VEGETATION MANAGEMENT PLAN

CSR HORSLEY PARK
EMBANKMENT REVEGETATION

Prepared For:

CSR

By:

Sturt Noble Associates Pty Ltd

15th June 2015

ISSUE A: ISSUE TO CLIENT

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1.0 INTRODUCTION

1.1 Background

This report outlines the vegetation restoration and vegetation management measures proposed for the embankment stabilisation & revegetation works at the Southern Boundary Interface of the possible warehouse site at 327-335 Burley Road; Horsley Park at Lot 1 DP 106143.

The three staged subdivision proposes the creation of 14 industrial lots and 1 lot for the environmental conservation land, ranging from 1.5 hectares to 13 hectares with vehicle access via an internal loop road. Currently the site is used for an extractive industry for the purposes of brick manufacturing and associated quarrying activities and the proposed subdivision is staged to facilitate the rehabilitation of the subject site, in Stages 1 and 2, while the brick making can continue to operate in Stage 3.

The proposed development has been assessed under Section 79C of the Environmental Planning & Assessment Act1979 (EP&A Act) and all requirements under the State Environmental Planning Policies (Western Sydney Employment Area) 2009.

The report has been prepared for CSR by Sturt Noble Associates Pty Ltd. This report is supporting documentation for the Development Application to be submitted to Fairfield Council for comment and approval.

It is noted that a vegetation management plan is required for the retained conservation lot containing Cumberland Plain Woodland. This report does not address this requirement.

1.2 Aims

The Plan aims to:

- Guide best practice solutions to embankment stabilisation & revegetation.
- Increase the presence of endemic flora and fauna in the area.
- Provide an effective vegetation screen from adjacent or future residences to the proposed new development.

1.3 Objectives

The objective of this Vegetation Management Plan is to establish and implement design principles and methodologies; fully integrating erosion management with the provision of environmental, ecological, and aesthetic amenity. The proposed work aims to restore natural values to the site; improving the potential for an endemic flora and fauna ecosystem for the local community and providing an effective screen to the new development.

This report outlines:

- Existing conditions, including existing site conditions and ecology.
- Environmental design to provide habitat creation and aesthetic amenity, while promoting self-sustaining systems and low maintenance.
- A set of recommendations for the work, based on a consideration of all available data and studies.
- Landscape plans for the embankment.
- An ongoing management and maintenance strategy for the proposed works on completion to ensure the ongoing success of the works completed for the following two (2) years.

2.0 PHYSICAL DESCRIPTION

2.1 Location

The subject site is formally known as Lot 1 in Deposited Plan 106143 being no. 327-335 Burley Road, Horsley Park. The total site area is 72.3 hectares and as shown in Figure 1, has an operational brick quarry located on the site with associated works, dams and existing vegetation. The brick making factory is located in the northern part of the site, fronting Burley Road with the dams to the south and west of the factory. The subject site also contains an area of Environmental Conservation land to the south-eastern corner of the site. An electrical transmission easement runs north/south along the subject site's eastern property boundary.

FIGURE 1: Location Map

(Source: Google maps)

2.2 Current Facilities, Conditions and Use

The proposed development has existing access off Burley Road and Reserved Road, with the proposed lots gaining vehicular access via an internal loop road. Burley and Reserved Road will be upgraded to a subregional road (Southern Link Road) in the future. The proposed development does include provisions to upgrade Burley and Reserved Road to support the construction of a subregional road

The site represents partly industrial, extractive and rural landscapes that have been dramatically altered from its original natural state, with large parts of the site devoid of vegetation, partly covered in buildings and the original landform altered by the nature of the extractive industry.

2.3 Soil Conditions

The underlying geology is generally weathered Wianamatta shale and clay soils.

The proposed site will represent a totally reconstructed landscape from this underlying substrate to soil and vegetation. Clean site fill will be used to reinstate the embankment areas and amended to provide a suitable planting medium.

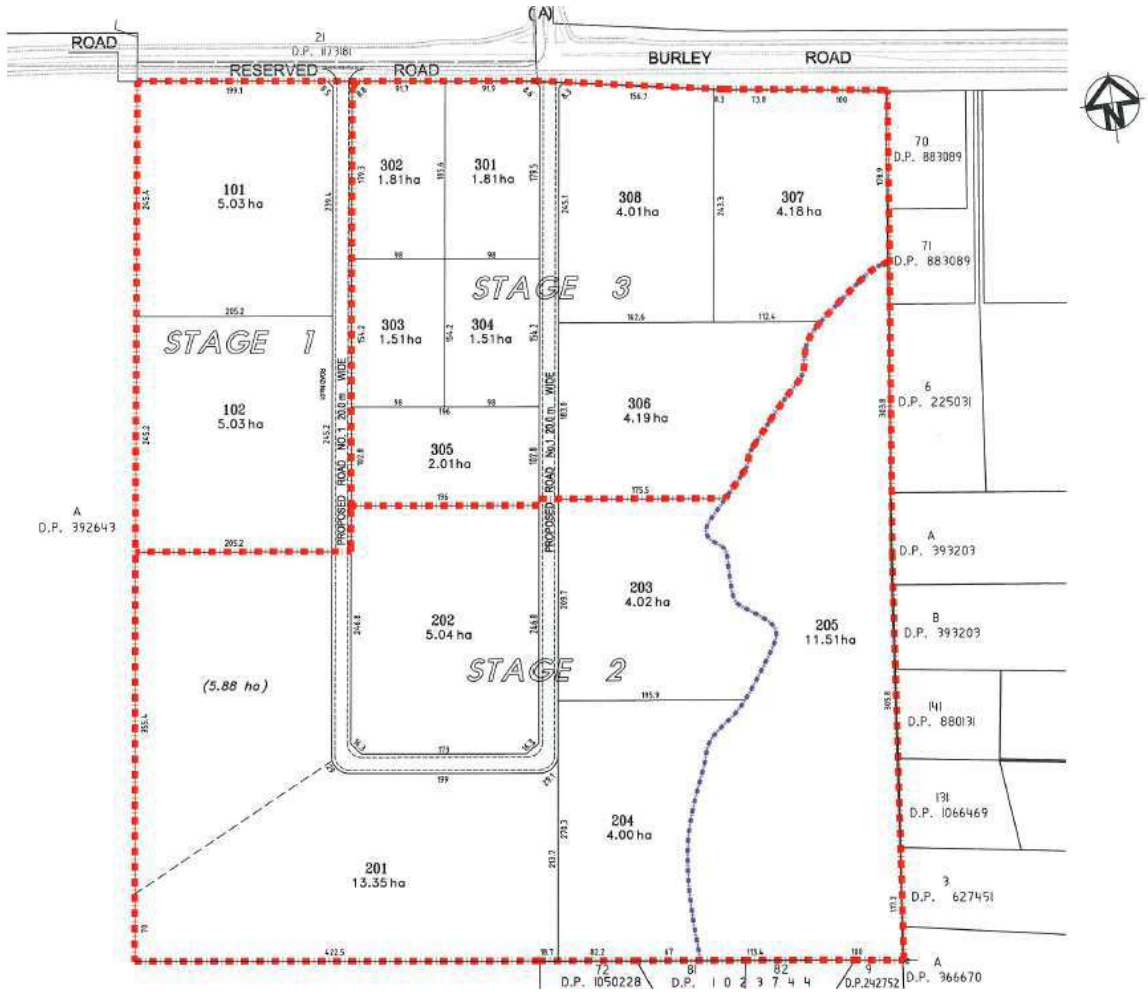
2.4 Surface Conditions

The proposed embankment is steeply sloping, with a number of conditions.

Sturt Nobles landscape buffer plan DA -1408-01 Revision D (Appendix B) indicates a section of embankment at 1:1 slopes on both sides forming a bund of approximately 21m width.

Sturt Nobles landscape buffer plan DA -1408-02 Revision C (Appendix B) indicates a section of embankment stepped with gabions and 1:2.5 slopes on one side forming an embankment of approximately 10m width.

FIGURE 2: Proposed subdivision layout



Source: (Calibre Consulting: Drawing no. X13044.P_STO. Appendix 2 Development Application Subdivision Plan)

3.0 ENVIRONMENTAL STUDIES

A Flora & Fauna Report was prepared by Travers Bushfire and Ecology to support the proposed subdivision. This report addresses the conservation of Cumberland Plain Woodland as identified as part of the conservation lot for environmental conservation.

Ecological survey and assessment was undertaken in accordance with relevant legislation including the Environmental Planning and Assessment Act 1979, the Threatened Species Conservation Act 1995, the commonwealth Environment Protection and Biodiversity Conservation Act 1999 and the Fisheries Management Act 1994.

One endangered ecological community (EEC), Cumberland Plain Woodland (CPW), was recorded within the study area. CPW occurs throughout the eastern vegetated portion of the study area in medium to high condition. This was despite the continued grazing by cattle in this area. The size of the eastern patch is approximately 10.63ha and it was proposed to retain and protect 9.74 ha of this vegetation.

The smaller fragmented remnants (3.60ha) within the western portion of the site are low in native species diversity and are proposed to be removed.

3.1 Plant Communities

There is one main vegetation community on site, Cumberland Plain Woodland.

It comprises of several sub-communities based upon the dominant canopy cover present. In some locations, Forest Red Gum with Grey Box dominate, whilst the canopy might be dominated by *Melaleuca decora* within another patch.

Canopy trees are generally to a height of between 15-25m and a projected foliage cover of 20-35%, dependent upon the age of the trees and the level of previous impacts, particularly within the small remnants. Some of these trees were old remnant trees as indicated by their large diameter trunk and constituent hollows however, most of the large eastern woodland portion appears as mature regrowth given evidence of previous disturbances, including tree clearing and grazing.

In the large eastern remnant, the shrub layer is largely dominated by *Bursaria spinosa* var.*spinosa, Acacia decurrens, Dillwynia sieberi, Daviesia ulicifolia, Acacia fimbriata* and *Exocarpus cupressiformis.* The shrub layer was 1-8m tall and accounted for between 30-65% coverage.

In the large eastern remnant, the ground layer was less than 1m tall and accounted for between 75-95% coverage. Dominant native species recorded included *Aristida vagans, Aristida ramosa Austrostipa pubescens Microlaena stipoides, Themeda australis, Brunoniella pumilio, Chloris ventricosa Dichondra repens, Cheilanthes sieberi, Eragrostis brownii, Glycine clandestina, Glycine tabacina, Hardenbergia violacea* and *Solanum prinophyllum.*

Full endemic species lists are noted in Appendix A.

4.0 RECOMMENDED OPTION

4.1 Scope of Works: Landscape Treatment

Broadly, proposed works are to provide embankment stabilisation & revegetation at the southern boundary interface of the possible warehouse site (Refer to Landscape & Engineers Plans, for full design details).

Erosion will be controlled by jute mesh or other such blanket system. Geotech design will be carried out by Douglas Partners to establish the bunds structural integrity.

The plans prepared for CSR: DA -1408-01 Revision D and DA -1408-02 Revision C; indicates species of smaller shrubs and grasses which will be able to be successfully established and improve the slope stability.

Larger Trees will be planted at either the toes/ crest of the slopes or on the less steep batters of 1:2.5

Planting small plant stock-no bigger than tubestock; will ensure ease of installation and minimise disruption to the slopes stability. These will be pocket planted and planted through slits cut in the blanket system as per industry practice.

Plant species are proposed to reinstate appropriate endemic plant communities that naturally occur in the area. (Refer Appendix B Landscape Plans).

4.2 Revegetation Works

4.2.1 Weed Control

Prior to commencement of revegetation works, eradicate existing weed growth from all areas to be revegetated. Ongoing maintenance will ensure the eradication and control of persistent/ noxious weeds to ensure problem species are targeted and removed to minimise future infestation of the revegetated areas and surrounding areas.

4.2.2 Soil Works

Refer to Engineers drawings for site grading. Soils will be s a combination of soils/substrates from site stockpiles naturally occurring at the site and imported soils. Imported soils/ Fabricated blends will be, specified by a qualified soil scientist and suitable for the establishment and ongoing viability of revegetation, free of weed propagules and contaminants.

4.2.3 Erosion Control

Refer to Engineers drawings for location and extent of erosion control measures.

4.2.4 Mulching

All planting areas shall be mulched with minimum depth of 75mm mulch and/or erosion control matting. Use mulch certified weed and contaminant free.

4.2.5 Plant Communities

Endemic plant species will be used in the revegetation works. Species will represent and emulate the full structure of the community to be reinstated.

4.2.6 Plant Species Suitable For Revegetation

All future revegetation and landscaping work within the site should be carried out with regard to the plant species listed in Appendix B – Landscape plans.

4.2.7 Seed Source

Propagated plant stock should be supplied from locally provenance seed where available. Early spring or autumn is the recommended time for planting.

4.2.8 Plant installation

For species and location see Landscape Revegetation Plans, drawing no DA -1408-01 Revision D and DA -1408-02 Revision C (refer Appendix B).

Densities shall be sufficient to achieve full cover with a minimum of 4 plants per m2. Plants provided shall be vigorous, well established free from disease and pests, of good form consistent with the species or variety. Do not plant in unsuitable weather conditions such as extreme heat, cold and or rain.

4.2.9 Irrigation

Install temporary irrigation to provide adequate water for establishment (minimum 12 weeks). Ensure irrigation system meets all current Sydney Water requirements and restrictions.

The first month after planting is the critical time for watering. Young plants require heavy watering every three (3) days. If very hot or windy days are encountered soon after planting then additional watering will be required. 50mm of water per week as a minimum should be adopted as a general guide.

Continue watering as required for the successful establishment of vegetation, for the full extent of the 2 year maintenance period.

4.3 Construction Management

General construction, will need to be carried out in stages to control erosion during the works. Refer to Engineers drawings and specifications, Erosion and Sediment Control Plan and Stormwater Management Plan.

4.3.1 Site Protection

Works are to be controlled and managed by a site superintendent. The areas are to have highly visible temporary protective fencing erected. There will be no vehicle access to completed zones.

4.3.2 Construction Management

Construction methods will aim to limit:

- Runoff from adjacent sites.
- Soil erosion.
- Damage to vegetation.
- Compaction of soil.
- Pollution to water, soil, and air.

4.3.3 Erosion Control

Erosion and water quality control measures such as silt fencing and hay bale installation are to be strategically placed to ensure little or no sediment run-off from adjacent areas. Erosion control and sediment traps are to be maintained in efficient working condition during the course of construction. Areas disturbed by the location of erosion control devices will be revegetated after completion of the construction period. Refer to Engineers plans and specifications, Erosion and Sediment Control Plan and Stormwater Management Plan, for full details of erosion and sediment control.

All areas of temporary soil & water management controls are to be revegetated once the controls are decommissioned and removed.

4.3.4 Materials Storage

All materials storage on site is to be limited to the designated storage areas as defined on site prior to construction commencing.

4.3.5 Staging of the works

A staging program for remediation and revegetation works for the riparian zones shall be prepared with the following elements in mind:

- Staging of soil preparation and bulk earthworks to minimise the areas exposed to run-off at any one time.

- Control of drainage from outside the site. Divert outside runoff away from the site using either catch drains or diversion banks to reduce the amount of water running across disturbed areas and thus lowering the production of runoff containing sediment. Such drains or banks are to be wholly situated within the designated construction zone and designed to safely and adequately collect and convey all diffuse runoff from outside the site.

- Protection of planted vegetation from erosion by reducing the speed of overland water flow.

- The temporary covering of disturbed areas which will otherwise remain exposed for more than fourteen days before permanent stabilisation works are undertaken. Temporary cover of mulch is to be applied if necessary.

- Stabilisation of drainage management controls i.e. catch drains and diversion banks will be stabilised using vegetation, or stone pitching depending on the location and design standard being adopted. Stabilisation with vegetation is preferred wherever practicable. Where regular flows would erode the drain and make the establishment of vegetation difficult, synthetic woven fabric or jute mesh will be used to provide temporary protection

- Installation of temporary sediment control structures (ie preferably filter cloth fences or where not appropriate, straw bale barriers) within the construction zone to control sediment movement and prevent erosion of disturbed areas of the site. All overland flow paths of 15m length or greater to be intercepted by filter fences.

- The direction of all runoff from the development area to temporary sedimentation basins. Basins are to be designed in accordance with EPA guidelines to the satisfaction of Fairfield Council.

- To achieve minimal soil disturbance and permanent soil erosion, drainage management devices will be installed at the earliest opportunity. Temporary devices will be installed only where permanent features are not required or where disturbance is increased by their installation. Temporary devices can be upgraded to permanent standards where re-entry into the area does not increase soil disturbance. Where upgrading is selected as the most appropriate method, the temporary devices will be accurately located. All temporary devices required during construction only are to be removed on completion of the works and these areas restored.

4.4 Maintenance Scope

4.4.1 Period of Work

Ongoing maintenance and plant establishment for Riparian zones shall be carried out over a period of two (2) years. At this time it is anticipated that the site will be in such condition as to be placed onto a low level maintenance weeding program. Programmed maintenance weeding should be undertaken indefinitely to maintain a maximum weed cover of 5%.

4.4.2 Maintenance Scope

The bushland maintenance staff/contractor shall maintain all plants and planting areas in optimum growing condition and appearance. Work will include but not be limited to:

A. Planting Area Maintenance:

- Fertilising (only if required by soil testing and plant conditions).
- Replacement planting.

- Weed removal.
- Additional planting as required to ensure development of a diverse indigenous flora.
- Rubbish removal.
- Mulching.
- Monitor at regular intervals for re-invasion / new outbreaks of weeds and treat accordingly.
- Check for outbreaks of pests and diseases and control using appropriate non chemical methods.

B. Erosion Control:

- Monitor erosion control systems to ensure the creek embankments are not being eroded.
- Install erosion control measures if required.

4.4.3 Fertilising

The use of fertiliser should be restricted to a minimum. Any fertiliser used should be low in phosphorous and specifically formulated for use on native plants. Use fertiliser only if required by soil testing and / or plant conditions.

4.4.4 Replacement & Additional Planting

Planting survival rates should be addressed regularly and appropriate actions undertaken if necessary. Replacement planting should be undertaken to achieve densities equal to a minimum 90% survival rate.

Replacement planting should replace plants with the same species, or where not available with a different species, but the same growth form (eg. replace a tree with a tree).

Species should represent and emulate the full structure of the community to be reinstated. Species selected should be made up of a mix of trees, shrubs and groundcovers, representing the original vegetation community.

4.4.5 Weed Removal

Weed removal shall include any species likely to significantly invade the indigenous flora corridor species, prevent natural regeneration or impede native seedling growth. Priority shall be given to species listed as noxious under the NSW Noxious Weeds Act. Weed species shall be evaluated individually and will only be retained and managed due to financial restraints or bank stabilisation merits.

The regeneration techniques to be employed shall aim to control weed growth and encourage natural regeneration. The techniques and methodologies used for bush regeneration shall conform to those identified in the National Trust Bush Regenerators Handbook (1991) and currently being taught through TAFE's Bushland Regenerator Certificate Course.

Weeding shall be by hand only. Introduced species that are particularly invasive, may be controlled by the 'cut stump method' which includes application by hand of Glyphosate (eg: Roundup bio-active, Zero) or by strictly controlled hand held spraying devices where overspray onto desirable species is negligible.

Weed densities should be addressed regularly and appropriate actions undertaken if necessary. Weed species should be controlled to achieve a maximum 5% weed cover at the completion of the maintenance period.

4.4.6 Pest/ Disease Control

All plants shall be inspected for disease or insect damage regularly. Treat affected material if it poses a problem to the long term health and viability of the plant. In general pest species provide important food sources to fauna. Systemic Pesticides shall not be used. Where possible utilise natural products such as pyrethrum based sprays or biological controls.

4.4.7 Mulch

Replace mulch as required to maintain a minimum depth of 75mm to all areas. Mulch shall be 100% recycled mulch, equal to ANL Forest Blend, which is free of weed propagules, soil and contaminants. Do not use Privet, Camphor Laurel, Coral Tree, Poplar, Willow, noxious weed or the like. Mulch is to be certified free of weed and contaminants.

4.4.8 Debris and Rubbish

Retain natural materials free of weed propagules for habitat value and position at nominated locations around the site. Only remove man-made litter and rubbish from the site.

4.4.9 Soil Erosion

Maintenance works are to include the replacement of any works damaged or destroyed by flows and flooding. Refer to Stormwater Management Plan and Soil, Erosion and Sediment Control Plan.

If maintenance works have the potential to de-stabilise slopes, action such as the use of fibre matting and/or the placement of fixed logs across the slope shall be employed to minimise the problem.

Erosion matting and/or silt fencing may be required for the works.

The locations of temporary erosion control devises are to be revegetated once the devices are decommissioned and removed.

4.4.10 Watering

Provide watering adequate for the successful establishment of vegetation for the extent of the maintenance period.

5.0 MONITORING & REVIEW

This section sets out recommendations and actions to address management issues, consistent with the objectives and the environmental outcomes outlined in the Management Plans.

5.1 Monthly Inspections

A Maintenance Manager or field supervisor shall carry out monthly site inspections to ensure the maintenance specifications are being followed.

5.2 Site Inspections

It is recommended that yearly site meetings are held to ensure that the management/ maintenance is being carried out in a satisfactory manner. A representative from CSR and the bushland maintenance contractor should attend.

6.0 PERFORMANCE CRITERIA

TASK	PERFORMANCE	ACTION
Site Management	Sediment and Erosion Control Plan Implemented	Review and update activities to maintain effective function.
	Weeds Controlled After 2 year maintenance period maximum 5% weed cover	Remove annuals, groundcovers 2 x per year.
	Site Rubbish Cleaned	Rubbish to be removed regularly.
Revegetation	80% survival rate for all species: Trees - 90% of the community species. Shrubs - 75% of the community species Groundcovers - 60% of the community species Plants appear healthy and vigorous	Disease and pest control every three (3) months if required. .

7.0 CONCLUSION

The Management Plan outlined aims to restore, feature and retain the natural values of the site, improving the potential for the reestablishment of endemic flora and fauna ecosystems, while reducing the visual impacts of proposed development on adjacent landuses. Any construction activity is to focus on soft engineering options, with minimal use of hardscape construction.

Overall, the project can be seen to have a positive environmental impact through the reinstatement of endemic vegetation communities and reducing visual impact. The project will also be managed and undertaken in an environmentally sensitive manner in order to minimise any impact to the environment.

9.0 APPENDIX A: ENDEMIC PLANT SPECIES ON SITE

Scientific name	***Common name***
Trees	
Acacia decurrens	Black Wattle
Angophora floribunda	Rough-barked Apple
Corymbia maculata	Spotted Gum
Eucalyptus crebra	Narrow-leaved Ironbark
Eucalyptus eugenioides	Thin-leaved Stringybark
Eucalyptus moluccana	Grey Box
Eucalyptus tereticornis	Forest Red Gum
Exocarpos cupressiformis	Native Cherry
Ficus spp.	Fig
Melaleuca decora	
Melaleuca styphelioides	Prickly-leaved Tea Tree
Syncarpia glomulifera	Turpentine
Shrubs	
Acacia falcata	Sickle Wattle
Acacia fimbriata	Fringed Wattle
Acacia implexa	Hickory
Acacia longifolia var. longifolia	Sydney Golden Wattle
Acacia ulicifolia	Prickly Moses
Bursaria spinosa var. spinosa	Native Blackthorn
Daviesia ulicifolia Gorse	Bitter Pea
Dillwynia sieberi	Prickly Parrot-pea
Hakea salicifolia	Willow Hakea
Indigofera australis	Native Indigo
Pultenaea microphylla	
Groundcovers	
Aristida ramose	Wire Grass
Aristida vagans	Three-awn Speargrass
Aristida warburgii	Wire Grass
Arthropodium milleflorum	Pale Vanilla Lily
Asperula conferta	Common Woodruff
Austrostipa pubescens	Tall Speargrass
Brunoniella pumilio	Dwarf Blue Trumpet
Centella asiatica	Indian Pennywort
Cheilanthes sieberi	Rock Fern
Chloris ventricosa	Tall Chloris
Dichelachne micrantha	Short-hair Plume Grass
Dichondra repens	Kidney Weed
Einadia hastata	Berry Saltbush
Entolasia marginata	Bordered Panic
Eragrostis brownii	Brown's Lovegrass
Geranium solanderi	Cutleaf Cranesbill
Hypericum gramineum	Small St Johns Wort
Juncus continuus	
Juncus usitatus	Common Rush
Lachnagrostis filiformis	Blown Grass

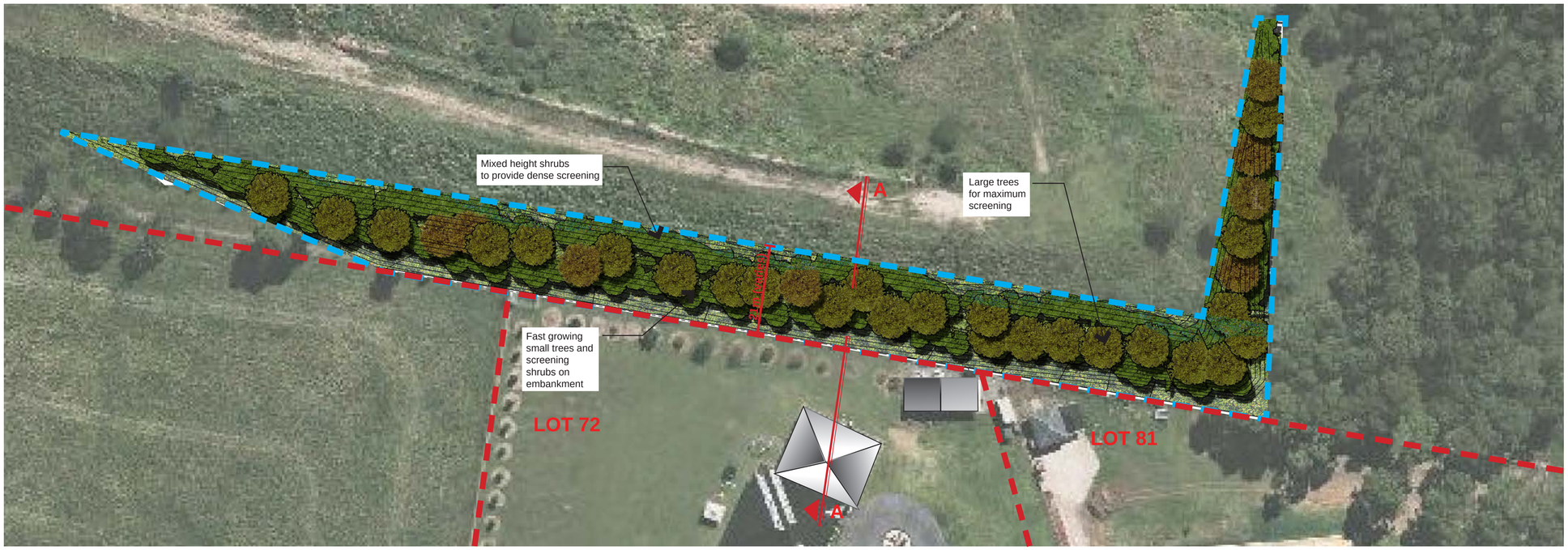
Lomandra longifolia	Spiky-headed Mat-rush
Microlaena stipoides var. *stipoides*	Weeping Grass
Oxalis perennans	
Panicum effusum	Hairy Panic
Persicaria decipiens	Slender Knotweed
Pseuderanthemum variabile	Pastel Flower
Pultenaea microphylla	Spreading Bush-pea
Solanum prinophyllum	Forest Nightshade
Sporobolus creber	Slender Rat's Tail Grass
Themeda australis	Kangaroo Grass

Vines

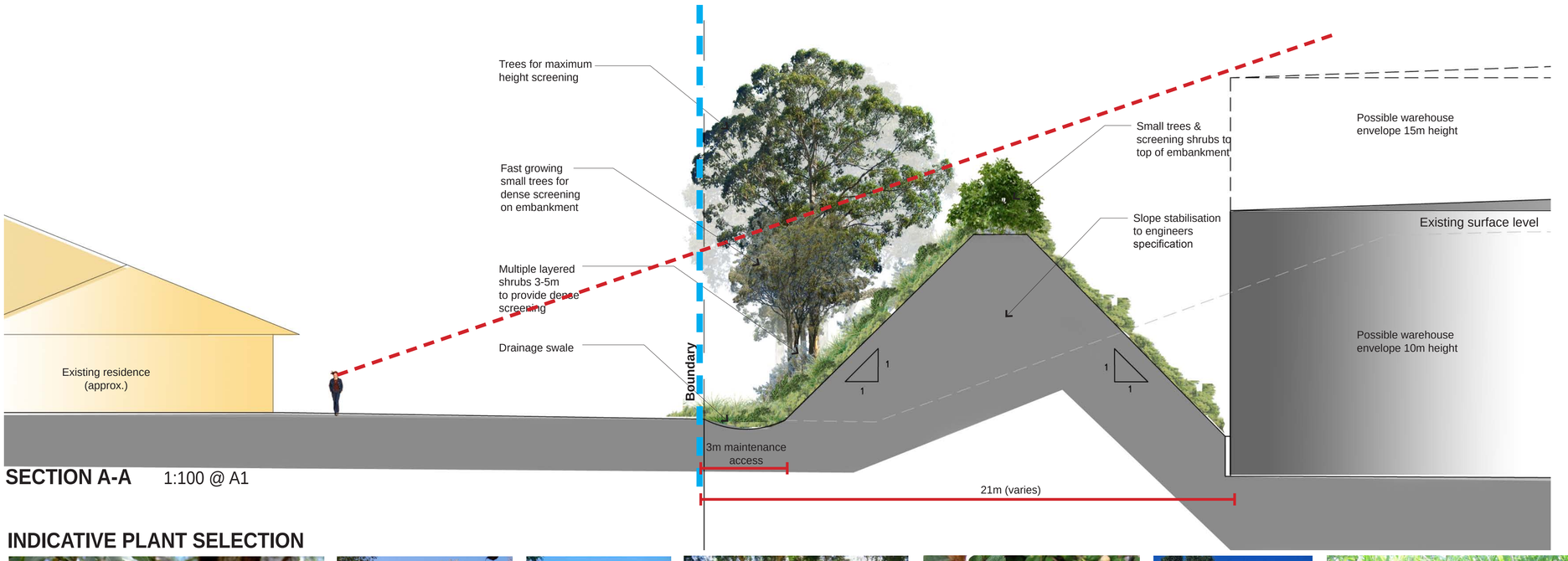
Desmodium varians	
Einadia nutans subsp. *linifolia*	Climbing Saltbush
Glycine clandestine	Twining Glycine
Glycine tabacina Variable	Glycine
Hardenbergia violacea	False Sarsparilla
Parsonsia straminea	Common Silkpod

(Source*. Flora & Fauna Assessment CSR Brick Plant*: Travers Bushfire & Ecology; 10/3/14)

10.0 APPENDIX B: LANDSCAPE PLANS



SOUTHERN BOUNDARY INTERFACE LANDSCAPE BUFFER PLAN 1:500 @ A1



SECTION A-A 1:100 @ A1

INDICATIVE PLANT SELECTION

Angophora floribunda

Corymbia maculata

Acacia implexa

Melaleuca decora

Correa alba

Melaleuca 'Snowstorm'

Imperata cylindrica

INDICATIVE PLANT SCHEDULE

SPECIES	COMMON NAME	MATURE HEIGHT
TREES		
Acacia decurrens	Black Wattle	2-10m
Angophora floribunda	Rough-barked Apple	20m
Corymbia maculata	Spotted Gum	20-25m
Eucalyptus crebra	Narrow-leaved Ironbark	20m
Eucalyptus eugenioides	Thin-leaved Stringybark	30m
Eucalyptus moluccana	Grey Box	25m
Eucalyptus tereticornis	Forest Red Gum	20-50m
Melaleuca decora		4-6m
Melaleuca styphelioides	Prickly-leaved Tea Tree	6-8m
Syncarpia glomulifera	Turpentine	40-50m
SHRUBS		
Acacia falcata	Sickle Wattle	5m
Acacia fimbriata	Fringed Wattle	4-6m
Acacia implexa	Hickory	8m
Acacia longifolia var. longifolia	Sydney Golden Wattle	0.5-3m
Acacia ulicifolia	Prickly Moses	1-2m
Bursaria spinosa var. spinosa	Native Blackthorn	2-5m
Daviesia ulicifolia Gorse	Bitter Pea	2m
Dillwynia sieberi	Prickly Parrot-pea	1-2m
Hakea salicifolia	Willow Hakea	2-3m
Indigofera australis	Native Indigo	1-2m
Pultenaea microphylla		3-4m
GROUNDCOVERS		
Aristida ramose	Wire Grass	0.5m
Aristida vagans	Three-awn Speargrass	0.6m
Aristida warburgii	Wire Grass	0.5m
Austrostipa pubescens	Tall Speargrass	0.6m
Centella asiatica	Indian Pennywort	1m
Chloris ventricosa	Tall Chloris	0.6m
Dichelachne micrantha	Short-hair Plume Grass	1m
Dichondra repens	Kidney Weed	0.3-0.6m
Einadia hastata	Berry Saltbush	0.5m
Entolasia marginata	Bordered Panic	0.4m
Eragrostis brownii	Brown's Lovegrass	0.6m
Geranium solanderi	Cutleaf Cranesbill	0.4m
Hypericum gramineum	Small St Johns Wort	0.3m
Juncus usitatus	Common Rush	0.8m
Lomandra longifolia	Spiky-headed Mat-rush	1m
Microlaena stipoides var. stipoides	Weeping Grass	0.6m
Panicum effusum	Hairy Panic	0.6m
Pseuderanthemum variabile	Pastel Flower	0.8m
Pultenaea microphylla	Spreading Bush-pea	1m
Themeda australis	Kangaroo Grass	0.3-0.6m
VINES		
Glycine clandestine	Twining Glycine	5-8m
Hardenbergia violacea	False Sarsparilla	5-8m

client: CSR LIMITED

0 4 8 12 16 20m

SCALE 1:500@A1 1:1000@A3

327-335 BURLEY ROAD, HORSLEY PARK

LANDSCAPE BUFFER PLAN

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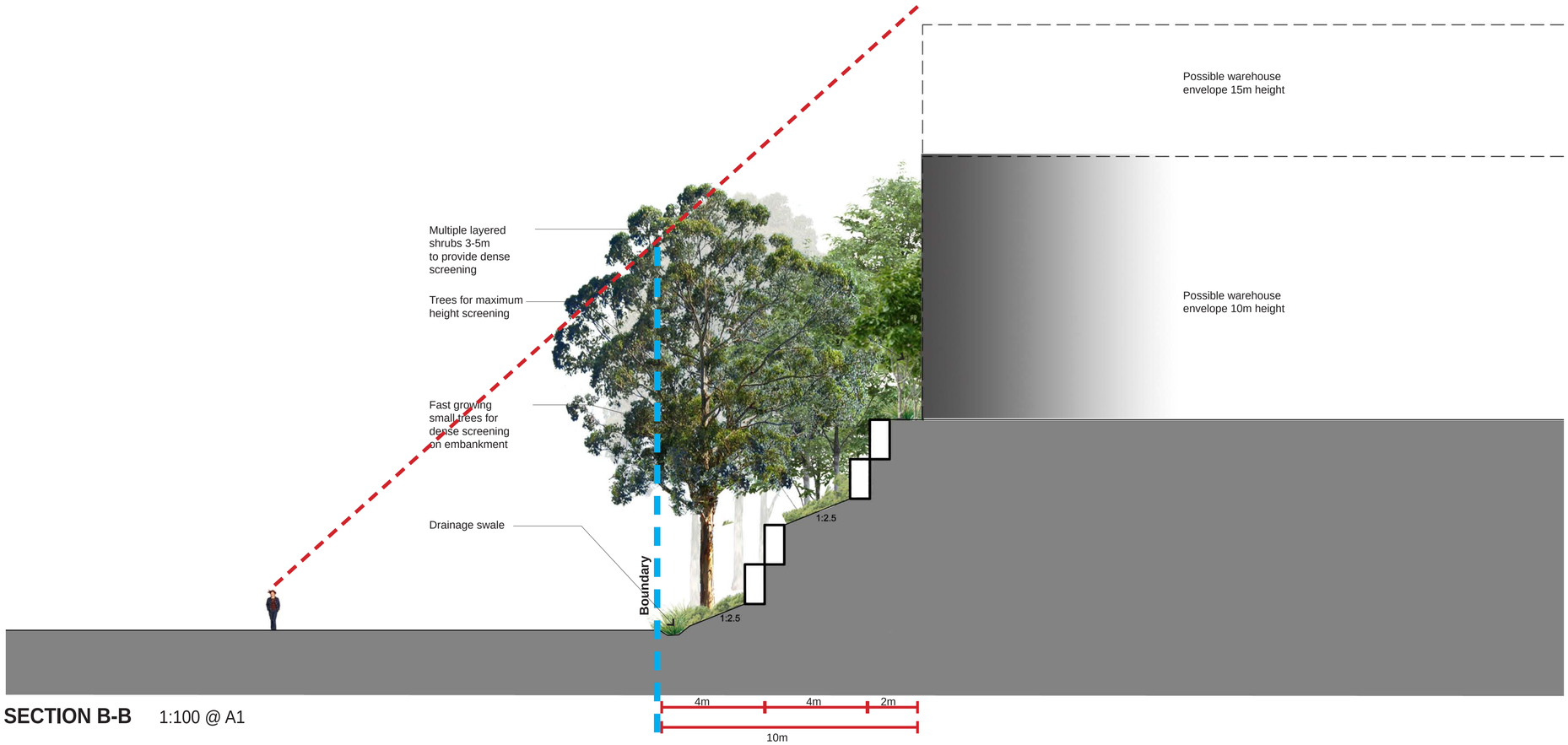
DRAWING: DA-1408-01 D
SCALE: As Shown @ A1



SECTION B-B 1:100 @ A1

INDICATIVE PLANT SCHEDULE

SPECIES	COMMON NAME	MATURE HEIGHT
TREES		
Acacia decurrens	Black Wattle	2-10m
Angophora floribunda	Rough-barked Apple	20m
Corymbia maculata	Spotted Gum	20-25m
Eucalyptus crebra	Narrow-leaved Ironbark	20m
Eucalyptus eugenioides	Thin-leaved Stringybark	30m
Eucalyptus moluccana	Grey Box	25m
Eucalyptus tereticornis	Forest Red Gum	20-50m
Melaleuca decora		4-6m
Melaleuca styphelioides	Prickly-leaved Tea Tree	6-8m
Syncarpia glomulifera	Turpentine	40-50m
SHRUBS		
Acacia falcata	Sickle Wattle	5m
Acacia fimbriata	Fringed Wattle	4-6m
Acacia implexa	Hickory	8m
Acacia longifolia var. longifolia	Sydney Golden Wattle	0.5-3m
Acacia ulicifolia	Prickly Moses	1-2m
Bursaria spinosa var. spinosa	Native Blackthorn	2-5m
Daviesia ulicifolia Gorse	Bitter Pea	2m
Dillwynia sieberi	Prickly Parrot-pea	1-2m
Hakea salicifolia	Willow Hakea	2-3m
Indigofera australis	Native Indigo	1-2m
Pultenaea microphylla		3-4m
GROUNDCOVERS		
Aristida ramose	Wire Grass	0.5m
Aristida vagans	Three-awn Speargrass	0.6m
Aristida warburgii	Wire Grass	0.5m
Austrostipa pubescens	Tall Speargrass	0.6m
Centella asiatica	Indian Pennywort	1m
Chloris ventricosa	Tall Chloris	0.6m
Dichelachne micrantha	Short-hair Plume Grass	1m
Dichondra repens	Kidney Weed	0.3-0.6m
Einadia hastata	Berry Saltbush	0.5m
Entolasia marginata	Bordered Panic	0.4m
Eragrostis brownii	Brown's Lovegrass	0.6m
Geranium solanderi	Cutleaf Cranesbill	0.4m
Hypericum gramineum	Small St Johns Wort	0.3m
Juncus usitatus	Common Rush	0.8m
Lomandra longifolia	Spiky-headed Mat-rush	1m
Microlaena stipoides var. stipoides	Weeping Grass	0.6m
Panicum effusum	Hairy Panic	0.6m
Pseuderanthemum variabile	Pastel Flower	0.8m
Pultenaea microphylla	Spreading Bush-pea	1m
Themeda australis	Kangaroo Grass	0.3-0.6m
VINES		
Glycine clandestine	Twining Glycine	5-8m
Hardenbergia violacea	False Sarsparilla	5-8m

INDICATIVE PLANT SELECTION

Angophora floribunda

Corymbia maculata

Acacia implexa

Melaleuca decora

Correa alba

Melaleuca 'Snowstorm'

Imperata cylindrica

client: CSR LIMITED

0 4 8 12 16 20m

SCALE 1:500@A1 1:1000@A3

327-335 BURLEY ROAD, HORSLEY PARK

LANDSCAPE BUFFER PLAN

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