) been assessed by the ER to have:	
i. minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts	Yes – As per A18(a), these aspects are management in accordance with the endorsed CEMP. The minor ancillary facility will meet the requirements of the <i>Interim Construction Noise Guideline</i> (DECC 2009) by operating in accordance with the CoA, Construction Environmental Management Framework (CEMF) and Sydney Metro Construction Noise and Vibration Strategy (CNVS). Traffic impacts for the establishment works will be minor as per the Risk



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		<p>Assessment in Appendix 1 of this document. Traffic will be controlled in accordance with Traffic Control Plans (TCPs) as approved by Willoughby City Council.</p> <p>Vehicle movements will be minimal, as such there will be nil-low impacts on dust generation.</p> <p>Portable toilets will be maintained regularly to prevent odours.</p> <p>Screening will be utilised to mitigate visual impacts. Lighting towers will be positioned to mitigate light spill to nearby residents.</p> <p>The above aspects will be reviewed during weekly environmental inspections.</p>
	<p>ii. minimal environmental impact with respect to waste management and flooding</p>	<p>Yes - As per A18(a), these aspects are management in accordance with the endorsed CEMP.</p> <p>Waste will be removed on a regular basis to ensure the site remains clean.</p> <p>The minor ancillary facility is on free-draining land and is not located in the path of any existing overland flow route.</p> <p>The volume of the Minor Ancillary Facility is small in terms of the larger catchment and will have nil – low impact on overall catchment flood storage.</p> <p>The above aspects will be reviewed during weekly environmental inspections</p>
	<p>iii. no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval</p>	<p>Yes - As per A18(a), these aspects are management in accordance with the endorsed CEMP.</p> <p>There will be no additional impacts to biodiversity, soil and water and heritage items beyond those identified within the project approval documentation.</p> <p>The above aspects will be reviewed during weekly environmental inspections</p>

Fencing in the vicinity of the Minor Ancillary Facility will also be upgraded to provide further visual screening and noise attenuation. As such, the Minor Ancillary Facility will meet the requirements of CoA A19 and A20.

Operation of Drake St Minor Ancillary Facility

The Drake Street Minor Ancillary Facility will operate with the use of the office, portable toilets and canteen until further modification is approved under the Construction Ancillary Facilities Management Plan. The Minor Ancillary Facility will be operated in accordance with the Conditions of Approval A18, A19 & A20.

All controls will be inspected during the weekly environmental inspection, as outlined within the CEMP.

It is noted that in accordance with Figure 7-7 of the C2S EIS the rail corridor is approved for use as "storage". As such, Laing O'Rourke will use a number of areas as material storage as indicated within the ECM in Appendix 2.

Drake St Ancillary Facility

It is noted that during the construction period, as defined by the Sydney Metro City and Southwest - C2S Conditions of Approval, the Drake Street Minor Ancillary Facility will be modified to include a concrete washout. As such, the facility would meet the definition of "Ancillary Facility" and would need to meet the conditions of A16 and A17. Further, the Drake Street Ancillary Facility must be approved as part of the Construction Ancillary Facilities Management Plan. The operation of Drake Street as a full Ancillary Facility does not form part of and is not subject to ER endorsement under this Minor Works Application. Discussion of the Ancillary Facility is included for information only.



Footings Works Preparation:

1. Delivery/movement of supplies and equipment in preparation for possession works (Feb 2018). Deliveries to be undertaken in Drake St using traffic control adhering to TCPs. All deliveries will be undertaken in normal working hours.
2. Erect Variable Message Signs (VMS) and corflute signage around Frank Channon Walk (in preparation to close FCW in WE33).

Frank Channon Walk closure signage locations are included in Appendix 2. The closure will occur during WE33 possession works and are therefore not part of this Minor Works Application. Pedestrian diversions and distances are included in Appendix 2 for information.

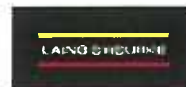
Survey Works:

1. Survey of Council drainage pits on Frank Channon Walk and within Chatswood Bowling Club
2. Brand Street survey of drainage and landform
3. Nelson Street to Mowbray Street survey of drainage, landform, design elements and existing underground services
4. Survey of rail corridor fencing on eastern side of the track between Raleigh Street and Nelson Street, and between Hopetoun Avenue and Chatswood Oval

All works will be conducted during normal construction hours as per the following dates as it will be undertaken outside of the danger zone.

Table 2 Programme of Works

Week	Date	Work period	Activities
MW30	22-25 Jan '18	Normal	<ul style="list-style-type: none"> - Establishment of Drake Street Minor Ancillary Facility - Installation of any additional environmental controls required at Drake Street Minor Ancillary Facility - Delivery/movement of site sheds, amenities, generator and office equipment for Drake Street Minor Ancillary Facility - Delivery/movement of supplies and equipment to Drake Street Minor Ancillary Facility - Survey of Council drainage pits on Frank Channon Walk and within Chatswood Bowling Club
MW31	29 Jan -02 Feb '18	Normal	<ul style="list-style-type: none"> - Delivery/movement of supplies and equipment to Drake Street Minor Ancillary Facility - Installation of screening to boundary fencing in preparation for the commencement of construction. Noting that screening will be installed to meet the requirements of CoA A20. - Brand Street survey of drainage and landform - Nelson Street to Mowbray Street survey of drainage, landform, design elements and existing underground services - Survey of Corridor Fencing
MW32	05-09 Feb '18	Normal	<ul style="list-style-type: none"> - Erect VMS and corflute signage around Frank Channon Walk (in preparation to close FCW in WE33). - Installation of screening to boundary fencing in preparation for the commencement of



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				<p>construction. Noting that screening will be installed to meet the requirements of CoA A20.</p> <ul style="list-style-type: none"> - Delivery/movement of supplies and equipment in preparation for possession works - Brand Street survey of drainage and landform - Nelson Street to Mowbray Street survey of drainage, landform, design elements and existing underground services - Survey of rail corridor fencing
	MW33	12-16 Feb '18	Normal	<ul style="list-style-type: none"> - Delivery/movement of supplies and equipment in preparation for possession works - Brand Street survey of drainage and landform - Nelson Street to Mowbray Street survey of drainage, landform, design elements and existing underground services - Survey of rail corridor fencing
Planned Commencement Date:	22 nd January 2018			
Local Sensitivities: Describe the presence (if any) of local sensitive environmental areas and community receptors.	<p>Community – Residents on Drake St will all have direct line of sight to the minor ancillary facility establishment works.</p> <p>Survey works will be visible to the all residents located on the worksite boundary.</p>			
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 - Environmental Control Map - EPL 12208 			
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?	Community notification and letter box drops covered through Sydney Metro engagement strategy. Specific notifications have been distributed in the January 2018 newsletter			
What community consultation is planned to be undertaken?	<p>Planned as per requirements of the Community Consultation Strategy:</p> <ul style="list-style-type: none"> - Letter box notifications - Door knocking residents located within 50 meters of the works - Door knocking Chatswood Bowling Club prior to survey works 			
If drafted already, attach applicable Community Notification as Appendix 3.				
Part 6: Contact Details				



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Nominate contractor's project manager, environmental and communications contact(s).					
Name:	Tony Deacy	Position:	Project Manager	Phone:	0467 762 987
	Chris Standing		Environmental Manager		0431 338 578
	Helena Johansson		Communications Manager (Sydney Metro)		0466 545 189
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:	Chris Standing				
Signature:				Date:	18/01/2018



Determination Page

(TfNSW/Environmental Representative Use Only)

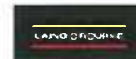
12. Endorsement/Approval

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:	Helena Johansson	FIL CERONE	Erran Woodward
Date:	19/01/18	22/1/18	19/01/18
Comments:			Supporting letter attached as Appendix 4 if necessary.
Conditions:	No survey of council drainage pits on Frank Channon Walk and within Chatswood Bowling Club to be carried out until the community has been notified. No installation of screening to boundary fencing at Drake Street, or any other activity not yet notified for, to be carried out until appropriate additional notification to the community has been given. January 2018 notification attached.		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
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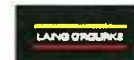


Appendix 1: Environmental Risk Assessment and Environmental Control Map.

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

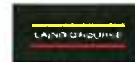
Aspect	Potential Environmental Impact	Initial Risk Rating			Control Measures	Residual Risk Rating		
		P X	C =	Risk		P X	C =	Risk
Approvals and Licensing								
Not identifying appropriate approvals / licenses required or proceeding without them.	Works delayed, infringements, prosecution and reputational 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 minor works are being undertaken. No permanent construction works are to be completed.	U	1	L
Noise								
Noise from 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). Works to be undertaken during normal construction hours. Vehicles to enter rail corridor immediately on arrival to gate No engine idling. No congregating near residents, shouting, swearing or loud radios	U	3	M



Noise from Minor Ancillary Facility set up activities to be undertaken within normal construction 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). Works to be undertaken during normal construction hours.	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	3	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	Control measures as per Environmental Control Map (ECM). Existing stormwater drainage points and swales within the rail corridor and on Drake Street identified on ECM with control in place. Moving of material from one area to another within EPL boundary. All controls (stockpile and drainage) to be in place as per ECM. ECM controls to be in place prior to establishment of Minor Ancillary Facility. 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. If water discharge is required, Sydney Metro Water Discharge or Reuse Approval form to be utilised. Form to be approved by LORAC Environmental Manager prior to discharge.	U	2	L



Ground water	Ground water entering excavations Without appropriate safeguards onsite could lead to ground water contamination	U	2	L	Proposed works are on the surface only. No excavation. They will not be affecting groundwater table.	R	1	L
Waste								
Waste disposal during works.	Incorrect disposal of waste, further costs incurred for classifications and disposal, fines may be issued.	P	2	M	Removal of wastes from the site would only be undertaken by a licensed contractor as required by the POEO Act and with appropriate approvals, if required, for contaminated materials, etc. All material that requires off-site disposal to be appropriately classified against the Waste Classification Guidelines (DECC, 2008). Waste to be taken to an appropriately licenced waste management facility with all records retained. All loads travelling on public roads will be covered.	R	2	L
Contamination								
Potential for discovery of unexpected contaminated spoil during investigation works involving excavation and drilling.	Health effects resulting from airborne contamination, e.g. asbestos. Complaints received from odours.	P	3	M	If contaminated soil is encountered, all works are to stop in the vicinity of the find and investigations commence. Induct personnel on location, type, nature and concentration of contaminants on site if found.	U	2	L
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	Vegetation removal/trimming is not required for the works. Any removal/trimming will be subject to a Vegetation Removal Permit. Toolbox/Pre-start brief workers on requirements.	R	1	L
Air Quality								
General works; stockpile movement.	Dust activity in close proximity to residential and commercial premises, complaints received.	U	3	M	Air quality to be maintained by implementing dust suppression when appropriate. Plant movements to be reduced to minimise dust during activities.	R	2	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. The engines of all on-site vehicles and plant would be switched off when not in use for an extended period.	R	2	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 Environmental Manager contacted. Label any known heritage items on Environmental Control Maps. Unexpected finds procedure to be followed. The site is to be isolated and investigated by a heritage consultant. Approval to proceed required prior to re-commencing works.	U	2	M
Flora & Fauna								
Removal of flora without approval.	Failure to identify flora prior to removal.	R	3	L	Vegetation removal/trimming is not required for the works. Any removal/trimming will be subject to a	R	1	L



					Vegetation Removal Permit. Toolbox/Pre-start brief workers on requirements.			
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. Team briefing/tool box on appropriate parking locations Site vehicles shall be parked within the rail corridor and not affect public parking area.	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 No oversized deliveries required for minor works. Designated access routes given to contractors/suppliers. Community Notifications. Access to properties to be maintained. Pedestrian management with traffic controller in place where required.	U	3	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



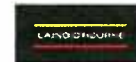
Resource usage (e.g. building materials, water, fuels, packaging), waste generation and disposal	Depletion of resources due to wastage (e.g. wastage of water / no recycling, poor management of procurement, ineffective removal of off-cuts, waste, i.e. no recycling).	U	2	L	Resources used on site to minimise waste generation and to meet the recycling objectives of the project.	U	2	L
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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



(Uncontrolled when printed)

Environmental Control Map – Supplementary Information for Drake Street Minor Ancillary Facility		
ID	Environmental Aspect	Description
1	Project	<ul style="list-style-type: none"> 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 existing Hopetoun Ave and Drake St rail corridor access gate.
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 a Drake St.
5	Contamination	<ul style="list-style-type: none"> Unexpected contamination finds will be managed onsite by occupational hygienist in attendance. All waste to be classified prior to disposal.
6	Air Quality	<ul style="list-style-type: none"> No air quality related issues are expected to be encountered. Dust suppression to be utilised for plant movements as required.
7	Waste	<ul style="list-style-type: none"> All waste will be captured in bins located at Drake St Minor Ancillary Facility and transported to a licenced waste facility.
8	Soils and water	<ul style="list-style-type: none"> Existing erosion and sediment controls are in place at Drake St. To be maintained as per ECM
9	Heritage	<ul style="list-style-type: none"> Unexpected finds of heritage items must be reported to LOR Environmental Manager and Sydney Metro. The site is to be isolated and investigated by a heritage consultant. Approval to proceed required prior to re-commencing works.
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. No congregating of workers or plant near residents, no shouting, swearing or loud radios. 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 gate at Hopetoun Ave, Drake St, Nelson St and Ellis St. All delivery drivers will be given an induction covering relevant environmental controls to their activities. Designated access routes to be provided to drivers prior to accessing site. All Site vehicles shall be parked within the rail corridor and not affect public parking area. Additional traffic controls will be implemented in accordance with TCP(s) as approved by Willoughby City Council. Temporary lane closures on Drake Street may be required to allow trucks to exit the site. All closures are expected to be for minor durations (less than 5 minutes). Any closure will be managed in accordance with the TCP. Pedestrian management with traffic controller in place where required for Frank Channon Walk and Brand St lane way. Signage will direct pedestrians during Frank Channon Walk closure – signs to be installed as part of works under this MWA. Closure works will occur as part of WE33 possession works. All vehicles to enter rail corridor immediately on arrival to gate Plant and vehicles engines to be switched off when not in use, with engine idling minimised as much as possible.
12	Utilities	<ul style="list-style-type: none"> Any impacts to utilities will be reported to site HS 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"> Imported materials to include clean sand and road base for backfilling of excavation and pot holing for weekend 33 and 35 possession works in February.
16	No-go zones	<ul style="list-style-type: none"> Activities will be restricted to the rail corridor. All activities outside the NCW site boundary will undergo a review for potential environmental impacts and require approval from Sydney Metro.



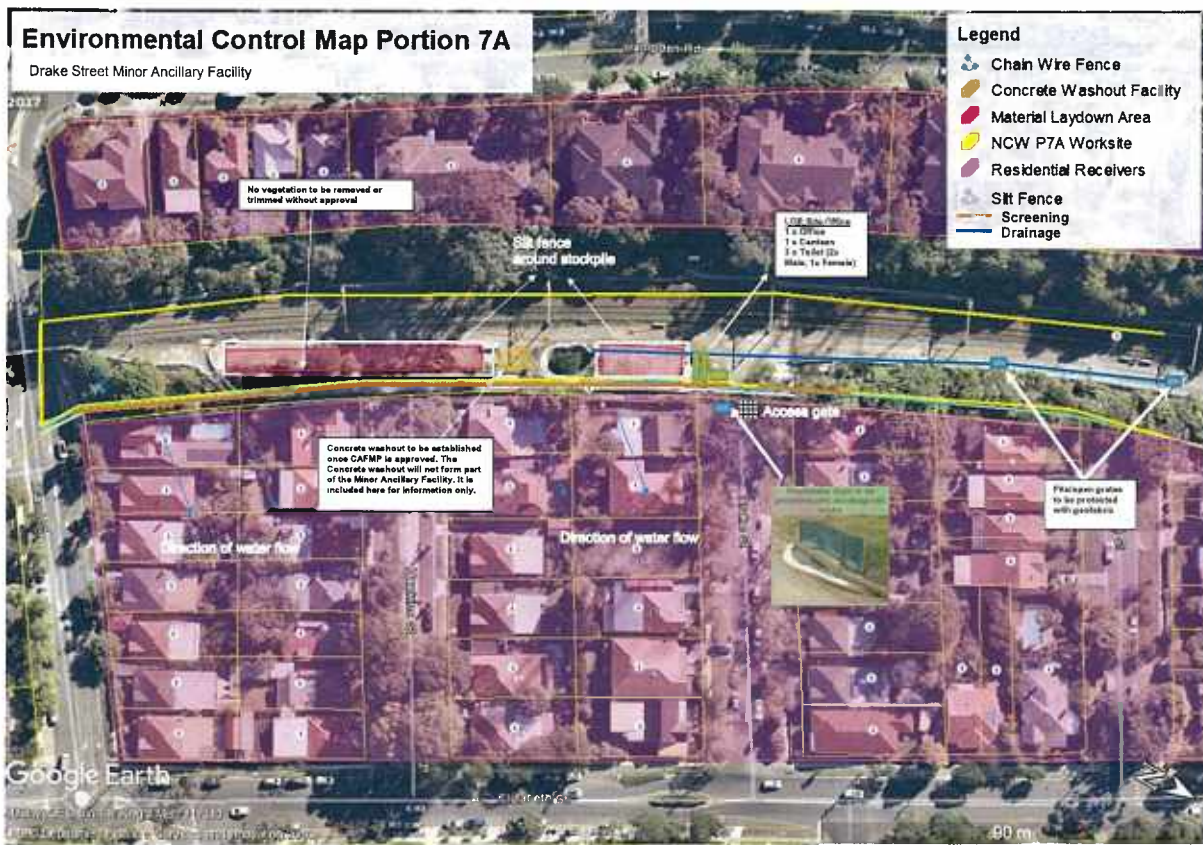


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Contact Information		
Position	Name	Phone
LOR Project Leader	Tony Deacy	0467 762 987
LOR Construction Manager	Martin O'Brien	0457 560 728
LOR/Sydney Metro Communications Manager	Helena Johansson	0466 545 189
LOR Environment and Sustainability Manager	Chris Standing	0431 338 578
LOR WHS Manager	Clive Hunter	0428 412 130
ER	Erran Woodward	0437 343 178
Sydney Metro Environmental Manager	Andrew Hendy	0475 983 494
Sydney Metro City and Southwest Info Line		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		
<p>Audible construction works unless otherwise approved by the Environmental Manager will be restricted to:</p> <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 <p>Any works outside of the hours above require OOHW and Sydney Metro and LOR Environmental Manager's Approval</p> <p>As per Sydney Trains EPL, "High noise impact works and activities must only be undertaken:</p> <ol 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		
Nil		



Appendix 2: Maps (and/or ECM) and Work Diagrams









Frank Channon Walk Closure – pedestrian detour distances



Frank Channon Walk closure – Street signage erected



Frank Channon Walk closures – fencing and barricades



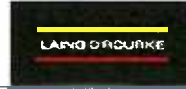


Frank Channon Walk closures – pedestrian management personnel



Frank Channon Walk closures – Variable Message Signage Placement





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