



Compaction & Soil Testing Services Pty Limited

ABN 44 106 976 738

Phone: (02) 9675 7522 **Fax:** (02) 9675 7544 **Email:** office@comsoiltest.com.au
1/78 Owen Street, GLENDENNING NSW 2761

Elf Farm Supplies PTY Ltd



Mushroom Substrate Plant Modification to Approved Project

December 2016

Prepared by
Compaction & Soil Testing Services (CSTS)
1/78 Owen Street,
Glendenning, NSW, 2761.
Ph: (02) 9675 7522
Fax: (02) 9675 7544
E-mail: office@comsoiltest.com.au



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EXECUTIVE SUMMARY

Elf Farm Supplies operates a mushroom substrate production plant at 108 Mulgrave Road, Mulgrave. In 2012, the 'Minister' for Planning granted approval to further develop the plant and for staged increase in substrate production. Elf Farm Supplies is now applying for a modification to the project approval to enable facilitation of works and expedite conformance to approval requirements.

In summary, the purpose of the modification is to seek retroactive approval for already completed constructions works on a tree corridor in the South-West section of the project, receive approval for modification of the noise wall and construction of an asset fire protection wall, and rescind a requirement for the installation of a riparian management zone.



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INTRODUCTION

1.1 Purpose of The Report

This report has been prepared to accompany an application to the Department of Planning and Environment to modify an approved concept plan, approved development work and operations at Elf Farm Supplies' mushroom substrate plant at 108 Mulgrave Road, Mulgrave. Figure 1 shows an annotated aerial map of the substrate plant.

The relevant approvals were granted by the 'Minister' for Planning on 11 January 2012 under Part 3A of the Environmental Planning and Assessment Act 1979. The approvals permit Elf Farm Supplies to further develop the company's mushroom substrate plant at Mulgrave and for staged increase in substrate production. The current modification application seeks to modify the project approval under part 4, division 3, section 87 of the Environmental Planning and Assessment Act 1979.

The role of this report is to describe and assess the proposed modification to the project approval and its potential environmental impact. It is not a re-assessment of the approved development. Reference should be made to the 'Mushroom Industry Expansion in Western Sydney - *Environmental Assessment* (Perram & Partners 2010)' and 'Mushroom Substrate Plant - *Modification to Approved Project* (Perram & Partners 2015)' for description and assessment of aspects of the approved project that are unaffected by the proposed modification.

1.2 Site details

The changes to site details are limited to the acoustic walls. Refer to Figure 1 for proposed changes to the site.

1.3 Purpose of The Proposed Modifications

The purpose for proposing modifications to the approval include:

- to preserve the existing tree corridor on the South-West side of the project site,
- rescind the riparian management zone requirement, and
- modify the dimensions of the acoustic noise wall and construct a second asset fire protection wall.



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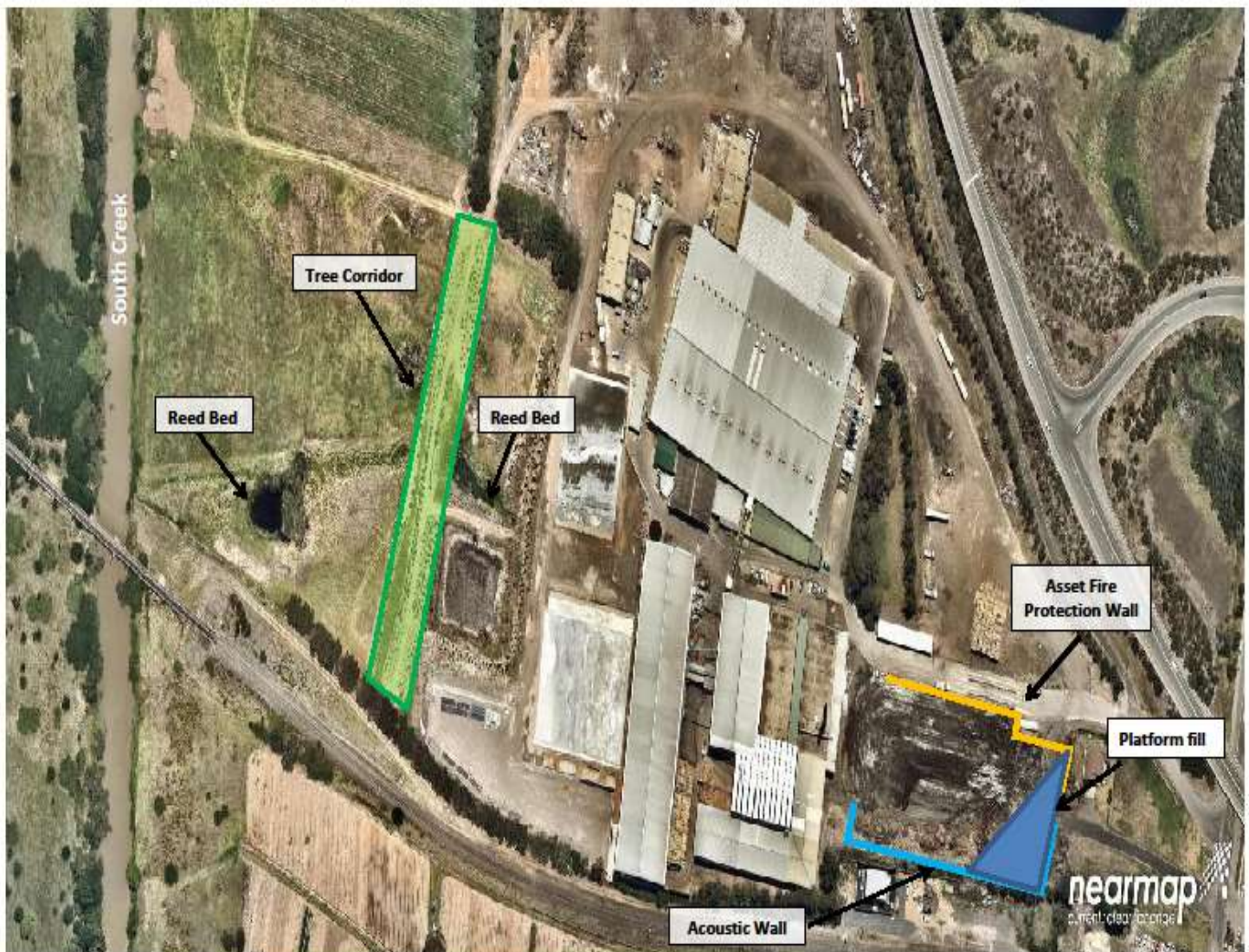


Figure 1



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DEVELOPMENT DESCRIPTION

The acoustic wall and asset fire protection wall are the only items in this modification request that would require any activities to be undertaken. The remainder of the requested modifications are related to variations of requirements on the existing approval or seek retroactive approval to works already undertaken. There will be no significant variation in the substrate plant development.

2.1 Proposed Modification

Elf Farm Supplies requests the Secretary to modify the project approval to allow for the following alterations:

Retroactively approve construction referred to in Schedule 2; Condition 7B of the current modified approval .

In this instance, the tree corridor has already been installed (See Figure 2), however the works were not approved. Hence, to preserve the asset a retroactive approval is required.

The construction of the tree corridor involved placing material that had previously been stripped from the biofilter pad, the western end of biofilter area and material validated as excavated natural material followed by the planting of an estimated 500 trees.

It should be noted the filling process and other works involved with the construction of the tree corridor did not result in a change of the structure or dimensions of nearby existing infrastructure specifically the nearby retention basin and the West dam.



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Figure 2

Modify the requirement for a 'Riparian Management Area' as per Schedule 3; Condition 23.

This modification is a request to remove a development requirement, in this instance a request to remove the requirement for a 'riparian management area'. A case justifying this request will be elaborated in the 'justification' section.

Modification to Schedule 3: Condition 21 –

This modification will involve changes to the dimension of the acoustic noise wall and a construction of an asset fire protection wall.

It is proposed to adjust the dimensions of the approved noise wall adjacent to the proposed material storage and parallel to the Southern boundary of the site (Please see Figure 1). In addition, an asset fire protection wall is proposed to cordon off the diesel fuel storage cell and the weighbridge of a fire.

The dimensions of the acoustic wall are as follows; the length will run East to West for approximately 135m, the North to South return will be approximately 60m and a small return



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in the South-West approximately 20m in length. The approximately 20m return will step up from approximately 8m to approximately 4m along its length. The acoustic wall will be approximately 4m above current platform height and 1m in the perimeter from the boundary and current fence line.

The asset fire protection wall will run along the southern end (East to west) of the diesel fuel cell have a return from South to North of the western end of the diesel fuel cell and then run from East to West along the length of the weighbridge and be approximately 4m high.

It will be approximately 45m at the weighbridge length at the Northern end of the return, approximately 15m at the return and approximately 20m at the diesel tank section at the southern end of the return. For asset integrity and fire planning purposes, it is also intended that the current platform be backfilled for the North to South return of the acoustic wall (as shown in figure 3) to allow for a hydrant line to run along the inside of the North-South return of the acoustic wall.

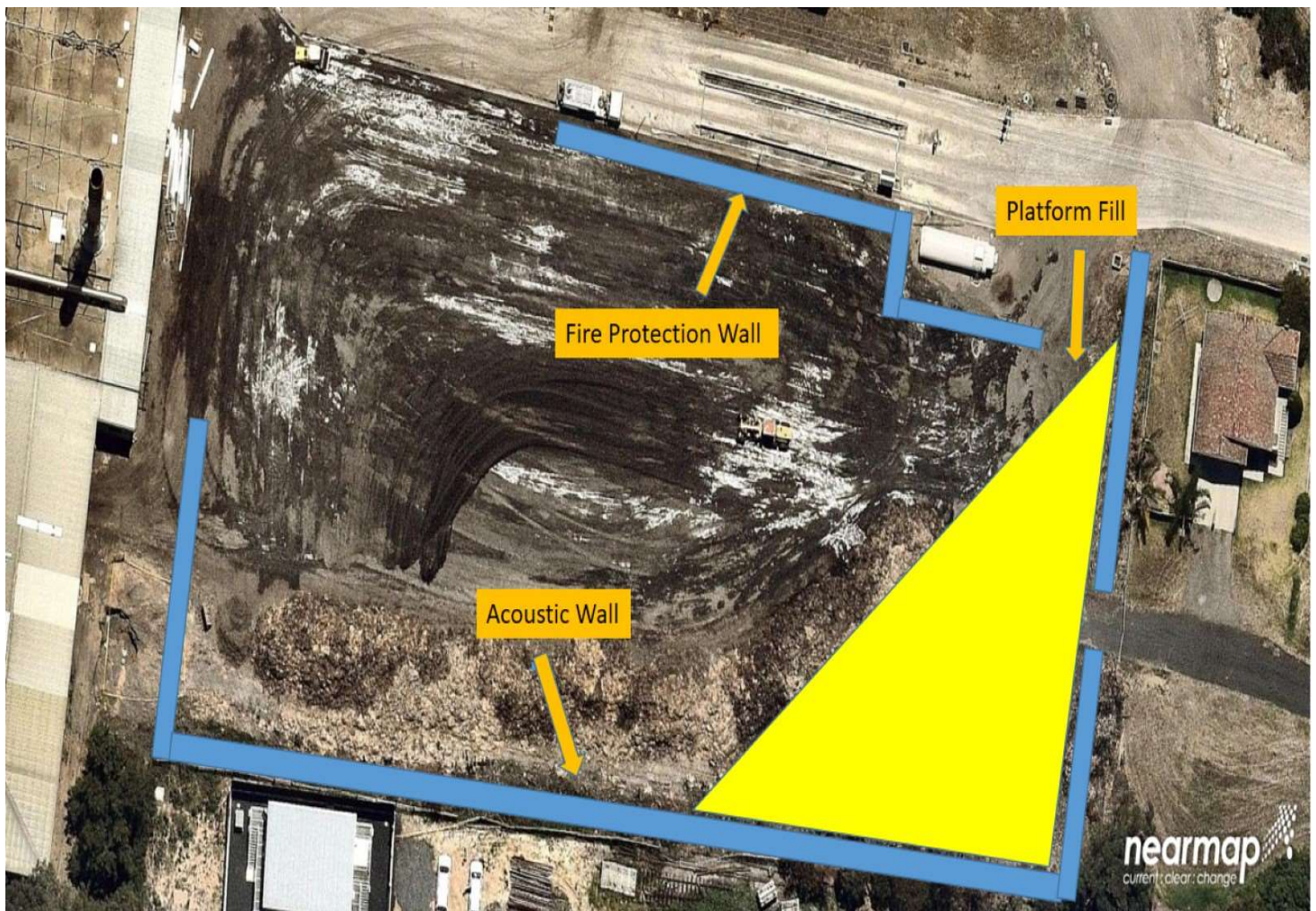


Figure 3



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PERMISSIBILITY AND STRATEGIC PLANNING

The proposed modifications do not impact existing items in the current modified approval as it relates to permissibility and strategic planning.

3.1 Environmental Impact Identification and Assessment

The proposed modifications will not trigger reassessment of the environmental impact identification conducted for the modification request of February 2015 nor prior environmental assessments.

Therefore, there will be no potentially adverse impacts on environmental aspects such as;

- Water Management,
- Stormwater,
- Wastewater,
- Hazardous Material,
- Noise, and
- Heritage
- Flora and Fauna



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JUSTIFICATION

4.1 Retroactive Approval of Existing Tree Corridor

The tree corridor (see figure 4) has already been constructed and the trees are over 2 years old. The decision to place the tree corridor in this location was made for several reasons;

1. it was a visual extension of the existing tree corridor towards the railway line and dictated a definite site boundary, as the trees mature they will also positively contribute to the aesthetics of the site.
2. the earthworks did not increase the height of the western dam,
3. the earthworks also improved the West retention basin thus improving the conduciveness of the environment for the reed beds (see figure 5, which are now thriving).

As such, there will be adverse environmental impact if the works were to be deconstructed, as not only will all the trees on the corridor (which are currently thriving) perish, the reed beds will also be adversely impacted.



Figure 4 – Side profile of tree corridor from South Creek side.



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Figure 5 – Reed bed in retention basin.

4.2 Modify Requirement for a Riparian Management Area

The substrate plant development is being undertaken on land that is already cleared and has been filled to provide a working platform above 'flood level'. Considerations for flood performance were assessed in the original project environmental assessment.

One of the key characteristics of a riparian zone is that it increases water quantity. Given the area is already of concern regarding floods, installing a riparian zone would nullify the benefits of raising the site platform with fill material in the first place as the riparian zone may contribute to increased water volume and by extension water height during floods. This is supported by the study reported in L_151203_108_Mulgrave_Rd.docx 2015 by WMA Water (see attached).

The requested 35m riparian zone is not consistent with what is believed to be the vegetated riparian zone (VRZ) width for South Creek, which is believed to be a 2nd order stream and thus should at most have had a 20m riparian management zone requirement as per NSW Office of Water – *Guidelines for riparian corridors on water front land 2012*.



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4.3 Modification to Schedule 3: Condition 21

Expanding on the dimensions of the acoustic wall will increase the scope of its effectiveness. The asset fire protection wall is intended for asset safety integrity and fire planning purposes. It is intended to protect vital infrastructure such as the weigh bridge and the diesel fuel tank in the event of a fire in the straw bale storage area.



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CONSULTATION

No consultation with the community, local councils, other Government agencies are required to be undertaken for this modification as the proposed items do not relate to aspects that necessitate consultation.



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CAPITAL INVESTMENT VALUE

The proposed modification will not change the current estimated capital investment value of the project.



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Hawkesbury-Nepean Flood Damages Assessment: Final Report, 2012, Infrastructure NSW.
http://www.infrastructure.nsw.gov.au/media/16727/molino_stewart_hn_flood_damages_report_final.pdf - 16/12/2016

USDA Natural Resources Conservation Service; Corridor Benefits
https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_014927.pdf
19 December 2016

NSW Department of Primary Industries Office of Water
Report card for South Creek Water Source, 2015
http://www.water.nsw.gov.au/__data/assets/pdf_file/0009/584811/RC6-south-creek.pdf
20 December 2016



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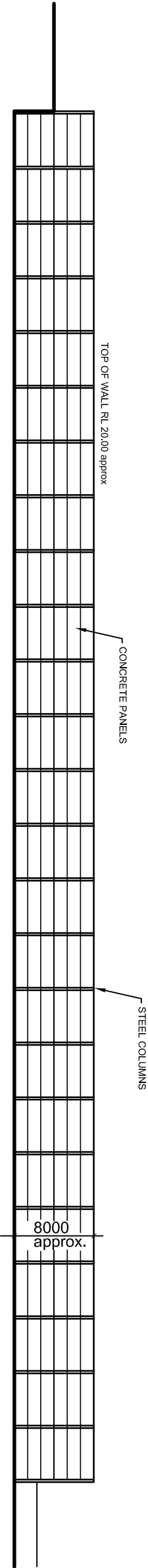
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L_151203_108_Mulgrave_Rd.docx, 2015, WMA Water.

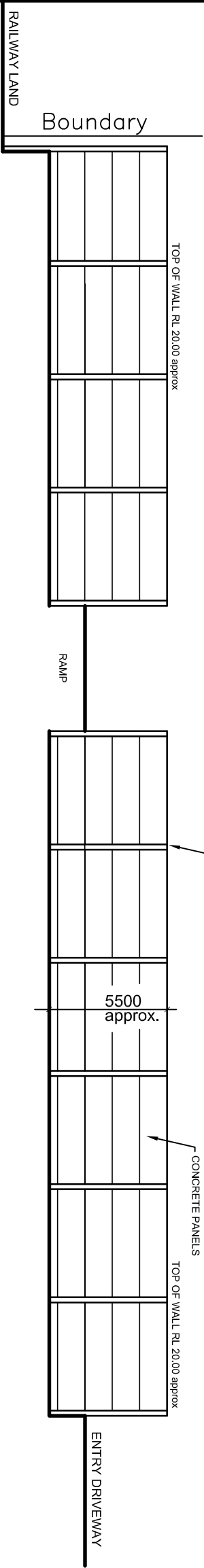
NSW Department of Primary Industries Office of Water

Controlled activities on waterfront land; Guidelines for riparian corridors on water front land, 2012.

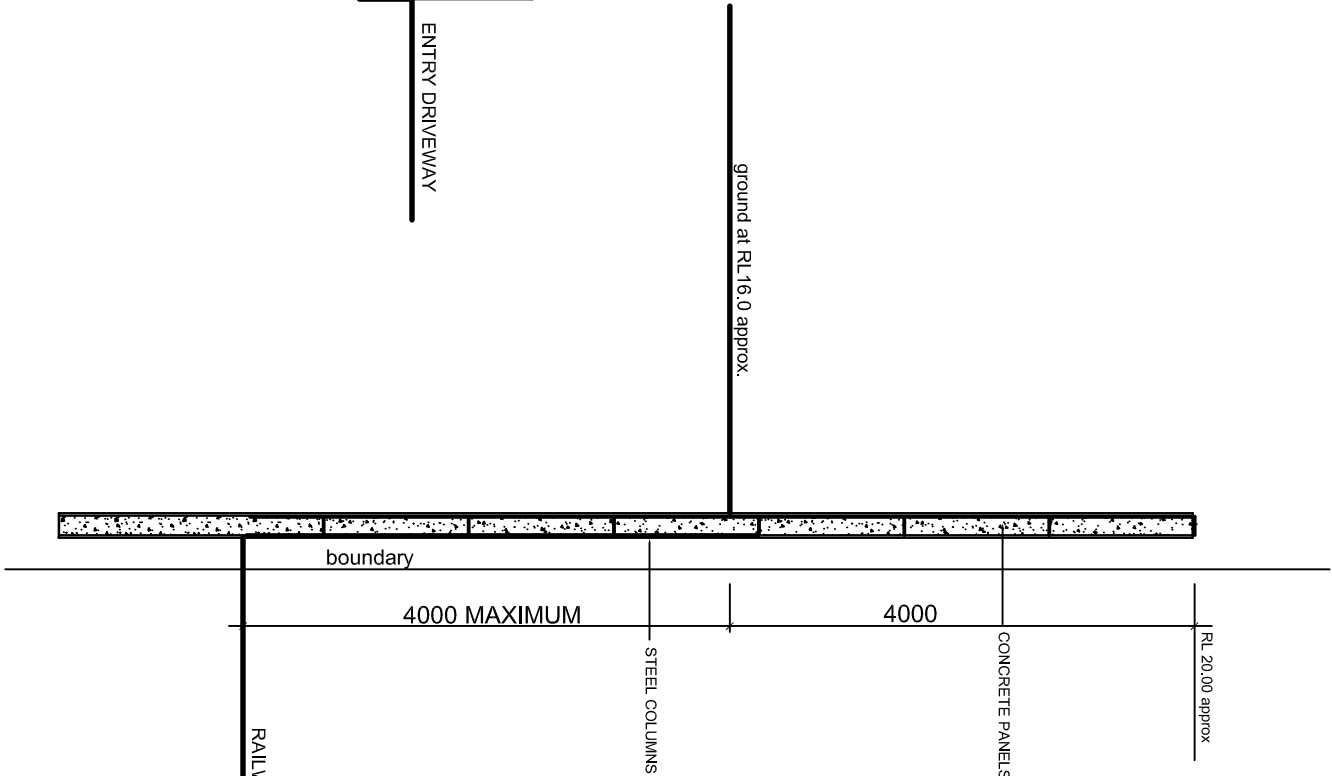
http://www.water.nsw.gov.au/__data/assets/pdf_file/0004/547222/licensing_approvals_controlled_activities_riparian_corridors.pdf - 20 December 2016



SOUTH ELEVATION
1:500



EAST ELEVATION
1:250

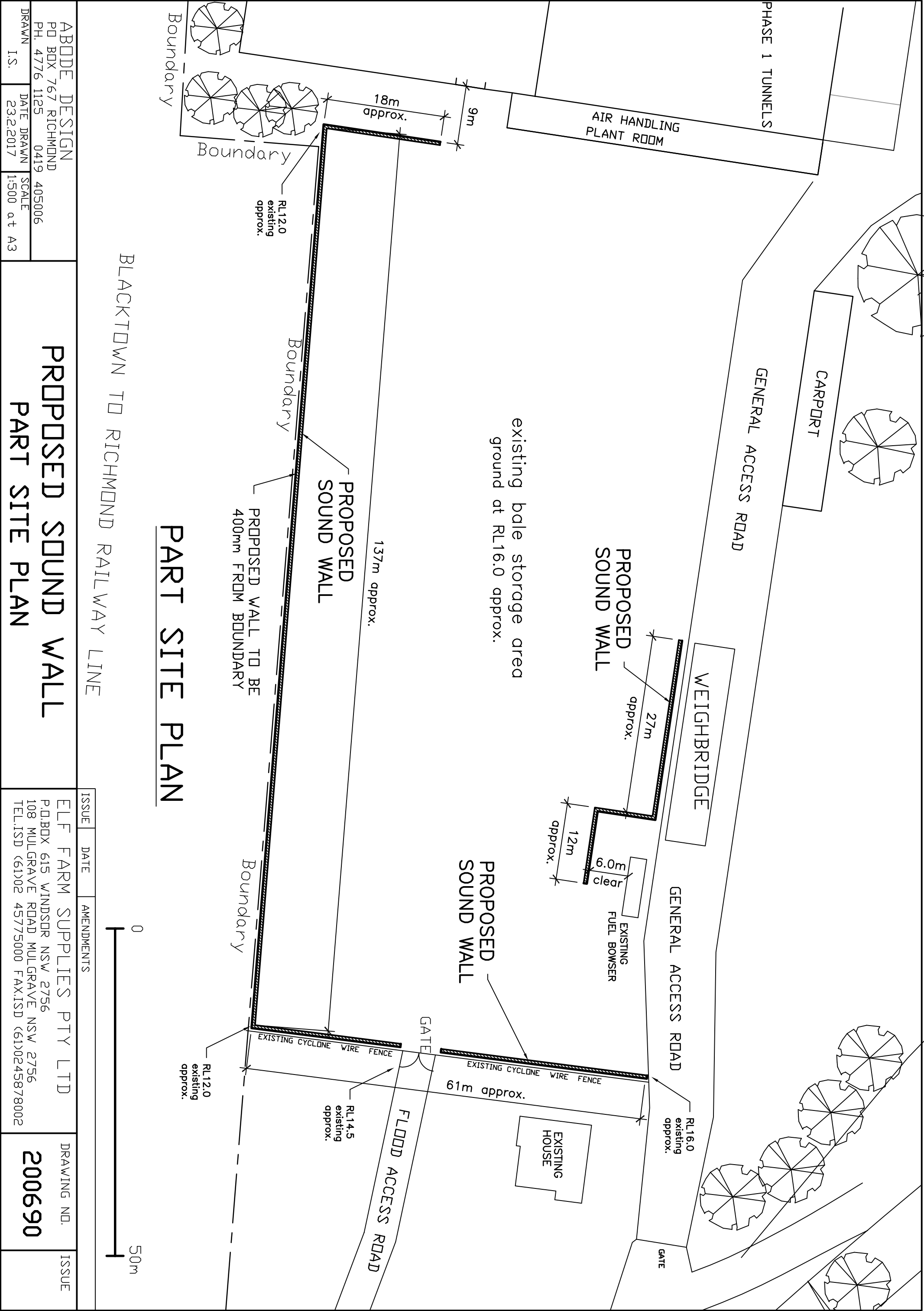


TYPICAL SECTION

ABODE DESIGN PO BOX 767 RICHMOND PH. 4776 1125 0419 405006			
DRAWN I.S.	DATE DRAWN 23.2.2017	SCALE as shown at A3	

**PROPOSED SOUND WALL
ELEVATIONS AND SECTION**

ISSUE		DATE	AMENDMENTS		DRAWING NO.	ISSUE
ELF FARM SUPPLIES PTY LTD						
P.O.BOX 615 WINDSOR NSW 2756						
108 MULGRAVE ROAD MULGRAVE NSW 2756						
TEL.ISD (61)02 45775000 FAX.ISD (61)0245878002						
						200691



PART SITE PLAN

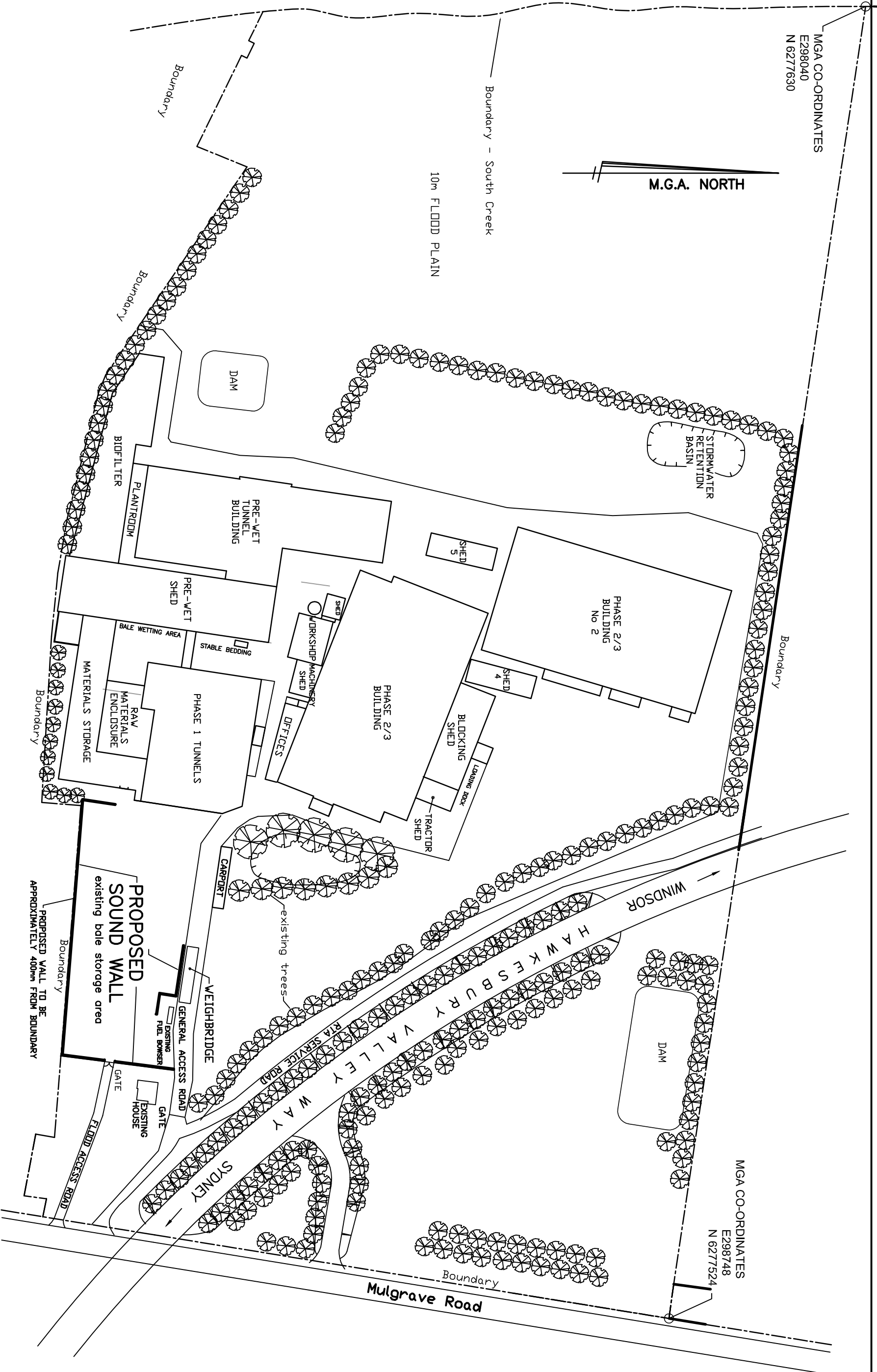
BLACKTOWN TO RICHMOND RAILWAY LINE

ABODE DESIGN PO BOX 767 RICHMOND PH. 4776 1125 0419 405006	DRAWN I.S. 23.2.2017
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PROPOSED SOUND WALL
PART SITE PLAN

ISSUE	DATE	AMENDMENTS
ELF FARM SUPPLIES PTY LTD P.O.BOX 615 WINDSOR NSW 2756 108 MULGRAVE ROAD MULGRAVE NSW 2756 TEL.ISD (61)02 45775000 FAX.ISD (61)0245878002		

DRAWING NO. 200690	ISSUE
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SITE PLAN

BLACKTOWN TO RICHMOND RAILWAY LINE

ABODE DESIGN PO BOX 767 RICHMOND PH. 4776 1125 0419 405006		
DRAWN I.S.	DATE DRAWN 23.2.2017	SCALE 1:2000 at A3

PROPOSED SOUND WALL
SITE PLAN

ISSUE	DATE	AMENDMENTS	DRAWING NO.	ISSUE
ELF FARM SUPPLIES PTY LTD P.O.BOX 615 WINDSOR NSW 2756 108 MULGRAVE ROAD MULGRAVE NSW 2756 TEL.ISD (61)02 45775000 FAX.ISD (61)0245878002			200689	