

Summary Environmental Report

NS174A SER

Ausgrid

Version 1.20

Page 1 of 16

Notes

1. This report is to be used in accordance with NSW Code of Practice for Authorised Network Operators, Department of Planning and Environment, September 2015 (Planning Code). In particular, any proposed works assessed under this report (Activity) must be expected on a reasonable basis to have impacts which are minor and neither extensive nor complex and require a Part 5 assessment under the Environmental Planning and Assessment Act 1979 (NSW). The report may also be used to determine whether a more detailed environmental impact assessment is needed. This report should be used where the "Stage 1 - preliminary assessment" conducted in accordance with NS 174B Environmental Assessment Guidelines identifies that an SER is required.
2. Instructions for completing this report are contained in NS174 Environmental Procedures Supplementary Notes - EIA Guidelines and EGN 174B SER Guidance Notes which can be accessed by the information buttons. The report should also be prepared in accordance with the relevant information in NS 174B Environmental Assessment Guidelines which relates to the Planning Code requirements. An SER must comply with the Planning Code requirements.
3. If Ausgrid is performing the Nominated Determining Authority role, the report must identify all factors other agencies will need to consider to determine whether a separate licence or approval can be issued and record that Ausgrid consulted with those agencies to clarify any specific information that should be covered by the assessment documentation.
4. The report must be prepared by persons appropriately trained to consider and assess the impacts of the Activity in accordance with the requirements of NS 174B Environmental Assessment Guidelines. The SER must not be verified by the same person who conducted the assessment (ie. prepared the report).
5. Proposals involving level 3 risks (Table 2) will require verification by Ausgrid's Environmental Services.
6. Fields marked with an asterisk (*) must be completed before the form can be submitted.
7. The SER once verified forms Ausgrid's conditional determination of the proposal. Conditions include specific controls in this SER and controls in NS174C Environmental Handbook for Construction and Maintenance. In the event of an inconsistency, specific controls in this SER will prevail.

Project information

Project name * (include asset # where known)	Installation of Kiosk Substation (HS.80046 Kitchener Mosbri)
Project number * (do not use symbols such as &)	AN-14197
Street number	
Street	Kitchener Parade
Suburb *	The Hill
Ausgrid project coordinator (if known)	Nigel Goodwin
Version date	26/11/2020
SER status	Approved

Table 1 - Project details**1.1 Scope of activities covered by this SER****Description: ***

Works: The developer proposes to install new kiosk substation, install LV cables and conduits to Kitchener Pde, remove chamber substation, HV and LV cables from site, install LV cables to existing network in Mosbri Cres. This will be completed by:

Works: The developer proposes to install new kiosk substation, cables and conduits, remove chamber substation by:

SITE PLAN A**UNDERGROUND**

- Installation of 11kV underground cables from proposed HV joints to proposed kiosk substation (HS.80046 Kitchener Mosbri)
- Installation of LV underground cables from proposed LV joints to proposed kiosk substation (HS.80056 Kitchener Mosbri) to proposed pillar at ref E
- Installation of HV & LV joints, pillar
- Installation of kiosk substation (HS.80046 Kitchener Mosbri) with site specific earthing
- Excavation of approx. 308m of trenching at various depths and widths but no more than 530mm (w) x 1160mm (d)
- Underbore at minimum 1500mm (If required)
- Installation of underground cables and conduits
- Decommission of Chamber Substation (HS6225 Mosbri Cres) and return equipment to Ausgrid via ASPreturns@ausgrid.com.au
- Remove redundant HV and LV cables and conduits

OVERHEAD

- Install LV links on existing LV UGOHs at pole ref 1 and 2

SITE PLAN B

- Cable to be capped and sealed

Design reference: AN14197 Rev C dated 16/10/2020

NOTE: CHANGES TO THE DESCRIPTION OF THE PROPOSED ACTIVITY (INCLUDING THE DESIGN) WILL REQUIRE A REASSESSMENT.

Typical construction methodologies would be utilised and may include utility vehicle, crew truck, flat bed truck, wire winding truck, cable truck, back hoe, shovel, earthing rig including drill, EWP, skip bin, tip truck, excavator, underbore.

Access: All work, including access during construction, would occur within existing roadways or pre-approved Ausgrid access tracks. Work would occur within a roadway and, as such, provisions for traffic management would be made sufficient to meet local Council and the Roads and Maritime Service (RMS) standards.

No access tracks or construction pads are required

Vegetation trimming/clearing: Vegetation removal in Kitchner Parade. There will be trees being removed as part of the development consent, however DA will not be finalised until February 2021.

For the electrical design to be certified, the vegetation removal will be required to be approved under Part 5 assessment in this SER.

Measures will need to be taken in the TPZ and SRZ along the trenching route for the stability and health of the trees, for those trees not being removed, in accordance with NS174C Environmental Handbook for Construction and Maintenance

1.2 Future maintenance activities and ongoing operational requirements**Description: ***

The Activity includes future maintenance, operation, inspection, repair and decommissioning. This may include works undertaken out of normal working hours and vegetation management works. All works would be undertaken in accordance with NS174C Environmental Handbook for Construction and Maintenance and Ausgrid's Tree Safety Management Plan or equivalent procedures in force at the time.

1.3 Related projects**Description:**

The works are part of the proposed electrical reticulation for a residential development that has been submitted to Newcastle City Council as a Part 4 Assessment under the Environmental Planning and Assessment Act. The DA consent is not yet available until approximately Feb 2021

1.4 Need for the proposed Activity

Description: *

Required to provide an electricity supply to the existing infrastructure, and to decommission and remove redundant chamber substation

1.5 Route/site option justification: (This should be completed in conjunction with Table 2)

Description: *

Several factors are considered when determining the most suitable option. These include cost, environmental impact, community sensitivity, constructability and the parameters of the existing network configuration. Kiosk substation site and route decided by consultation with developer and their representatives and in consultation with Ausgrid to minimise the impact on the environment, whilst still providing the service and allowing access to the site. Options for this project have been restricted due to the need to make points of connection at certain locations. Alternative options: option of substation off Kitchener Parade, and, next alternative option in the reserve/park in Mosbri Cres. - The Kitchener Parade option discounted due to space for 1 substation only and development substation will be going there. - The reserve option was discounted due to community reaction to development and to have the substation (although only supplying existing network) on the development lot. The current option (on design plan) has less impact on the environment and community.

1.6 Indicative commencement date and duration of works

Description: *

Work is expected to commence in the first or second half of 2021 and take approximately 2-3 months to complete. This time frame is indicative and may vary due to the contractor or specialist availability, resources and consultation with the community.

The construction period may also vary in duration depending on weather conditions, technical parameters, environmental issues, resources and availability of contractors and specialists.

Working hours are restricted to Monday to Friday 7 am to 6pm and Saturdays 8 am to 1pm, with no work on Sundays and public holidays. Working outside these hours, although not expected, may be required where RMS/ Council Road Occupancy Licences stipulate out of hours work / there would be a greater environmental or social benefit as a result of out of hours work occurring / electrical outages require that work must be undertaken out of standard operating hours. Refer to Table 2 regarding any specific construction controls.

1.7 Description of the land - environmental characteristics, land use and land ownership

Description: *

The Assessor/Designer undertook a site visit on 21/5/2020.

The study area for this project has been defined by coordinates indicated in the attached WebGIS EL Report. This project is to be carried out on Lot 1 DP204077. The study area encompasses all those matters potentially affected as a result of the proposal. Matters likely to be affected are addressed in this assessment.

The area is dominated by residential, commercial and recreational land uses.

The area has been mapped on Ausgrid's WebGIS EL Report to include:

- Powerful Owl Breeding Territory
 - Possible Organochlorine Pesticides (OCPs)
 - NSW Threatened Fauna
 - Hazardous materials
 - Mine Subsidence Area
 - Local Heritage
- within the study area.

Land ownership: work would occur within a public road or reserve with the exception of Lot 1 DP204077 for the installation of kiosk substation. Ausgrid's Property section will undertake a title search. An easement is required prior to works commencing.

1.8 Notification or approval requirements for Drinking Water Catchment Areas, Crown Land, Crown-Timber Land, State Forests, Mine subsidence areas, SHFA areas, SOPA areas and Water Catchment Areas

Description:

The proposed works are within a Mine Subsidence area. SANSW were notified on 21/5/2020 and approval was received on 15/6/2020 subject to conditions. The approval expires 5 years after the date the approval was granted if construction work has not physically commenced.

NOTE: Upon completion of construction works-as-executed certification by a qualified engineer is to be forwarded to Subsidence Advisory NSW confirming that construction was in accordance with the plans approved by SANSW. The developer/ASP1 to organise the works-as - executed certification and forward to SANSW.

A structural report was undertaken by Northrop and subsequently a structural drawing for the footing for substation has been prepared. The footings for the substation is to be adhered to according to the structural drawing. Attached

1.9 Council notification (Electricity Supply Act)

Description:

Notification date: 15/3/2019. A further preliminary plan which shows more detail was forwarded to NCC on 8/5/2020. Preliminary plan shows the different location of the substation.

Summary of responses: Council made a submission on 15/3/2019 in response to the mandatory notification provided in accordance with Section 45 of the Electricity Supply Act NSW. NCC responded with standard conditions. NCC is to be given a minimum 2 days notice prior to the work commencing to arrange an on-site meeting with the NCCs Public Utilities Officer, Rod Price on 4974 6031 or 0413 154 858 regarding execution of the work. The Public Utilities Officer also needs to be advised of any variations/alterations to the works listed in the proposal prior to the work being undertaken so he can arrange for comment. ASP1 to notify and consult with residents prior to works commencing. If there are any public street trees are located along a proposed route, NCC recommends that boring methods be used to install any conduits at a minimum depth of 800mm to minimise the impact on the tree. Refer to NCC managing and protecting public tree assets and CNs' Urban Forest Technical Manual. Refer to the attached for full conditions. No further comments from council on the notification of 8/5/20

The mandatory notification and response are attached to this assessment.

1.10 Council/authority notification (SEPP Infrastructure and other)

Description:

Authority: Newcastle City Council

Notification date: 15/3/2019. A further preliminary plan which shows more detail was forwarded to NCC on 8/5/2020. Preliminary plan shows the different location of the substation.

Summary of responses: NCC made a submission on 15/3/2019 in response to the mandatory notification provided in accordance with the State Environmental Planning Policy (Infrastructure) 2007 (NSW). NCC responded with standard conditions. NCC is to be given a minimum 2 days notice prior to the work commencing to arrange an on-site meeting with the NCCs Public Utilities Officer, Rod Rice on 4974 6031 or 0413 154 858 regarding execution of the work. The Public Utilities Officer also needs to be advised of any variations/alterations to the works listed in the proposal prior to the work being undertaken so he can arrange for comment. If there are any public street trees are located along a proposed route, NCC recommends that boring methods be used to install any conduits at a minimum depth of 800mm to minimise the impact on the tree. Refer to NCC managing and protecting public tree assets and CNs' Urban Forest Technical Manual. ASP1 to notify and consult with residents prior to works commencing. Refer to the attached for full conditions. No further comments from council on the notification of 8/5/20

The mandatory notification and response are attached to this assessment.

1.11 Community consultation (SEPP Infrastructure & other)

Description:

Notification date: 27/8/2020. A further SEPP notification completed on 23/10/2020

Summary of submission: One submission was received in response to the mandatory notifications provided in accordance with the State Environmental Planning Policy (Infrastructure) 2007 (NSW). The SEPP response from Frank Renton at 44 Kitchener Parade, The Hill, who was requesting more information around the kiosk substation - power rating and supply to number of residences from existing substation to the proposed substation, whether the location is in private land, and if any safety studies have been completed on the proposed location of substation. Power Solutions responded on 15/9/2020 to the SEPP enquires and have had no further questions or response.

As to date, no further responses with the second notification.

The mandatory notification letter and response are attached to this assessment.

Proposed consultation: All potentially affected residents / businesses must be notified between 4 and 14 clear business days prior to the commencement of work. Where residents / businesses are directly affected by the work, for example their access will be restricted, at least four clear business days notice must be given. Notices issued will outline the reason for the work, a suitable point of contact, estimated duration and any potential construction impacts. This may include temporary changes to traffic, construction noise and the location of site compounds.

1.12 Statutory context

Description: *

The project falls within Clause 41 of the State Environmental Planning Policy (Infrastructure) 2007 (NSW) as 'development permitted without consent' and is not on land reserved under the National Parks and Wildlife Act 1974 (NSW) or to which clauses 10 and 11 of State Environmental Planning Policy (Coastal Management) 2018 apply.

This SER forms an assessment for the purposes of section 5.5 of Part 5 of the Environmental Planning and Assessment Act 1979 (NSW) (in accordance with clause 228 of the Environmental Planning and Assessment Regulation 2000 (NSW)) and the NSW Code of Practice for Authorised Network Operators.

Table 2 – Environmental impact assessment & specific construction controls

Ecology

2.1 Matters of national environmental significance (NES, Commonwealth)

- ☒ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

There are no matters of NES within the Assessment Area (as identified by WebGIS EL Report, consultation process and other means); AND

The proposal is NOT on commonwealth land.

Specific construction controls

NS174C Environmental Handbook applies

2.2 Biodiversity (NSW)

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The following threatened species or ecological communities (or their habitats), declared areas of outstanding biodiversity value or critical habitat are in the Assessment Area:

- NSW Threatened Fauna - Wompoo Fruit-Dove
- Powerful Owl Breeding Territory

The proposal would NOT impact any threatened species or ecological communities (or their habitats), declared areas of outstanding biodiversity value or critical habitat other than vegetation maintenance, undertaken in accordance with Ausgrids TSMP where clearing is to the minimum extent necessary to maintain existing and regularly maintained clearances (ie no new clearance envelopes).

Avoidance of impacts would be appropriately managed with the specific construction controls.

An arborist assessment was undertaken by Vivianne Bleiker on 6/12/2018 and supplement assessment for Kitchner Parade on 6/3/2020 for the trenching line for stormwater and this can be used for the electrical trenching line. It has been recommended that trees 11 trees to be removed along Kitchner Parade due to unhealthy, encroachment in the TPZ and SRZ. Refer to trees to be removed visualisation diagram on page 6 of the Supplement assessment.

A further ecologist report was undertaken by Cumberland Ecology on 20/11/2020 for the impact of the tree removal by the electrical works. It is a mix of native and exotic species, but do not conform to a native plant community type or threatened ecological community, as listed under the BC Act or the Commonwealth EPBC Act. The removal of this vegetation does not constitute an important area of habitat for any threatened flora or fauna species with potential to occur in the area.

Vegetation is being removed along trenching route in Kitchener Parade. Supplement Arborist report and Ecologist Assessment are attached.

Measures will need to be taken in the TPZ and SRZ along the trenching route for the stability and health of the trees, where the trees have not been removed.

Specific construction controls

1. All workers to be made aware of ecologically sensitive areas and the need to avoid impacts.

2. No works in undisturbed areas (including storing equipment in, parking vehicles on or accessing the worksite through an undisturbed area).

3. No disturbance of bush rock, tree hollows, wetlands, mangroves, nests, aquatic or other sensitive habitats.

4. Retain native ground cover vegetation.

5. Comply with the controls in NS174C-Section 6.1.

6. No works to be undertaken outside the proposed electrical works/scope.

7. TPZ and SRZ protection as per Environmental Handbook NUS174C. Hand digging or non-mechanical methods

- Open excavations are to be completed in a timely manner to reduce moisture stress to trees

- No storage of materials is to be in Mosbri Crescent Park. Store recommended to be in the carpark.

8. As per recommendation from the Ecologist Report; Implementation of standard mitigation measures to protect the adjoining habitats, including tree protection for retained trees, sediment and erosion controls, and pre-clearance surveys for fauna.

Note: 'Disturbance' includes trimming, pruning or removing vegetation including root structure.

2.3 Marine vegetation (mangroves, seagrass etc) or dredging/reclamation of a water body

- ☒ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal is NOT within 100m of marine vegetation (seagrass or mangroves etc) or within 20m of a waterway (as identified by the WebGIS EL Report, consultation process, site inspection and other means).

Specific construction controls

NS174C Environmental Handbook applies

2.4 Other ecological issues

- ☐ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☒ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

Vegetation is being removed along trenching route in Kitchener Parade. Supplement Arborist report and Ecologist Assessment are attached.
An arborist assessment was undertaken by Vivianne Bleiker on 6/12/2018 and supplement assessment for Kitchner Parade on 6/3/2020 for the trenching line for stormwater and this can be used for the electrical trenching line. It has been recommended that trees 11 trees to be removed along Kitchner Parade due to unhealthy, encroachment in the TPZ and SRZ. Refer to trees to be removed visualisation diagram on page 6 of the Supplement assessment.

A further ecologist report was undertaken by Cumberland Ecology on 20/11/2020 for the impact of the tree removal by the electrical works. It is a mix of native and exotic species, but do not conform to a native plant community type or threatened ecological community, as listed under the BC Act or the Commonwealth EPBC Act. The removal of this vegetation does not constitute an important area of habitat for any threatened flora or fauna species with potential to occur in the area.

Measures will need to be taken in the TPZ and SRZ along the trenching route for the stability and health of the trees, where the trees have not been removed.

Specific construction controls

1. Refer to construction controls in 2.2
2. Consultation with Birdlife Australia regarding the Powerful Owl is required during April to October. Contact Birdlife Australia by both phone and email on (03) 9347 0757 and powerfulowl@birdlife.org.au.

Note: 'Disturbance' includes trimming, pruning or removing vegetation including root structure.

Heritage

2.5 Non-Aboriginal heritage

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The following non-Aboriginal heritage items are in the Assessment Area:

- Local Heritage - Newcastle East Public School.

The works are outside of the Newcastle Conservation Heritage area. The works are approximately 113m from the Heritage School buildings to the proposed works and unlikely that the Heritage item will be affected.

The proposal would NOT impact any non-Aboriginal heritage items (unless in accordance with an approved CMP, exception or exemption).

Avoidance of impacts would be appropriately managed with the specific construction controls.

Specific construction controls

1. All workers to be made aware of the presence of non-Aboriginal heritage in the Assessment Area and the need to avoid impacts.

2. All works to stop immediately and restrict access if potential non-Aboriginal heritage is discovered. Notify the Supervisor and Ausgrid's Environmental Services. Environmental Services will contact the regulator if required. Ausgrid employees should contact Ausgrid Environmental Services on 9394 6659.

3. No works to be undertaken outside of the proposed electrical works/scope.

2.6 Aboriginal cultural heritage

- ☒ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

There is NO known Aboriginal cultural heritage in the Assessment Area (as identified by WebGIS EL report, developer/client assessments, consultation process, site inspection and other means); AND

The proposal does NOT involve disturbing rock outcrops; AND

The proposal is NOT in undisturbed land with the following landscape features:

- within 200 m of waters, or
- within a sand dune system, or
- on a ridge top, ridge line or headland, or
- within 200 m below or above a cliff face, or
- within 20 m of or in a cave, rock shelter, or cave mouth

Specific construction controls

NS174C Environmental Handbook applies

Pollution

2.7 Air quality (dust, and other emissions)

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal involves activities that could generate dust and other emissions, however, avoidance of impacts would be appropriately managed with specific construction controls.

The proposal would NOT involve dust leaving the worksite or generate offensive odours/fumes.

The proposal would NOT involve any of the following:

- transmission tower paint or corrosion removal or
- installing a permanent exhaust.

Specific construction controls

1. Manage the worksite to prevent dust and fumes leaving the worksite.

2. Comply with the controls in NS174C-Section 4.1.

2.8 Oils, fuels and other chemicals

- ☐ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☒ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

Part of the proposed works is to decommission kiosk substation (HS6225 Mosbri Cres). The kiosk substation is oil filled and has asbestos and possible lead contamination. The substation was commissioned in 1961 and is likely to have PCBs as PCBs were in substations prior to 1997. Refer to the Ausgrid Audit Report.

From the fieldwork, it has indicated that there was oil leaking from the substation.

Specific construction controls

- All workers to be made aware of the presence of potential asbestos and PCBs in the Substation being decommissioned HS6225.
- Equipment to be handled, transported and stored in an environmentally responsible manner
- Decommissioned kiosk substation HS6225 to be returned to Ausgrid. ASP1 to contact Ausgrid via ASPreturns@ausgrid.com.au to arrange.
- Refer to the Ausgrid Environmental Handbook NUS174C, section 3.2 for management of PCBs
- On removal of the substation the developer must undertake an assessment of the soils under the substation footprint to determine if the site has been contaminated as a result of operation of the substation. A copy of the report must be submitted to Ausgrid.

2.9 Water quality (erosion and sedimentation)

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal involves activities that could generate sediment or cause erosion, however, avoidance of impacts would be appropriately managed with specific construction controls.

The proposal would NOT involve any of the following:

- ground disturbance > 250m² at any one time.
- ground disturbance > 50m² or vegetation removal on category 2 regulated land (vulnerable land- steep, highly erodible or protected riparian land).
- ground disturbance > 50m² within 40m of a natural waterway, including creeks, rivers, lakes, wetlands, streams, and ponds.
- clearing within 20m of a waterway.
- working within a natural waterway, including dredging (excavating), reclamation (filling) or vehicle access.

Specific construction controls

1. All workers to be made aware of sensitive areas (drainage lines, grates, drains, inlets, exposed surfaces, areas subject to bogging and waterways) and the need to avoid impacts.
2. Manage worksite to prevent sediment and unclean water leaving the site.
3. Comply with the controls in NS174C-Section 2.1.
4. No ground disturbance >250m² at any one time.
5. No ground disturbance > 50m² or vegetation removal on category 2 regulated land (vulnerable land - steep, highly erodible or protected riparian land).
6. No ground disturbance > 50m² within 40m of a natural waterway, including creeks, rivers, lakes, wetland, streams, and ponds.
7. No working within a natural waterway, including dredging (excavating), reclamation (filling) or vehicle access.
8. No clearing within 20m of a waterway.

2.10 Water quality (water discharge)

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal may involve discharges of accumulated water, however, all discharges would be in accordance with NS174C-Section 2.2.

The proposal would NOT involve any of the following:

- groundwater extraction,
- automatic or long term water discharges,
- discharges > 100,000L.

Specific construction controls

1. All workers to be made aware of sensitive areas and the need to avoid impacts.
2. All discharges of accumulated water to comply with NS174C-Section 2.2.
3. No automatic or long-term water discharges.
4. No groundwater extraction.

Noise

2.11 Construction noise and vibration

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal involves audible works in a sensitive area or high impact works, however, avoidance of impacts would be appropriately managed with specific construction controls.

The proposal will not impact a receiver for >3 consecutive weeks without a specialist assessment or noise and vibration management plan.

Specific construction controls

1. Implement noise control measures and notification/respice requirements in accordance with NS174C-Section 4.2.

2. Out of hours work must meet strict justification, notification and other requirements and not impact a receiver:

- for more than 2 nights in any 7-day period
- on Sunday after 6pm
- on a Monday before 7am
- on a public holiday
- after 12am (midnight) if undertaking high impact activities.

2.12 Operational noise and vibration

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal involves the installation of noise generating equipment, however, the equipment would NOT exceed the operational criteria, as determined by EGN 422 Transformer Noise Calculator.

The proposal does NOT involve the installation of CLCs, fans or other noise generating equipment.

The closest receiver is at 5m which the predicted noise level is the same as the allowable criteria at 35dB.

A noise assessment was undertaken by Rapt Consulting for the kiosk substation for any impacts to the near by residents. The conclusion is that the noise emitted from the substation is in compliance with all noise goals expected for the development and no further mitigation is required.

Specific construction controls

1. No additional construction controls are required

Contamination and waste

2.13 Contamination and hazardous materials

- ☐ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☒ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

Proposed works include decommissioning chamber substation HS6225 Mosbri Cres. It was commission in 1961 and has suspected PCBs, lead and asbestos. Ausgrid Asbestos and Lead Materials Audit, November 2018 attached.
Possible Organochlorine Pesticides (OCPs)

Specific construction controls

1. Refer to Ausgrid Asbestos and Lead Materials Audit and ASP1 to adhere to the recommendations in the Removal Management Strategies.
2. On removal of the substation the developer must undertake an assessment of the soils under the substation footprint to determine if the site has been contaminated as a result of operation of the substation. A copy of the report must be submitted to Ausgrid.
3. Decommissioned chamber substation HS6225 Mosbri Cres to be returned to Ausgrid. ASP1 to contact Ausgrid via ASPreturns@ausgrid.com.au to arrange.
4. The area defined by this report includes in service / decommissioned 132kV fluid filled cables. Bedding sands around 132kV fluid filled cables may contain Scheduled Pesticides (Organochlorine Pesticides). For work that will disturb the ground surface:
- Work in accordance with NS156 Working Near or Around Underground Cables.

2.14 Acid sulfate soils

- ☒ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal would NOT involve disturbing ASS (as identified by WebGIS EL report, consultation process, site inspection and other means).

Specific construction controls

NS174C Environmental Handbook applies

2.15 Waste

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal will generate hazardous, restricted solid, liquid, special (eg asbestos), PCB waste, or OCPs, however, avoidance of impacts would be appropriately managed with specific construction controls.

Specific construction controls

1. Manage all wastes in accordance with NS174C-Section 5.3.
2. Manage PCBs in accordance with NS174C-Section 3.2.
3. Manage spoil from 132 kV cable trenches in accordance with NS156 Working near or around underground cables.
4. 1. Refer to Ausgrid Asbestos and Lead Materials Audit and ASP1 to adhere to the recommendations in the Removal Management Strategies.
5. Decommissioned chamber substation HS6225 Mosbri Cres to be returned to Ausgrid. ASP1 to contact Ausgrid via ASPreturns@ausgrid.com.au to arrange.

Other

2.16 Traffic and access

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal will involve traffic and access impacts, however, impacts would be appropriately managed with specific construction controls.

The proposal would NOT involve any of the following:

- works on a public road which are non-compliant with the relevant RMS approval and road occupancy licence (ROL) requirements.
- works non-compliant with notification requirements for affected residences and businesses.
- permanent access restrictions for people with disabilities.

Specific construction controls

1. Where required, approvals and ROLs must be in place prior to works commencing. Comply with associated conditions.
2. NCC is to be given a minimum 2 days notice prior to the work commencing to arrange an on-site meeting with the NCCs Public Utilities Officer, Rod Price on 4974 6031 or 0413 154 858 regarding execution of the work.

2.17 Flood prone land

- ☒ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal would NOT involve works within flood prone land (as identified by WebGIS EL report, consultation process, site inspection and other means).

Specific construction controls

NS174C Environmental Handbook applies

2.18 Bushfire

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal is within bushfire prone land, however, would comply with:

- design requirements in relevant Network Standards such as NS187 Passive fire mitigation design of substations; and
- hot works requirements in NS174C-Section 6.4.

Avoidance of impacts would be appropriately managed with the specific construction controls.

Specific construction controls

1. Check the requirements of any applicable Total Fire Ban exemption.
2. Review high risk activities, assess the risk and consider the need for additional controls.
3. Comply with the Total Fire Ban controls in NS174C-Section 6.4.

2.19 EMF

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal will result in changes to EMF levels, however, EMF levels are within the ICNIRP 2010 Public Reference Levels and there are no further measures to reduce exposure consistent with prudent avoidance (ie very low cost and without unduly compromising other issues).

The community is unlikely to raise concerns. EMF Calculator is within the guidelines without any further prudent avoidance.

Specific construction controls

1. Refer all EMF enquiries to Environmental Services on 9394 6659.

2.20 Visual and aesthetics

- ☒ Level 1 - No potential impacts identified
- ☐ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The proposal would NOT involve any of the following:

- impacting areas of high aesthetic, scenic, natural or recreational value.
- materially impacting a property owners view of waterways or scenic areas.
- impacting views where property owners are likely to raise concerns.

Specific construction controls

NS174C Environmental Handbook applies

Summary Environmental Report

NS174A SER

Ausgrid

Version 1.20

Page 15 of 16

2.21 Other issues

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The following additional potential impacts have been identified, however, impacts would be minor and neither extensive nor complex and can be effectively managed/avoided:

- the works are in Mine Subsidence Area. A structural report was undertaken by Northrop and subsequently a structural drawing for the footing for substation has been prepared. See attached SA Approval.

Specific construction controls

1. The footings for the substation is to be adhered to according to the structural drawing. Upon completion of construction works-as-executed certification by a qualified engineer is to be forwarded to Subsidence Advisory NSW confirming that construction was in accordance with the plans approved by SANSW. The developer/ASP1 to organise the works-as-executed certification and forward to SANSW.

Cumulative

2.22 Cumulative impact

- ☐ Level 1 - No potential impacts identified
- ☒ Level 2 - Impacts would be avoided / minimised. Specific controls may be required.
- ☐ Level 3 - Referral to Environmental Services for further assessment

Description of potential impacts

The following cumulative impacts have been identified, however, impacts would be minor and neither extensive nor complex and can be effectively managed/avoided:

- proposed development

Specific construction controls

1. No additional construction controls

NOTE: Projects impacting on areas above must be referred to Ausgrid's Environmental Services.

Attachments - Env GIS Analytical Report, Design Drawing (<10MB total)

Download	File Name	environmental 20200520.pdf
Description *	Ausgrid WebGIS EL	
Download	File Name	S45 and Concept Notification to Council Reduced.pdf
Description *	Section 45 and SEPP (Infrastructure) Notification to council	
Download	File Name	Heritage Road Assets.pdf
Description *	NCC Heritage Road Assets	
Download	File Name	Mines Conditions 20200615 - Notice of Determination - 11-17 Mosbri Crescent The Hill - TB
Description *	Mines Approval	
Download	File Name	CityofNewcastlePublicUtilityResponseDocument2020 Reduced.pdf
Description *	NCC Standard Conditions	
Download	File Name	D.S.HS06225 - Asbestos and Lead Audit Report - 180421 Reduced.pdf
Description *	Ausgrid DS HS06225 Asbestos & Lead Audit Report	

Summary Environmental Report

NS174A SER

Ausgrid

Version 1.20

Page 16 of 16

Download	File Name	Appendix Q - Supplement to Arborist impact assessment 060320 Reduced.pdf
Description *	Arborist Report Supplemental	
Download	File Name	NL202804_Structural SiD Report_201009.pdf
Description *	Structural Report for Footings	
Download	File Name	NL202804_S00.01(A).pdf
Description *	Structural Design	
Download	File Name	NL202804_S01.01(A).pdf
Description *	Structural Design 2	
Download	File Name	AN-14197 Design Plans Reduced.pdf
Description *	Design Plans	
Download	File Name	201007 Noise Assessment 11-17 Mosbri Crescen Reduced.pdf
Description *	Transformer Noise Assessment	
Download	File Name	Ecologist Assessment - 20158 - Let4_FFA_11-15 Mosbri Cres. Newcastle_NBN Substation Re
Description *	Ecologist Assessment	

Decision statement

Assessor

☒ Agree. I certify to the best of my knowledge and belief that:

- I have completed this SER in accordance with NS174 Environmental Procedures Supplementary Notes - SER Guidelines, EGN 174B SER Guidance Notes, NS174B Environmental Assessment Guidelines and the Planning Code.
- The information contained in this SER is neither false nor misleading and I have been appropriately trained to consider and assess the impacts of the Activity in accordance with the requirements of NS 174B Environmental Assessment Guidelines.
- The Activity is a Class 3 activity under the Planning Code because it has impacts that are minor and neither extensive nor complex and can proceed subject to compliance with specific controls in this SER and minimum construction controls in NS174C Environmental Handbook for Construction and Maintenance.
- The scope of works for the Activity includes all construction, maintenance, operation and ancillary activities and accurately reflects the attached design plan for the Activity.
- I have completed a site inspection using EF 17410 SER Site Inspection.

Assessor name *	Alison Callan	Assessor company *	Power Solutions (NSW) Pty Ltd
Assessor contact No. *	4923 8100	ID number *	60082940

Verifier

☒ Agree

- As an authorised person, I have approved this SER, on behalf of Ausgrid, in accordance with NS174 Environmental Procedures Supplementary Notes - SER Guidelines, EGN 174B SER Guidance Notes and EF 17450 - SER Verification Checklist.
- The Activity is a Class 3 activity under the Planning Code because it has impacts that are minor and neither extensive nor complex and can proceed subject to compliance with specific controls in this SER and minimum construction controls in NS174C Environmental Handbook for Construction and Maintenance.
- The scope of works for the Activity includes all construction, maintenance, operation and ancillary activities and accurately reflects the attached design plan for the Activity.

Verifier name *	Robyn Coombes	Verifier contact No. *	04 3936 1483
Verification date time	26/11/2020 10:35:26 AM	ID number *	47522