

**REPAIR OF SHARED USERS PATH****BEACH STREET HUSKISSON****1. Background**

City Services intend to repair the damaged shared user path (SUP) that suffered undermining during multiple storm events during June to August 2022.

The proposed activity is a “minor activity” as described in the *Guidelines for Division 5.1 Assessments*<sup>1</sup> prepared under the NSW *Environmental Planning and Assessment Regulation 2021*. As such this Review of Environmental Factors (REF) takes the form of a summary environmental assessment document, through:

- a threatened species impact assessment (Section 5 of this REF)
- an environmental and planning approvals due diligence checklist (Section 6)
- an assessment of the proposed activity against the factors listed in clause 171(2) of the EP&A Regulation (Section 7).

The proposed activity could be undertaken as exempt development under Section 2.74 of the State Environmental Planning Policy (Transport and Infrastructure) 2021 however as there are inconsistencies between internal referenced sections of the SEPP relating to removal of vegetation, a decision was made to prepare a Review of Environmental Factors (REF) for the proposed activity. The proposed works may also be of interest to the public.

**2. Proposed activity**

City Services are currently examining three options:

1. Realignment of path around the undermined section, rock fill for the full extent of the undermined section of path, rock fill scour protection (5 metres wide, 3 metres in length), installation of bollards on the beach side of the path, and removal of redundant section of path.
2. Straighter realignment of path around the undermined section, removal of existing bollard, rock fill for the full extent of the undermined section of path, rock fill scour protection (5 metres wide, 3 metres in length), installation of bollards on the beach side of the path, and removal of redundant section of path.
3. Reinstatement of existing path without realignment, rock fill under the undermined area for stabilisation, and rock fill scour protection (5 metres wide, 3 metres in length).

Refer to Appendix A for option plans.

The proposed activity would also require the removal or impact to native vegetation to install the scour protection. The vegetation is typical dune scrub vegetation containing Bangalay *Eucalyptus botryoides*, Coastal Wattle *Acacia sopharae*, Sallow Wattle *Acacia longifolia*, Raspberry *Rubus parvifolius*, Spiky-headed Matt-rush *Lomandra longifolia*, Flax-lily *Dianella caerulea*, and Blady Grass *Imperata cylindrica*. Much of the vegetation in the area of the proposed activity was removed during the erosional events during June to August 2022. 9m<sup>2</sup> of this vegetation on the sides of the scour is estimated to require removal to install the rock scour protection.

---

<sup>1</sup> <https://www.planning.nsw.gov.au/sites/default/files/2023-02/guidelines-for-division-51-assessments.pdf>

The proposed activity would also include a number of environmental impact mitigation measures and safeguards listed in Section 8 of this REF.

### 3. Location description

Refer to Figure 1 below.

The proposed activity would predominately be undertaken within Lot 7014 DP 1094565, 17A Beach Street. Access to the site would be via Beach Street. Lot 7014 is a Crown Land Reserve (R76522) to which SCC is the appointed Manager under the NSW *Crown Land Management Act 2016*. Lot 7014 is predominantly used as the Huskisson Beach Holiday Haven Tourist Park.

For the purposes of this summary environmental assessment document, pertinent environmental features of the site are as follows:

- The vegetation east (beach-side) of the SUP comprises the endangered ecological community *Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions* ('Bangalay Sand Forest') listed under the NSW *Biodiversity Conservation Act 2016*.
- There are no threatened species apparent or likely at the location.
- The geology at the site to the boardwalk repair works comprises Holocene coastal sand deposits (marine-deposited quartz-lithic fine- to medium-grained sand, shell and shell material, polymictic gravel). As such:
  - the risk of acid sulfate soils is low
  - there is potential for unrecorded Aboriginal ancestral remains to be present in the beach facies of the locality.
- The proposed activity would be undertaken above the mean high water mark and therefore beyond the regulated boundaries of Jervis Bay Marine Park.

Photos of the proposed activity location are provided in Section 4 of this REF.

Figure 1: Location of the Proposed Activity





#### 4. Photos

**Photo 1: The undermined section of SUP subject of this REF (looking north to south)**





**Photo 2: The undermined section of SUP subject of this REF – looking east towards Huskisson Beach**



**Photo 3: Below the undermined path**





## 5. Threatened Species Impact Assessment

Section 1.7 of the EP&A Act 1979 applies the provisions of Part 7 of the NSW *Biodiversity Conservation Act 2016* and Part 7A of the NSW *Fisheries Act 1994* that relate to the operation of the EP&A Act in connection with the terrestrial and aquatic environment. Each are addressed below:

### Part 7A Fisheries Management Act 1994

Part 7A relates to threatened species conservation. As the proposed activity would not affect key fish habitat or aquatic and marine environments, this part of the Act is not relevant and further assessment and consideration is not necessary.

### Part 7 Biodiversity Conservation Act 2016

Section 7.3 of the Act provides a 'five-part' test to determine whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats. Each Part is addressed below:

**Part A - In the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the lifecycle of the species such that a viable local population of the species is likely to be place at risk of extinction.**

A survey of the area undertaken on 31 June 2023 did locate any threatened flora species and the site is unlikely to provide suitable habitat for cryptic species known occur in the Jervis Bay area e.g. Thick Lip Spider Orchid *Caledenia tessellata*, Leafless Tongue Orchid *Cryptostylis hunteriana*, *Pterostylis ventricosa*, and Bauer's Midge Orchid *Genoplesium baueri*.

Several threatened fauna species could be in the vicinity of the proposed activity area from time to time including White-bellied Sea-eagle *Haliaeetus leucogaster*, Eastern Osprey *Pandion cristatus*, Pied Oystercatcher *Haematopus longirostris*, Gang-gang Cockatoo *Callocephalon fimbriatum*, and Grey-headed Flying-fox *Pteropus poliocephalus*. The proposed activity however would not impact breeding habitat or significant food resources for these species. If present during the proposed works, these species would leave and thereby not be directly impacted.

**Part B - In the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:**

- (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or**
- (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction**

The vegetation community at the proposed activity site comprises the Bangalay Sand Forest endangered ecological community.

Bangalay Sand Forest is the name given to the ecological community associated with coastal sandplains of marine or aeolian origin. It occurs on deep, freely draining to damp sandy soils on flat to moderate slopes within a few kilometres of the sea and at altitudes below 100 metres.

The extent of the local occurrence is shown in Figure 2 below. The extent of the local occurrence is 0.42 hectares (4,200m<sup>2</sup>). The majority of this local occurrence has been significantly modified to a mown public park with predominantly isolated Bangalay *Eucalyptus botryoides* and Blackbutt *Eucalyptus pilularis* trees with other species consistent with the EEC present in patches and on the beach dunes. Bangalay Sand Forest is threatened by land clearing; degradation and disturbance associated with heavy recreational use, frequent burning; rubbish dumping and weed invasion.



The access and operational area for excavator / piling machine as well as storage areas would be on cleared, mown public park area and no vegetation would be impacted. The proposed rock scour protection is within relatively more intact Bangalay Sand Forest community. To undertake the proposed activity, it is anticipated that vegetation in the area of the scour protection would either be removed, pruned or otherwise harmed to allow construction. This would include:

- Removal of one young, non-hollowing bearing Bangalay *eucalyptus botryoides* that has already fallen into the scour area
- Removal / disturbance / pruning of approximately 9m<sup>2</sup> of native vegetation (~500mm either side of the boardwalk) comprising Coastal Wattle *Acacia sopharae*, Sallow Wattle *Acacia longifolia*, Raspberry *Rubus parvifolius*, Spiky-headed Matt-rush *Lomandra longifolia*, Flax-lily *Dianella caerulea*, and Blady Grass *Imperata cylindrica*.

The proposed activity is unlikely to have a significant impact on the local occurrence of the EEC for the following reasons:

- The 9m<sup>2</sup> that would be harmed represents only 0.2% of the local occurrence.
- The species that would be harmed are common species and are likely to naturally re-colonise the disturbed area.
- The proposed activity would not comprise the other main threats to the EEC (heavy recreational use, frequent burning, rubbish dumping and weeds).

A SIS and / or entry into the BOS is therefore not required for this Part.

**Figure 2: (Approximate) Local Extent of the Bangalay Sand Forest**



**Part C - In relation to the habitat of a threatened species or ecological community:**

- (i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity**
- (ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and**
- (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality.**

No important habitat for threatened species would be removed or otherwise significantly impacted (see Part A).

No EEC would not be further fragmented or isolated, nor removed or modified to an extent that would affect the long-term survival of the EEC occurring in the locality (refer to Part B).

The proposal will therefore not affect the long-term survival of any threatened species or endangered ecological community in the locality.

**Part D – Whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly).**

No “areas of outstanding biodiversity values” have been declared in the City of Shoalhaven.

**Part E – Whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.**

No key threatening processes listed in the NSW *Biodiversity Conservation Act 2016* are considered relevant to the proposed activity. The proposed activity would not involve clearing of native vegetation as defined by the Scientific Committee’s determination, i.e.:

*“the destruction of a sufficient proportion of one or more strata (layers) within a stand or stands of native vegetation so as to result in the loss, or long-term modification, of the structure, composition and ecological function of a stand or stands.”*

**Conclusion of the Part 7 Biodiversity Conservation Act 2016 ‘five-part test’**

The proposed activity is unlikely to have a significant impact on threatened species, endangered ecological communities, critically endangered ecological community, and declared areas of outstanding biodiversity values and does not comprise or significantly exacerbate a key threatening process. A species impact statement (SIS) or entry into the Biodiversity Offset Scheme (BOS) is therefore not required.



## 6. Environmental and Planning Approvals Due Diligence Checklist

Tick True or False (Any False answers may require further assessment or investigations)	True	False	Comments
1. Council has lawful authority to carry out the activity.	<input checked="" type="checkbox"/>		<p>SCC is the appointed Crown Land Manager for the Crown reserve. Under Section 3.21 of the NSW <i>Crown Land Management Act 2016</i>, a Council manager is authorised to manage its reserved Crown land as if it were public land with the meaning of the NSW <i>Local Government Act 1993</i>.</p> <p>The proposed activity can be undertaken without development consent through Section 2.73(3)(a) of the <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>.  <a href="https://legislation.nsw.gov.au/view/html/inforce/current/epi-2021-0732#sec.2.73">https://legislation.nsw.gov.au/view/html/inforce/current/epi-2021-0732#sec.2.73</a></p>
2. The works would not cause significant traffic disruptions or affect access to businesses.	<input checked="" type="checkbox"/>		
3. The works would not have a substantial impact on Council infrastructure and services.	<input checked="" type="checkbox"/>		
4. The development will be carried out in accordance with relevant requirements of <i>Managing Urban Stormwater: Soils &amp; Construction</i> (4th edition, Landcom, 2004), commonly referred to as the "Blue Book".	<input checked="" type="checkbox"/>		This would be required as part of the environmental impact mitigation measures prescribed for the proposed activity (Section 8 of this REF)

<b>Tick True or False</b> (Any False answers may require further assessment or investigations)	<b>True</b>	<b>False</b>	<b>Comments</b>
5. The development will not have a more than minimal impact on the heritage significance of a state or local listed heritage item or conservation area.	<input checked="" type="checkbox"/>		
6. Hazards and Resilience SEPP mapped Coastal Wetlands, Littoral Rainforest and Coastal Vulnerability Area layers do not apply to the land.	<input checked="" type="checkbox"/>		
7. The land is not in, or adjacent to, a Marine Park (having regard to Section 56 of the Marine Estate Management Act). <a href="https://legislation.nsw.gov.au/view/html/inforce/current/act-2014-072#sec.56">https://legislation.nsw.gov.au/view/html/inforce/current/act-2014-072#sec.56</a>		<input checked="" type="checkbox"/>	<p>The works would be above mean high water mark (MHWM) and therefore not within the regulated boundaries of the Jervis Bay Marine Park (JBMP).</p> <p>Although the proposed activity would be adjacent to JBMP the proposed activity is unlikely to have an effect on the plants and animals within the Marine Park.</p> <p>Commensurate with Section 56 of the NSW <i>Marine Estate Management Act 2014</i>, a 'notice of intention' was sent to Jervis Bay Marine Park on 27 June 2023 (SCC ref. D23/301791). No comments or advice have been received.</p>
8. The land is not reserved under the National Parks and Wildlife Act 1974.	<input checked="" type="checkbox"/>		



Tick True or False (Any False answers may require further assessment or investigations)	True	False	Comments
9. There is a low likelihood of the occurrence of an Aboriginal artefact being present and/or harmed.	<input checked="" type="checkbox"/>		The area is highly disturbed and AHIMS database indicates there are no recorded site in the location (AHIMS search conducted on the 9/6/23 ID:790114).
10. There are no records of threatened species at the site of the proposed works – check GIS under Environmental Layers.	<input checked="" type="checkbox"/>		
11. The proposal does not involve carrying out work on, or affect, a classified road.	<input checked="" type="checkbox"/>		
12. The activity complies or is not inconsistent with the relevant community land Plan of Management (if applicable).	<input checked="" type="checkbox"/>		Generic Community Land Plan of Management – Parks is likely to be the relevant plan of management. The proposed activity contributes to meeting Core Objective 1 of “ <i>to encourage, promote and facilitate recreational, cultural, social and educational pastimes and activities</i> ” and the ‘sub-objective’ “ <i>To improve pedestrian/cycle access to parks</i> ”. <a href="https://doc.shoalhaven.nsw.gov.au/displaydoc.aspx?record=D11/116070">https://doc.shoalhaven.nsw.gov.au/displaydoc.aspx?record=D11/116070</a>
13. The activity would not occur in land mapped as Acid Sulfate Soils (ASS) Class 1, 2 and 3.  (Check GIS under the Shoalhaven LEP layer)	<input checked="" type="checkbox"/>		Mapped as class 5 (low risk).

Tick True or False (Any False answers may require further assessment or investigations)	True	False	Comments
14. The activity does not involve dredging, reclamation or the blockage of fish passage within key fish habitat as defined / mapped by NSW Fisheries.  <a href="#">NSW DPI – Shoalhaven Key Fish Habitat Map</a>	<input checked="" type="checkbox"/>		The works would not be conducted in key fish habitat and would be above highest astronomical tide level. NSW <i>Fisheries Management Act 2014</i> does not apply.
15. There are no Aboriginal Land Claims over the site. (Check GIS under Administration layers).		<input checked="" type="checkbox"/>	The Crown reserves are subject to the following land claims: <ul style="list-style-type: none"> <li>• ALC26319 lodged on the 21 June 2010</li> <li>• The 2017 'blanket and multiple' claim</li> </ul> The NSW <i>Aboriginal Land Rights Act 1983</i> does not preclude the proposed activity and the risk to SCC proceeding with the activity is low as both the public park and shared users path were in place prior to the lodgement of these land claims. As such the site is unlikely to be "claimable Crown Lands" as defined in Section 36 of Act being lawfully used or occupied and needed for an essential public purpose.
16. Native title has been extinguished, e.g. freehold land, roads, or existing structures / features built before January 1994.	<input checked="" type="checkbox"/>		Native Title may have been impacted by the initial construction of the shared users path and the Tourist Park. The proposed activity would not exacerbate this impact.
17. The land is not flood prone. (Check GIS layers under Shoalhaven LEP layers).	<input checked="" type="checkbox"/>		



## 7. Clause 171(2) Factors EP&A Regulation 2021

Does the proposal:	Assessment	Reason
a) Have any environmental impact on a community?	Low adverse - Positive	The proposed activity would not have a significant impact on the community. Measures would be in place to mitigate the impact to users of the path route (refer to Section 8 of this REF). The proposed activity would not have any impact on other community services and infrastructure such as power, water, waste-water, waste management, educational, medical or social services.
b) Cause any transformation of a locality?	Nil	The locality would not be transformed.
c) Have any environmental impact on the ecosystem of the locality?	Low adverse	Vegetation disturbance would be minimal. The vegetation disturbance would not have a significant impact to threatened species and endangered ecological communities (refer to Section 5 of this REF)
d) Cause a diminution of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	Low adverse / positive	In the context of the locality, the visual impact of the activity would be minimal. Removal of vegetation and habitat will be minimal, occurring on existing edges and not resulting in significant fragmentation of habitat. The area that would be affected by the proposed activity has no significant value in terms of science. The proposed activity would have no impact on these values.
e) Have any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific, or social significance or other special value for present or future generations?	Negligible	The site of the proposed activity has no significant aesthetic, architectural, cultural, historical, scientific or social values. As such, the proposed activity would have no impact on these items. No items in the vicinity of the work site which are listed on the State Heritage Register and the Shoalhaven Local Environmental Plan would be impacted by the proposal. The site is not within an Aboriginal Place declared under the <i>National Parks and Wildlife Act 1974</i> . The proposed activity does not require an Aboriginal Heritage Impact Permit as the activity is unlikely to harm an Aboriginal heritage object.
f) Have any impact on the habitat of protected fauna (within the meaning of the Biodiversity Conservation Act 2016)?	Low adverse	No fauna habitat will be removed by the activity. No important habitat will be removed or otherwise impacted. The potential impact is therefore considered to be insignificant or inconsequential. The proposed activity would not have a significant impact upon threatened fauna. No hollows or important food resources would be removed.

Does the proposal:	Assessment	Reason
g) Cause any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	Negligible	There are no species likely to rely on the site of the proposed works to the extent that modification would put them further in danger.
h) Have any long-term effects on the environment?	Negligible	The proposed activity would not use hazardous substances or use or generate chemicals which may build up residues in the environment.
i) Cause any degradation of the quality of the environment?	Low-adverse	Aquatic ecosystems are not likely to be significantly affected by the proposed activity and there is not likely to be any long-term or long-lasting impact through the input of sediment and nutrient into the ecosystem. The proposal would not intentionally introduce noxious weeds, vermin, or feral animals into the area or contaminate the soil.
j) Cause any risk to the safety of the environment?	Negligible	The proposed activity would not involve hazardous wastes and would not lead to increased bushfire or landslip risks. The activity is not anticipated to adversely affect flood behaviour or exacerbate flooding risks.
k) Cause any reduction in the range of beneficial uses of the environment?	Positive	The site and local environment will remain relatively unchanged. The area is currently being used as a shared users path. The proposed activity would improve this use.
l) Cause any pollution of the environment?	Nil	It is unlikely that the activity (including the environmental impact mitigation measures) would result in water or air pollution, spillages, dust, odours, vibration or radiation. The proposal does not involve the use, storage or transportation of hazardous substances or the generation of chemicals which may build up residues in the environment. The proposed activity would not disturb and expose acid sulfate soils.
m) Have any environmental problems associated with the disposal of waste?	Negligible	The waste that would be disposed off-site can be recycled or re-used in accordance with resource recovery exemptions or taken to a licensed waste facility. There would be no trackable waste, hazardous waste, liquid waste, or restricted solid waste as described in the <i>NSW Protection of the Environment Operations Act 1997</i> .
n) Cause any increased demands on resources (natural or otherwise) which	Nil	The amount of resources that would be used are not considered significant and would not increase demands on current resources such that they would become in short supply.



Does the proposal:	Assessment	Reason
are, or are likely to become, in short supply?		
o) Have any cumulative environmental effect with other existing or likely future activities?	Nil	<p>The assessed low adverse or negligible impacts of the proposal are not likely to interact.</p> <p>Mitigation measures shall be implemented to minimise the risk of cumulative environmental effects.</p> <p>The current proposal would not significantly affect habitat connectivity or reduce any significant vegetation.</p> <p>No further construction activities are planned for this location.</p>
p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions	Negligible	<p>The proposed activity would have no effect on coastal processes including those projected under climate change conditions.</p>
q) applicable local strategic planning statements, regional strategic plans or district plans made under the Act, Division 3.1	Positive	<p>The proposed activity is consistent with the <i>Shoalhaven 2040 Strategic Land-use Planning Statement</i>, including Planning Priority 2 <i>Delivering infrastructure</i> and Planning Priority 7 <i>Promoting a responsible visitor economy</i></p> <p><a href="https://doc.shoalhaven.nsw.gov.au/displaydoc.aspx?record=D20/437277">https://doc.shoalhaven.nsw.gov.au/displaydoc.aspx?record=D20/437277</a>.</p> <p>The activity is not inconsistent with the Illawarra Shoalhaven Regional Plan 2041</p> <p><a href="https://www.planning.nsw.gov.au/sites/default/files/2023-03/illawarra-shoalhaven-regional-plan-2041.pdf">https://www.planning.nsw.gov.au/sites/default/files/2023-03/illawarra-shoalhaven-regional-plan-2041.pdf</a>.</p>
r) other relevant environmental factors	n/a	

## 8. Environmental impact mitigation measures and safeguards

- This REF shall be published on the NSW Planning Portal as per clause 171(4)(c) of the EP&A Regulation 2021 (public interest).
- There shall be no plant and machinery access onto Huskisson Beach except with the approval of Jervis Bay Marine Park.
- The proposed activity should avoid peak holiday periods (*i.e.* school holidays, Easter, and triathlon events).
- A pedestrian access management plan shall be prepared and implemented to provide for safe detour around the work site.
- Erosion and sediment controls in accordance with the 'Blue Book' shall be installed and maintained to prevent the entry of sediment into waterways.
- An emergency spill kit shall be always kept on-site with procedures to contain and collect any leakage or spillage of fuels, oils, greases, etc from plant and equipment.
- Staff working at the site will be instructed to stop work immediately on identification of any suspected Aboriginal heritage artefact (except skeletal remains). If any objects are found, Heritage NSW (ph:131 555) shall be contacted.
- If skeletal remains that could be human are uncovered, works are to immediately cease, the site secured, and the NSW Police are to be notified. Notification to Heritage NSW and the Jerrinja Local Aboriginal Land Council shall be taken when/if advised by NSW Police.
- Any waste shall be managed, transported, stored, collected and disposed of in an environmentally satisfactory manner pursuant to NSW *Protection of the Environment Operations Act 1997*.
- It is recommended that the site be restored by:
  - removing the obsolete section of the concrete path
  - replacing and realigning the timber rail barrier / fence – one metre from the edge of the path
  - stabilisation of the area behind the timber fence using clean mulch and revegetation of native species including *Banksia integrifolia*, *Lomandra longifolia*, *Dianella caerulea*, *Eucalyptus botryoides*, *Acacia sopharae*, *Acacia longifolia*, *Imperata cylindrica* and *Rubus parvifolius* depending on commercial availability.
  - The area between the fence and path and other bare areas caused by the works shall be turfed using plastic net free turf.
- An asset form must be trimmed to file 44574E on commissioning of the assets in Accordance with POL15/8 Asset Accounting Policy section 3.1.4 and POL16/79 Asset Management Policy section 3.3.




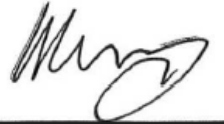
## 9. Conclusion and recommendations:

Assuming the prescribed environmental impact mitigation measures and safeguards are implemented (Section 8 above), the proposed activity is unlikely to have a significant impact on the environment and further environmental assessment (e.g. Environmental Impact Statement) is not warranted. In addition:

- No permits, engagement or further concurrence from government agencies is required.
- The proposed activity is unlikely to significantly affect threatened species, populations, ecological communities or their habitats and a species impact statement or biodiversity development assessment is not required.

The proposed activity can proceed.

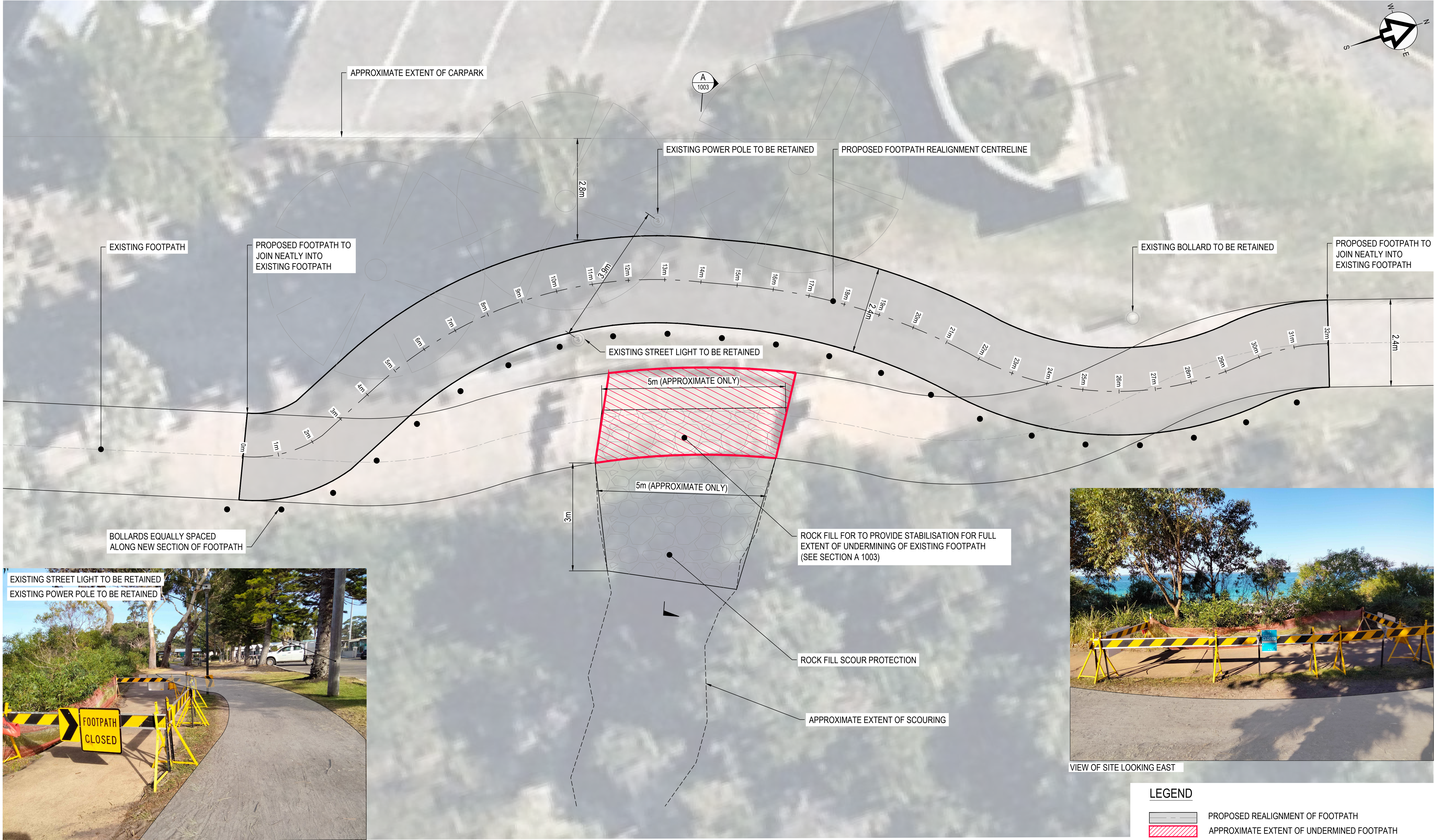
### Document Review:

	Name	Signature	Date
Author*	Geoff Young Environmental Officer Works and Services		31/07/2023
Proponent*	William Lynch District Engineer Works and Services		21/09/2023
<p>*Review and endorsement statement:</p> <p><i>"I certify that I have reviewed and endorsed the contents of this REF document and, to the best of my knowledge, it is in accordance with the EP&amp;A Act, the EP&amp;A Regulation and the Guidelines approved under clause 170 of the EP&amp;A Regulation, and the information it contains is neither false nor misleading".</i></p>			

## Appendices

### A: Plans



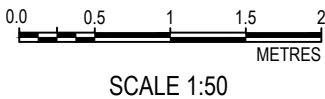


OPTION 1 GENERAL ARRANGEMENT LAYOUT

SCALE 1: 50

LEGEND

- PROPOSED REALIGNMENT OF FOOTPATH
- APPROXIMATE EXTENT OF UNDERMINED FOOTPATH
- ROCK FILL SCOUR PROTECTION AND STABILISATION



REVISIONS				
	A	###	ISSUED FOR REVIEW ONLY	###
		DATE	DESCRIPTION	APPROVED

DRAFT ONLY



THIS DRAWING IS THE PROPERTY OF SLR CONSULTING AUSTRALIA AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE CONSENT OF THE COMPANY.

DRAWN: WP	DATE: 19.07.2023
DESIGN: MB	DATE: 18.07.2023
DWG. CHECK: MB	DATE: 21.07.2023
DES. CHECK: MB	DATE: 21.07.2023
RESPONSIBLE PRINCIPAL SIGNATURE:	DATE:
RPEQ : %:	
RPEQ : %:	



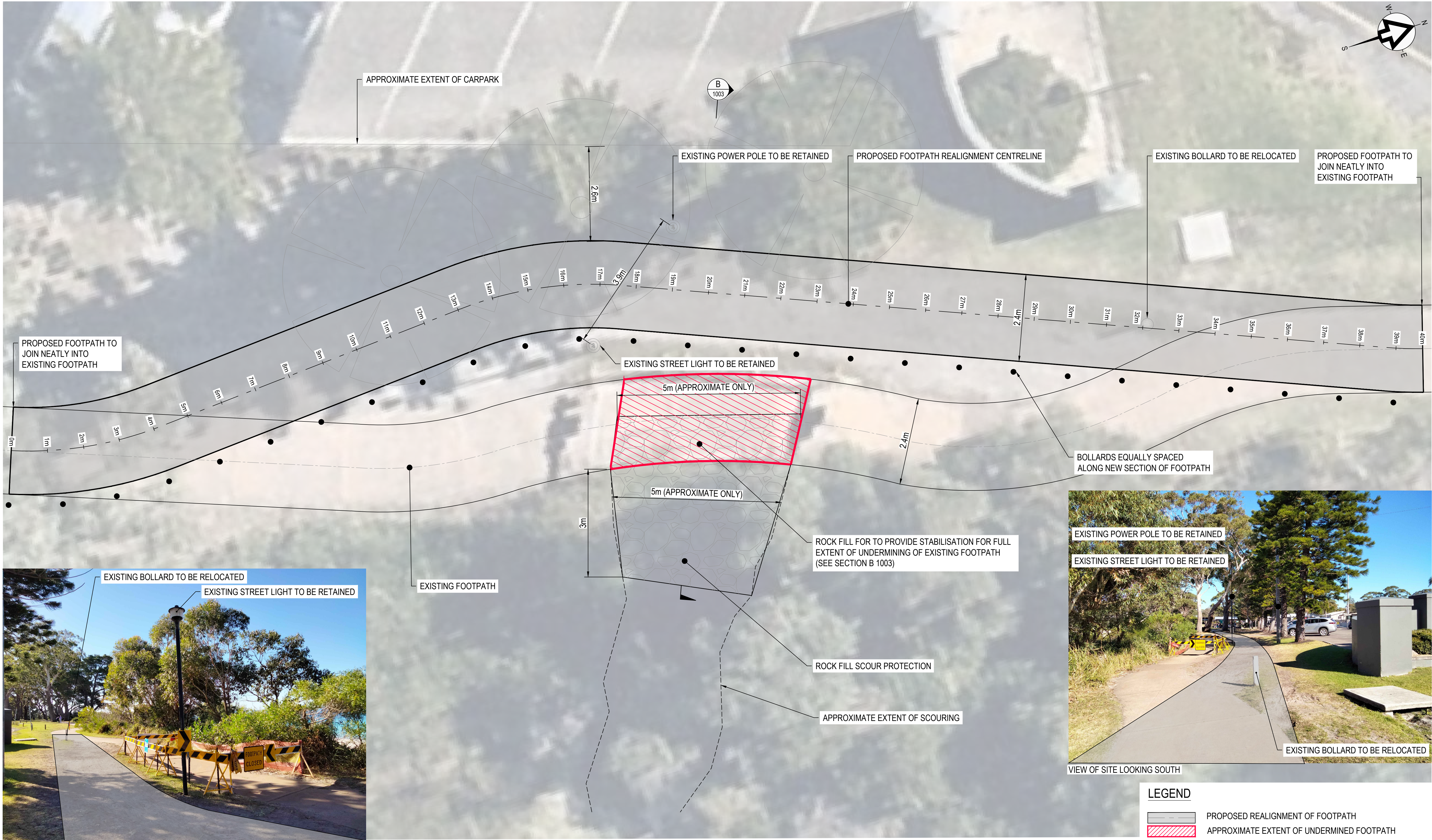
THE CONTENT CONTAINED WITHIN THIS DOCUMENT MAY BE BASED ON THIRD PARTY DATA. SLR CONSULTING AUSTRALIA PTY LTD DOES NOT GUARANTEE THE ACCURACY OF ANY SUCH INFORMATION.

LEVEL 1, THE CENTRAL BUILDING  
UoW INNOVATION CAMPUS  
NORTH WOLLONGONG  
NEW SOUTH WALES, 2500  
AUSTRALIA  
T: +61 (0)2 4249 1000  
www.slrconsulting.com

CLIENT:					SHOALHAVEN CITY COUNCIL	
PROJECT: FOOTPATH REALIGNMENT AND LAND STABILISATION			DRAWING TITLE: OPTION 1 GENERAL ARRANGEMENT LAYOUT		SIZE  A1	
STATUS:  NOT FOR CONSTRUCTION		SCALE:  1:50	DRAWING NUMBER:  660.30225-G-1000		REVISION  A	
		DATUM:				

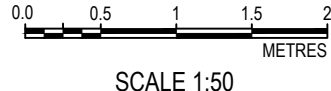
PLOT DATE 25-Jul-2023 11:40:03 AM





OPTION 2 GENERAL ARRANGEMENT LAYOUT

SCALE 1: 50



LEGEND

- PROPOSED REALIGNMENT OF FOOTPATH
- APPROXIMATE EXTENT OF UNDERMINED FOOTPATH
- ROCK FILL SCOUR PROTECTION AND STABILISATION

REVISONS				
	A	###	ISSUED FOR REVIEW ONLY	###
DATE		DESCRIPTION		APPROVED

DRAFT ONLY



THIS DRAWING IS THE PROPERTY OF SLR CONSULTING AUSTRALIA AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE CONSENT OF THE COMPANY.

DRAWN: WP	DATE: 19.07.2023
DESIGN: MB	DATE: 18.07.2023
DWG. CHECK: MB	DATE: 21.07.2023
DES. CHECK: MB	DATE: 21.07.2023
RESPONSIBLE PRINCIPAL SIGNATURE:	DATE:
RPEQ : %%	
RPEQ : %%	



LEVEL 1, THE CENTRAL BUILDING  
UoW INNOVATION CAMPUS  
NORTH WOLLONGONG  
NEW SOUTH WALES, 2500  
AUSTRALIA  
T: +61 (0)2 4249 1000  
www.slrconsulting.com

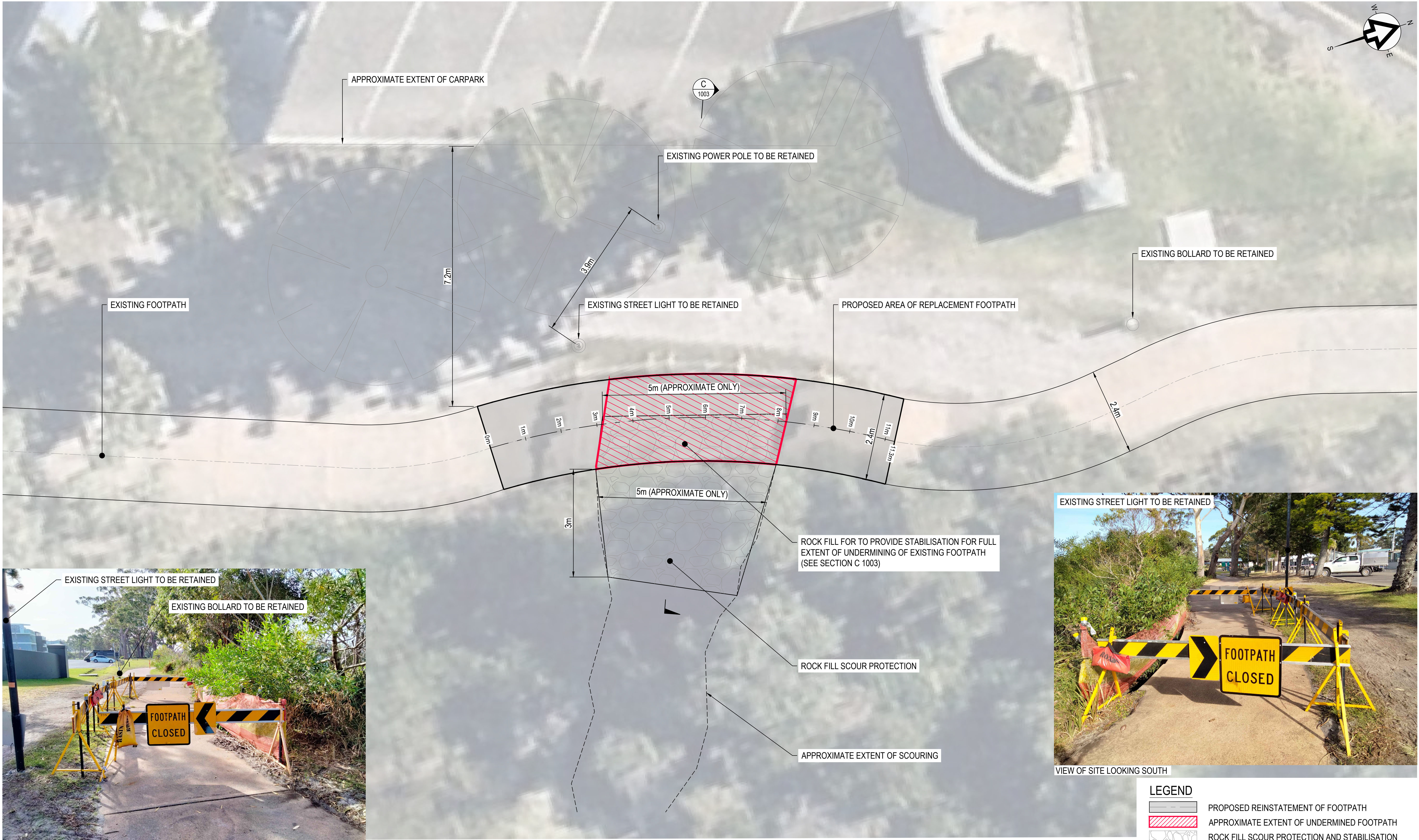
THE CONTENT CONTAINED WITHIN THIS DOCUMENT MAY BE BASED ON THIRD PARTY DATA. SLR CONSULTING AUSTRALIA PTY LTD DOES NOT GUARANTEE THE ACCURACY OF ANY SUCH INFORMATION.

CLIENT:

SHOALHAVEN CITY COUNCIL				
PROJECT: FOOTPATH REALIGNMENT AND LAND STABILISATION #### ####		DRAWING TITLE: OPTION 2 GENERAL ARRANGEMENT LAYOUT #####		SIZE  A1
STATUS:  NOT FOR CONSTRUCTION		SCALE:  1:50	DRAWING NUMBER:  660.30225-G-1001	REVISION  A
		DATUM:		

PLOT DATE 25-Jul-2023 11:40:29 AM

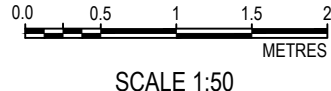




- LEGEND**
- PROPOSED REINSTATEMENT OF FOOTPATH
  - APPROXIMATE EXTENT OF UNDERMINED FOOTPATH
  - ROCK FILL SCOUR PROTECTION AND STABILISATION

OPTION 3 GENERAL ARRANGEMENT LAYOUT

SCALE 1: 50



DRAFT ONLY



DRAWN: WP	DATE: 19.07.2023
DESIGN: MB	DATE: 18.07.2023
DWG. CHECK: MB	DATE: 21.07.2023
DES. CHECK: MB	DATE: 21.07.2023
RESPONSIBLE PRINCIPAL SIGNATURE:	DATE:
RPEQ : %%	
RPEQ : %%	



LEVEL 1, THE CENTRAL BUILDING  
UoW INNOVATION CAMPUS  
NORTH WOLLONGONG  
NEW SOUTH WALES, 2500  
AUSTRALIA  
T: +61 (0)2 4249 1000  
www.slrconsulting.com

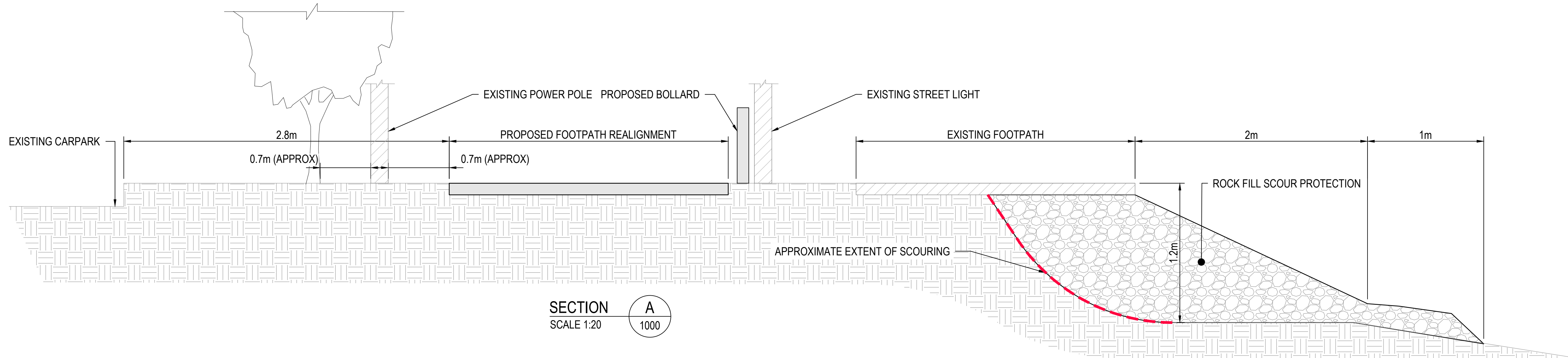
THE CONTENT CONTAINED WITHIN THIS DOCUMENT MAY BE BASED ON  
THIRD PARTY DATA. SLR CONSULTING AUSTRALIA PTY LTD DOES NOT  
GUARANTEE THE ACCURACY OF ANY SUCH INFORMATION.

CLIENT: SHOALHAVEN CITY COUNCIL		SIZE: A1
PROJECT: FOOTPATH REALIGNMENT AND LAND STABILISATION	DRAWING TITLE: OPTION 3 GENERAL ARRANGEMENT LAYOUT	
STATUS: NOT FOR CONSTRUCTION	SCALE: 1:50	DRAWING NUMBER: 660.30225-G-1002
	DATUM:	REVISION: A

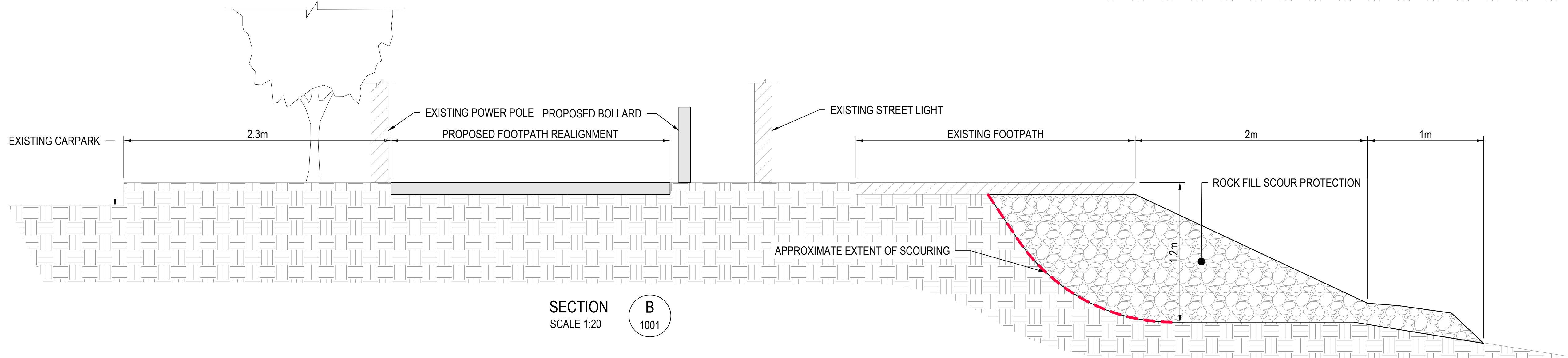
THIS DRAWING IS THE PROPERTY OF SLR CONSULTING AUSTRALIA AND MUST NOT BE  
RETAINED, COPIED OR USED WITHOUT THE CONSENT OF THE COMPANY.

REVISIONS	DATE	DESCRIPTION	APPROVED
A	###	ISSUED FOR REVIEW ONLY	###

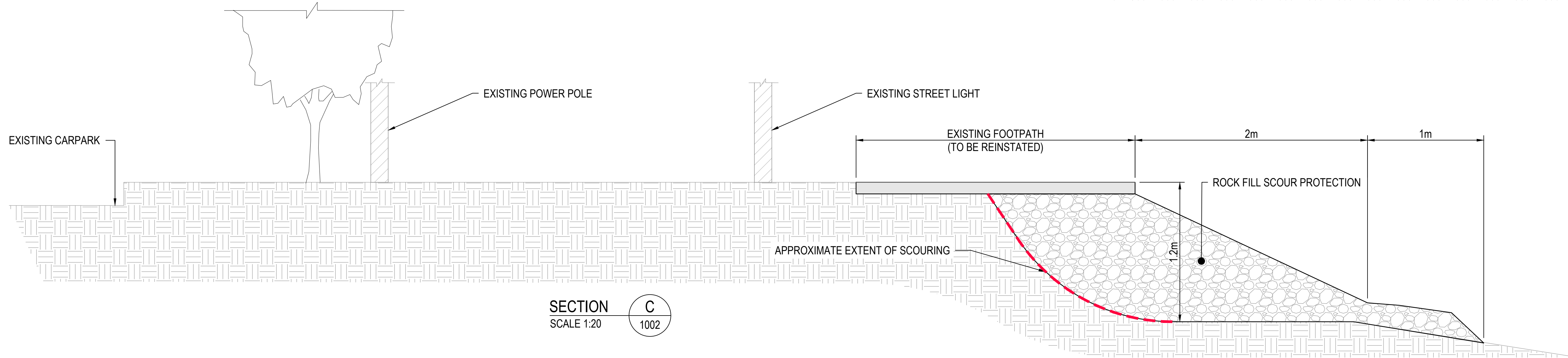




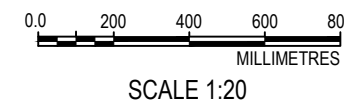
SECTION A  
SCALE 1:20  
1000



SECTION B  
SCALE 1:20  
1001



SECTION C  
SCALE 1:20  
1002



DRAFT ONLY



THIS DRAWING IS THE PROPERTY OF SLR CONSULTING AUSTRALIA AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE CONSENT OF THE COMPANY.

DRAWN: WP	DATE: 19.07.2023
DESIGN: MB	DATE: 18.07.2023
DWG. CHECK: MB	DATE: 21.07.2023
DES. CHECK: MB	DATE: 21.07.2023
RESPONSIBLE PRINCIPAL SIGNATURE:	DATE:
RPEQ : %%	
RPEQ : %%	



LEVEL 1, THE CENTRAL BUILDING  
UoW INNOVATION CAMPUS  
NORTH WOLLONGONG  
NEW SOUTH WALES, 2500  
AUSTRALIA  
T: +61 (0)2 4249 1000  
www.slrconsulting.com

THE CONTENT CONTAINED WITHIN THIS DOCUMENT MAY BE BASED ON THIRD PARTY DATA. SLR CONSULTING AUSTRALIA PTY LTD DOES NOT GUARANTEE THE ACCURACY OF ANY SUCH INFORMATION.

CLIENT: SHOALHAVEN CITY COUNCIL		SIZE: A1
PROJECT: FOOTPATH REALIGNMENT AND LAND STABILISATION	DRAWING TITLE: CROSS SECTIONS	REVISION: A
STATUS: NOT FOR CONSTRUCTION	SCALE: 1:20 DATUM:	DRAWING NUMBER: 660.30225-G-1003



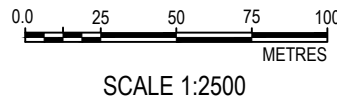
# SHOALHAVEN CITY COUNCIL

## BEACH STREET FOOTPATH REALIGNMENT AND LAND STABILISATION



DRAWING SCHEDULE	
DRAWING NUMBER	DRAWING TITLE
660.30225-G-1000	COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN
660.30225-G-1001	GENERAL ARRANGEMENT LAYOUT PLAN
660.30225-G-1002	TYPICAL TREATMENT CROSS SECTION

- GENERAL NOTES
- EXTENT OF PROPOSED REALIGNMENT TO BE CONFIRMED BY SHOALHAVEN CITY COUNCIL (SCC).
  - STRIP OFF ALL VEGETATION AND TOPSOIL CONTAINING ORGANIC OR ROOT MATTER FROM THE AREA OF THE WORKS.
  - UNDERGROUND SERVICES MUST BE IDENTIFIED AND CLEARED PRIOR TO ANY EXCAVATION.
  - EXCAVATE A MINIMUM 2.4m WIDE AND MINIMUM DEPTH OF 200mm BELOW EXISTING FOOTPATH CONCRETE SURFACE. UPON EXCAVATION, EXPOSED SUBGRADE SHALL BE INSPECTED BY A SUITABLY QUALIFIED ENGINEER TO ASSESS THE FOUNDATION CONDITIONS. ANY MOISTURE AFFECTED MATERIALS SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
  - FOLLOWING APPROVAL OF SUBGRADE, A LAYER OF WELL GRADED GRANULAR MATERIAL (I. E. DENSELY GRADED BASE MATERIAL - DGB20) SHALL BE PLACED OVER SUBGRADE
  - REINFORCEMENT SHALL COMPLY WITH SCC REQUIREMENT. CONCRETE (COMPRESSIVE STRENGTH OF 25 MPA ) SHALL BE POURED FOLLOWING INSPECTION AND APPROVAL BY SCC.



PLOT DATE 02-Aug-2023 3:16:51 PM

REVISIONS				
A	02.08.2023	ISSUED FOR CONSTRUCTION	DT	
	DATE	DESCRIPTION	APPROVED	



THIS DRAWING IS THE PROPERTY OF SLR CONSULTING AUSTRALIA AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE CONSENT OF THE COMPANY.

DRAWN: WP	DATE: 19.07.2023
DESIGN: MB	DATE: 18.07.2023
DWG. CHECK: DT	DATE: 21.07.2023
DES. CHECK: DT	DATE: 21.07.2023
RESPONSIBLE PRINCIPAL SIGNATURE:	DATE:
RPEQ : %:	
RPEQ : %:	

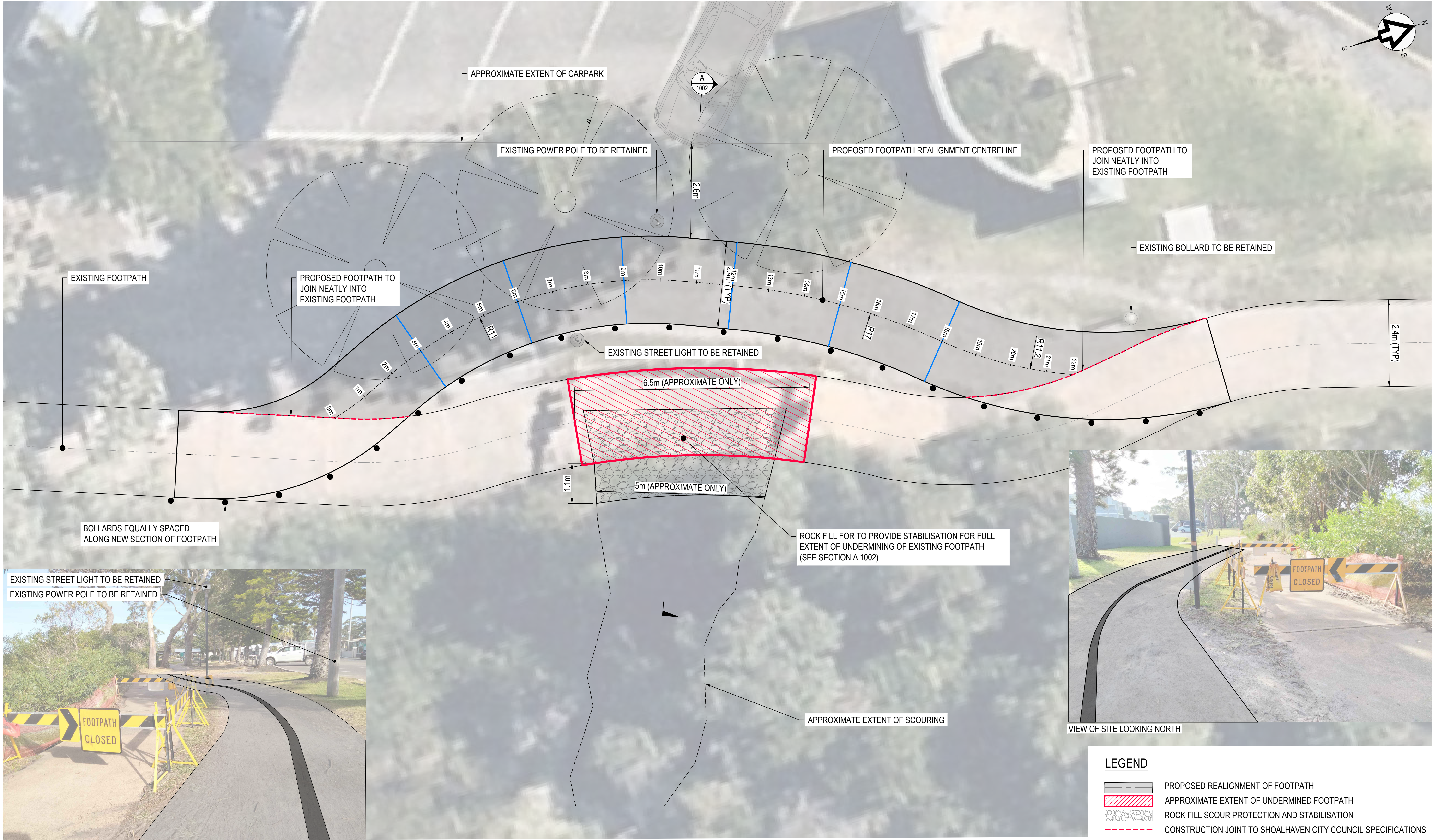


LEVEL 1, THE CENTRAL BUILDING  
UoW INNOVATION CAMPUS  
NORTH WOLLONGONG  
NEW SOUTH WALES, 2500  
AUSTRALIA  
T: +61 (0)2 4249 1000  
www.slrconsulting.com

THE CONTENT CONTAINED WITHIN THIS DOCUMENT MAY BE BASED ON THIRD PARTY DATA. SLR CONSULTING AUSTRALIA PTY LTD DOES NOT GUARANTEE THE ACCURACY OF ANY SUCH INFORMATION.

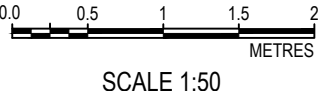
SHOALHAVEN CITY COUNCIL			
CLIENT:			
PROJECT: FOOTPATH REALIGNMENT AND LAND STABILISATION	DRAWING TITLE: COVER SHEET, DRAWING SCHEDULE, LOCALITY PLAN AND GENERAL NOTES		SIZE: A1
STATUS: FOR CONSTRUCTION	SCALE: 1:2500	DRAWING NUMBER: 660.30225-G-1000	REVISION: A
	DATUM:		





- LEGEND**
- PROPOSED REALIGNMENT OF FOOTPATH
  - APPROXIMATE EXTENT OF UNDERMINED FOOTPATH
  - ROCK FILL SCOUR PROTECTION AND STABILISATION
  - CONSTRUCTION JOINT TO SHOALHAVEN CITY COUNCIL SPECIFICATIONS
  - EXPANSION JOINT TO SHOALHAVEN CITY COUNCIL SPECIFICATIONS

OPTION 1 GENERAL ARRANGEMENT LAYOUT  
SCALE 1: 50



REVISIONS				
	A	02.08.2023	ISSUED FOR CONSTRUCTION	DT
	DATE	DESCRIPTION	APPROVED	

THIS DRAWING IS THE PROPERTY OF SLR CONSULTING AUSTRALIA AND MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE CONSENT OF THE COMPANY.

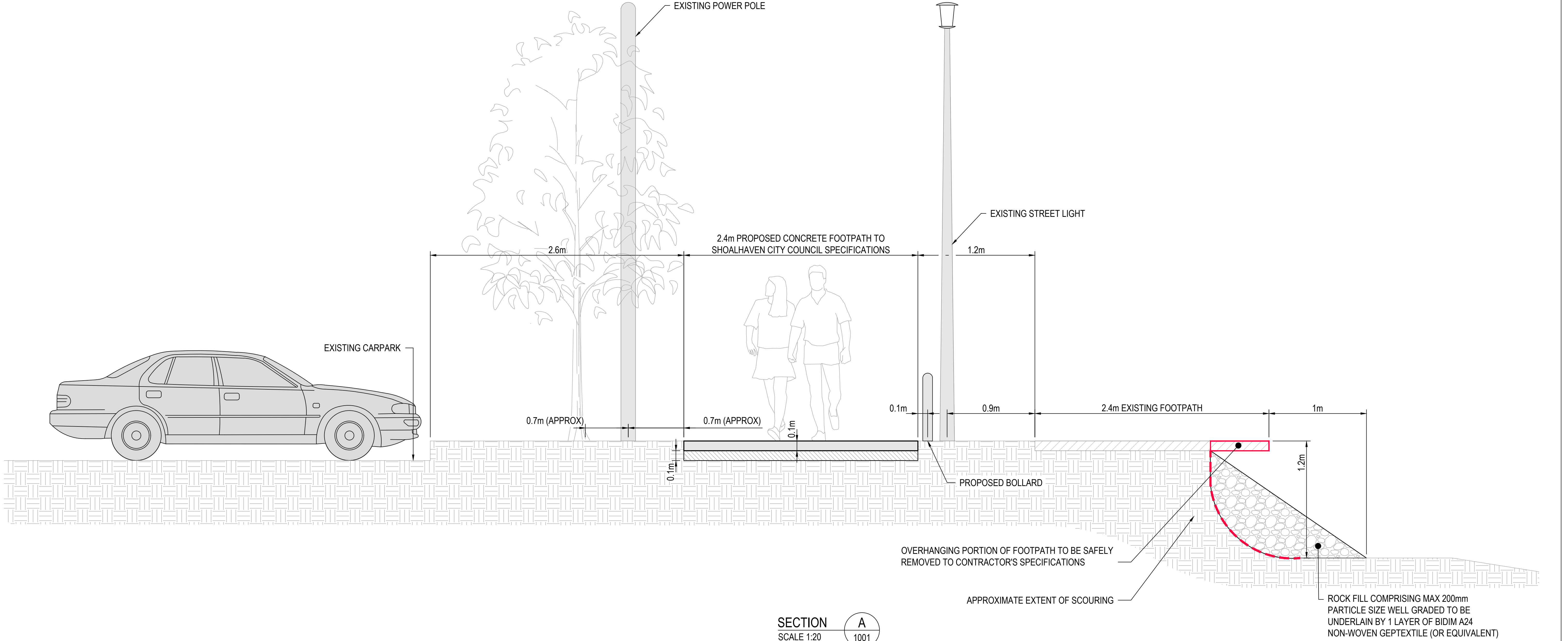
DRAWN: WP	DATE: 19.07.2023
DESIGN: MB	DATE: 18.07.2023
DWG. CHECK: DT	DATE: 21.07.2023
DES. CHECK: DT	DATE: 21.07.2023
RESPONSIBLE PRINCIPAL SIGNATURE: _____	
RPEQ : %%	
RPEQ : %%	

LEVEL 1, THE CENTRAL BUILDING  
UoW INNOVATION CAMPUS  
NORTH WOLLONGONG  
NEW SOUTH WALES, 2500  
AUSTRALIA  
T: +61 (0)2 4249 1000  
www.slrconsulting.com

THE CONTENT CONTAINED WITHIN THIS DOCUMENT MAY BE BASED ON THIRD PARTY DATA. SLR CONSULTING AUSTRALIA PTY LTD DOES NOT GUARANTEE THE ACCURACY OF ANY SUCH INFORMATION.

SHOALHAVEN CITY COUNCIL				SIZE
PROJECT: FOOTPATH REALIGNMENT AND LAND STABILISATION		DRAWING TITLE: GENERAL ARRANGEMENT LAYOUT		A1
STATUS: FOR CONSTRUCTION		SCALE: 1:50	DRAWING NUMBER: 660.30225-G-1001	REVISION
		DATUM:		A

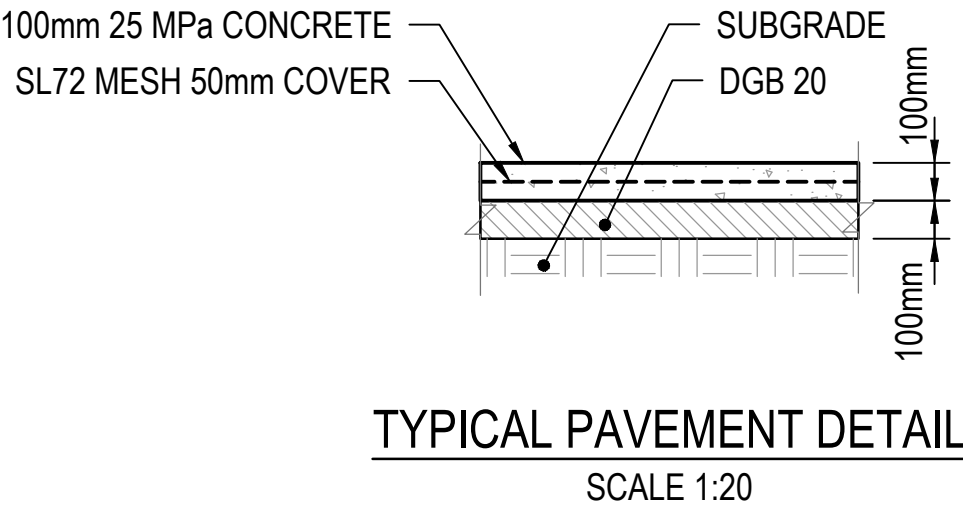




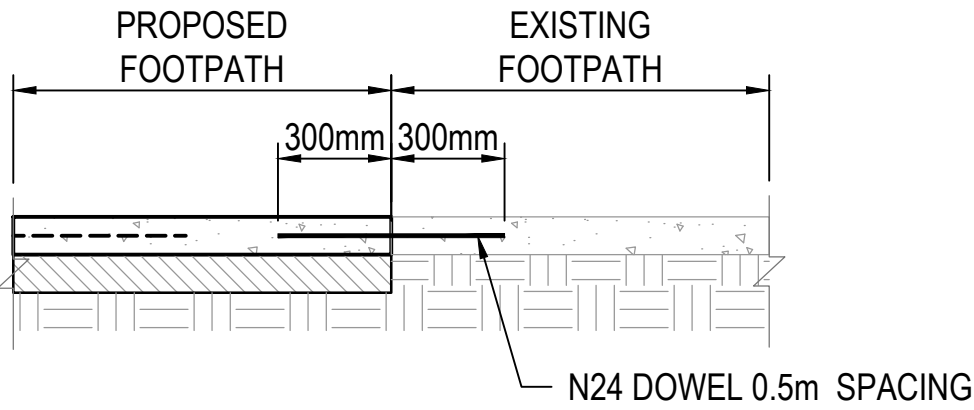
SECTION  
SCALE 1:20

A

1001



TYPICAL PAVEMENT DETAIL  
SCALE 1:20



TYPICAL CONSTRUCTION JOINT DETAIL  
SCALE 1:20



PLOT DATE: 02-Aug-2023 3:17:29 PM

REV	DATE	DESCRIPTION	APPROVED
A	02.08.2023	ISSUED FOR CONSTRUCTION	DT



THIS DRAWING IS THE PROPERTY OF SLR CONSULTING AUSTRALIA AND MUST NOT BE  
RETAINED, COPIED OR USED WITHOUT THE CONSENT OF THE COMPANY.

DRAWN:	WP	DATE:	19.07.2023
DESIGN:	MB	DATE:	18.07.2023
DWG. CHECK:	DT	DATE:	21.07.2023
DES. CHECK:	DT	DATE:	21.07.2023
RESPONSIBLE PRINCIPAL SIGNATURE:		DATE:	
RPEO : %%			
RPEQ : %%			



LEVEL 1, THE CENTRAL BUILDING  
UoW INNOVATION CAMPUS  
NORTH WOLLONGONG  
NEW SOUTH WALES, 2500  
AUSTRALIA  
T: +61 (0)2 4249 1000  
www.slrconsulting.com

THE CONTENT CONTAINED WITHIN THIS DOCUMENT MAY BE BASED ON  
THIRD PARTY DATA. SLR CONSULTING AUSTRALIA PTY LTD DOES NOT  
GUARANTEE THE ACCURACY OF ANY SUCH INFORMATION.

CLIENT: SHOALHAVEN CITY COUNCIL			
PROJECT: FOOTPATH REALIGNMENT AND LAND STABILISATION		DRAWING TITLE: TYPICAL TREATMENT CROSS SECTION	SIZE: A1
STATUS: FOR CONSTRUCTION		SCALE: 1:20 DATUM:	DRAWING NUMBER: 660.30225-G-1002 REVISION: A