

Ordinary Meeting of Council

8 March 2023

UNDER SEPARATE COVER ATTACHMENTS

ITEM 9.3

QUEANBEYAN-PALERANG REGIONAL COUNCIL ORDINARY MEETING OF COUNCIL

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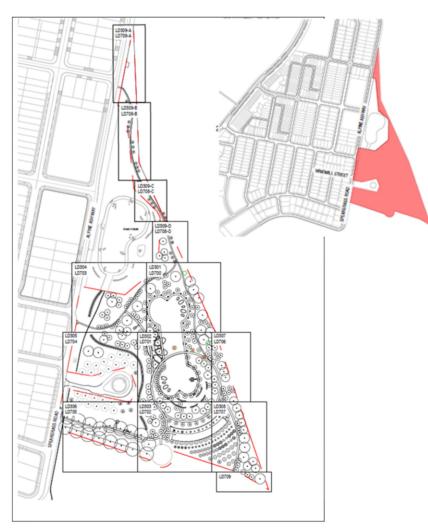
Council Meeting Attachment

8 MARCH 2023

ITEM 9.3 SOUTH JERRABOMBERRA DOG PARK REF

ATTACHMENT 1 DOG PARK REF





Review of Environmental Factors

Prepared for Queanbeyan Palerang Regional Council

South Jerrabomberra Dog Park
Part Lot 850 DP 1270463
Speargrass Road, Tralee NSW 2620

Canberra – Head Office Argyle Corner, 92 Hoskins Street Mitchell ACT 2911



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1. Introduction

This Review of Environmental Factors (REF) has been prepared to support the delivery of the South Jerrabomberra Dog Park.

The REF has been prepared in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2000* (EP&A Reg) and the Guidelines for Division 5.1 Assessments June 2022.

This REF provides a detailed description of the proposal and the statutory planning context. The potential impacts of the proposal have been considered against the matters listed in Clause 228 EP&A Reg. This REF details the measures that will need to be implemented to avoid any potential environmental impacts of the development.

REF Details

Proposed Development	The development of a Dog Park to be located to
	the east of the residential estate of South
	Jerrabomberra.
Development Without Consent	The works are characterised as development
	without consent under Division 12 Parks and
	other public reserves Clause 2.73 (3) of State
	Environmental Planning Policy (Transport and
	Infrastructure) 2021 (SEPP Transport and
	Infrastructure) which includes;
	3) Any of the following development may be carried out by or on behalf of a council without consent on a public reserve under the control of or vested in the council—
	(a) development for any of the following purposes—

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- roads, pedestrian pathways, cycleways, single storey car parks, ticketing facilities, viewing platforms and pedestrian bridges,
- (ii) recreation areas and recreation facilities (outdoor), but not including grandstands,
- (iii) visitor information centres, information boards and other information facilities,
- (iv) lighting, if light spill and artificial sky glow is minimised in accordance with the Lighting for Roads and Public Spaces Standard,
- (v) landscaping, including landscape structures or features (such as art work) and irrigation systems,
- (vi) amenities for people using the reserve, including toilets and change rooms,
- (vii) food preparation and related facilities for people using the reserve,
- (viii) maintenance depots,
- (ix) portable lifeguard towers,
- (b) environmental management works,
- (c) demolition of buildings (other than any building that is, or is part of, a State or local heritage item or is within a heritage conservation area).

Individual elements also satisfy the provision of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Codes SEPP). These include

Planting of exotic trees (refer planting schedule)

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	 Planting of native trees (refer planting schedule)
	 Planting of grasses (refer planting schedule)
	Landscape materials and finishes as set out in the schedule
	Dog agility equipment as set out in the schedule
	Fencing and bollards
	Furniture and structures such as park
	benches, waste bins, dog waste bag
	dispenser,
Site Address	Speargrass Road, Tralee NSW 2620
Property Description	Part Lot 850 DP 1270463
Site Area	Approx 3ha (subject to survey) will form same
	parcel as Pond in Stage 1F which has works
	approved under another CC however on
	approved under another CC however on completion the two will form one lot of
Site Plan	completion the two will form one lot of
Site Plan Owner	completion the two will form one lot of approximately 7ha. Village Building Company to be vested to
	completion the two will form one lot of approximately 7ha.
	completion the two will form one lot of approximately 7ha. Village Building Company to be vested to

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1.1 Planning Approval Pathway

The proposed works are an activity for the purpose of Section 5.1 of the EP & A Act. The works are being undertaken by Village Building Company on behalf of Council in addition to the requirements of the South Jerrabomberra Local Infrastructure Contributions Plan 2018. QPRC is the determining authority for approval of this Review of Environmental Factors. Part 5 of the EP&A Act requires that the determining authority examine and take into account all matters affecting or likely to affect the environment by reason of the proposed activity.

Under Part 5 a determining authority is defined as "...a Minister or public authority and, in relation to any activity, the Minister or public authority by on or whose behalf the activity is or is to be carried out or any Minister of public authority whose approval is required in order to enable the activity to be carried out..."

Section 5.5 of the EP&A Act requires the determining authority to 'examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity'.

This REF has therefore been prepared to assess the environmental impacts of the proposal and to determine if it is likely to have a significant impact on the environment. Factors that need to be taken into account when considering the likely impact of an activity on the environment re outlined in Clause 228 of the EP&A Act Reg and summarised in Section 4 of this report.

If the determining authority (in this case Council) decides the proposal would likely significantly affect the environment an environmental impact statement (EIS) must be prepared.

1.2 Consultation

Village Building Company has worked closely with Council in the design of the South Jerrabomberra Dog Park and will continue to engage with Council's Open Space and Recreation Team to deliver the asset to Council in a manner that is acceptable for the benefit of both new residents in the estate and the wider community.

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Description of the Proposal

A description of the proposal, design principles and approach has been prepared by Spiire and is outlined below.

2.1 General Overview

The REF deals with the construction of the South Jerrabomberra Dog Park that will deliver public open space that will be space for residents and the wider community as owners of small and large dogs but also accessible spaces for those wishing to enjoy the BBQ facilities within the confines of the parkland. The areas for dogs will be fenced and separate to the rest of the open space, toilet facilities and BBQ facilities within the broader park.

The park will include significant planting both native and exotic, as well as path networks, fencing, garden beds, toilet facilities x 2, BBQ facilities and shelter, seating, bike racks, bubblers and access to tap water, bins with dog waste dispensers and bench seating to provide a broad summary. Refer document list below and inserted.

Accompanying Documentation

Below is a list of the accompanying documentation annexed to this REF;

Annexure 1 – Dog Park South Jerrabomberra Bulk Earthworks Village Building Company

Annexure 2 - Civil Set South Jerrabomberra Dog Park Road REF Village Building Company

Annexure 3 – Dog Park Landscape Architecture Drawings for Village Building Company

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Figure 1



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General Open Space and Landscaping

The space will comprise a mixture of native and exotic plantings throughout the park. Species of plants have been identified that are suitable for Dogs to play in close proximity to.

List of plants includes;

Exotic trees will include the following;

Nys	Nyssa sylvatica	Tupelo
Upt	Ulmus parvifolia 'Todd'	Chinese Elm
Lai	Lagerstroemia indica	Crepe-myrtle
Llt	Liriodendron tulipifera 'Fastigiata'	Tulip Tree - Fastigiate
Qru	Quercus rubra	English Oak
Acb	Acer buergerianum	Trident Maple
Qp	Quercus palustris	Pin Oak
PYcl	Pyrus calleryana 'Chanticleer' syn. 'Cleveland Select'	Cleveland Select Callery Pear

Native trees will include the following;

AmI	Acacia melanoxylon	Australian Blackwood
Вр	Brachychiton populneus	Kurrajong Tree
Cm	Corymbia maculata	Spotted Gum
Сс	Corymbia citriodora 'Scentuous'	Dwarf Lemon Scented Gum
Es	Eucalyptus scoparia	Wallangarra White Gum
CI	Cupressocyparis leylandii	Conifer Species to match surrounding trees in Stage 1E
Cca	Corymbia citriodora	Lemon Scented Gum

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A fruit orchard will be planted within the park close to the carpark facility and will include the following species;

Pa	Prunus armeniaca	Apricot Tree
BB	Ballerina 'Bolero	Columnar Apple
PpGQ	Prunus persica 'Golden Queen'	Peach Tree
Oe	Olea europaea	Olive Tree
Cs	Citrus sinesis	Orange Tree
Cih	Citrus hystrix	Kaffir Lime Tree
Cil	Citrus limon 'Lisbon'	Lemon Tree
Pda	Prunus domestica	Plum Tree
Pd	Prunus dulcis	Almond Tree

Carpark tree species will include;

PLa | Platanus × acerifolia | London Plane

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Shrubs and ground cover will include the following species to be planted throughout the park;

RHs	Rhagodia spinescens	Salt Bush
Dir	Dianella revoluta	Blueberry Lily
Hav	Hardenbergia violacea 'Meema'	False Sarsaparilla
LDI	Lomandra longifolia 'Tanika'	Mat Rush
Pm	Philotheca myoporoides subsp. myoporoides	Wax Flower
PIE	Poa labillardierei 'Eskdale'	Eskdale Tussock Grass
Сс	Calocephalus citrius	Lemon Beauty heads
Lm	Liriope muscari 'Evergreen Giant'	Evergreen Giant Liriope
LDI	Lomandra longifolia 'Tanika'	Mat Rush
Hafw	Hardenbergia 'Flat White'	

The swale planning mix will include;

Срр	Carex appressa	Tall Sedge
Eaca	Eleocharis acuta	Spikerush
Jfl	Juncus flavidus	Yellow Rush
Cte	Carex tereticaulis	Rush Sedge
Jut	Juncus usitatus	Common Rush

The landscape concept for the development is based on creating a play space for humans and their canine friends and cater for various sizes and breeds of dogs with the small dog play area and large dog play space.

The dog park is designed to be set back from the residents fronting the open space to behind the low level reservoir so that there is a separation between the two areas.

The park will provide open space amenity to the new estate residents and visitors alike. The design intent is to provide a range of activities and community opportunities, throughout the year, to as wide a range of users as possible e.g. dog play groups etc.

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Construction Activities

Site preparation will commence from February 2023 with bulk earthworks and due for completion September 2023. The following sequence of construction is anticipated:

Approvals January/February 2023 – includes approval and exhibition of this REF document and comment on detailed design from the engineering team.

Construction – to commence early 2023 and be completed through 2023.

The built form components of the park will include the following;

- 1. Bulk Earthworks
- 2. Civil works for the delivery of the carpark and road.
- 3. Delivery of Dog Bone shaped play area, plantings, fencing, paving, toilets and BBQ shelter.

The installation and construction activities have the potential to generate the following impacts:

- Noise
- . Dust
- . Traffic
- Drainage and run off

These operational impacts and proposed mitigation measures have been considered in **Section 4** of this REF.

Operational Impacts

The impact of the end use on the environment is minimal.

The South Jerrabomberra Dog Park will be dedicated to Council in addition to the open space required under the Local Infrastructure Development Contributions Plan. The South Jerrabomberra Dog Park will be managed in a manner similar to that of any other public space or public domain, consistent with Council's obligations under the *Local Government Act, 1993* as it relates to Community Land.

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The delivery of the South Jerrabomberra Dog Park is a key element of the South Jerrabomberra neighbourhood and will provide a positive public benefit, increasing the area of accessible public open space and providing a focal and meeting point for the future residents.

2.2 Site Description

The South Jerrabomberra Dog Park is approximately 5ha in area, located on Speargrass Road, South Jerrabomberra.

The site has excellent access to public transport and pedestrian pathway networks and is located to the east of the estate. The site has good access to public transport and pedestrian pathway networks and is set back from Speargrass Road so that the residents can enjoy the open space elements whilst being in close proximity to excellent public amenity. The site also has excellent vehicle access with the construction of the road and carparking under the REF. The site will be in close walking distance to a large proportion of Estate 1 and part of Estate 2 South Jerrabomberra.

2.3 Landscape Approach

The landscape intent is to create attractive and high quality landscape for the amenity of local residents and visitors alike. The landscape design aims to create a contemporary, functional and aesthetically pleasing landscape that provides amenity for small and large dogs alike with the space being cleverly designed bone shaped play area which is has spaces allocated for small and large dogs.

The following general principles for the landscape approach to the site;

- Use of high quality landscape design to integrate the proposed development with its broader urban and rural context and the proposed estate streetscapes;
- · Design spaces that will become highly activated and vital to the community;
- Ensure that communal open spaces have access to sunlight whilst also providing adequate shelter and wind protection;

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- Maximise opportunities for social interaction, as well as surveillance, through arrangement of seating, terraces and views;
- Contribute to local biodiversity by increasing the biomass and diversity of plant species included in the landscape;
- Enhance local cultural heritage values by incorporating indigenous story telling into the park;
- Provide sufficient soil depths to enable trees and large shrubs to be grown to their maximum heigh and spread;
- · Create visual harmony with the surrounding area;
- Create a robust landscape made from simple materials, proven planting and bold forms that can be managed and maintained by Council;
- Provide a range of opportunities including creating a meeting place for the community be they
 dog owners or not;
- · Provision of a Kelpie sculpture by Gillie and Marc at the Park's entrance;
- Provide clear and integrated access as well as security perimeter fencing
- · Make boundaries and interfaces green, verdant, and alive; and
- Consider the landscape as a composition to be viewed as accessible but also set back from nearby residences.

2.4 Planting Design

The planting scheme for the South Jerrabomberra Dog Park uses a palette of native and exotic trees and a mix of shrubs and ground covers chosen for their sculptural characteristics with deciduous trees chosen for their provision of shade in summer and solar access in winter.

Planting is intended to;

- Establish the various park spaces, internal park pathways and external streetscape as a series of diverse 'soft' and 'hard' landscape spaces'
- Incorporate soil volume and mulched gardens within the constraints of the site;
- Use landscape elegantly to create identity and maximise amenity as a 'premier' Dog Park for Queanbeyan Palerang Regional Council;
- Be robust, suited to the available aspect, work with ambient wind levels and minimise water use;
- Provide a community orchard and gardening space for the residents.

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2.5 Maintenance

The maintenance needs of any landscape are absolutely tied to the resolution of the design at planning level. This proposal attempts to negotiate the desire for the verdant planted areas within the need to ensure that these plantings have longevity within a low-maintenance environment.

The proposal includes;

- A strong palette of proven performing plants which provide maximum shade and form, are tolerant of low-water conditions and create micro climates;
- · Highly resilient plants provided around the dog bone feature and BBQ shelter and facilities; and
- A planting palette that utilises several species for each application ensuring seasonal change as well as a consistent level of amenity should one of the species not perform.

2.6 Proposed Landscape Features

Dog Bone

The large and small dog play space will be segmented into 2 halves that relate to small and large dogs focused activities to excite these dogs such as ramp bridges, agility equipment and hurdles. The play space is designed to maximise the play opportunities for the Dog Park. The Dog Bone being fenced into these two segments will avoid conflict between small and large dogs and planting within and around these spaces will be orientated to reduce heat from direct sunlight and maximise surveillance.

BBQ Shelter and Toilet Amenity

The BBQ area will be located so that it is separate to the Dog Bone fenced areas and allows the whole community to benefit from this facility. We see bushwalkers who may wish to utilize the future walking trails in the Stewardship site benefit from its use as well.

The two toilet facilities will be collocated with the BBQ Shelter and the carpark to allow for clear access for both bushwalkers, park users and dog owners.

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3 Statutory Planning Context

The development is considered development without consent being an activity undertaken on behalf of a public authority (Council) under the *State Environment Planning Policy (Infrastructure) 2007 (SEPP)*. As individual elements, most of the work proposed, including landscaping, pathways and equipment would ordinarily be exempt development under *State Environmental Planning Policy (Exempt and Complying Development Code) 2008* (Codes SEPP).

3.1 State Environmental Planning Policy

State Environmental Planning Policy (Transport and Infrastructure) 2021

The aim of the SEPP is to facilitate the timely and efficient delivery of infrastructure by public authorities throughout NSW. It does this by making certain infrastructure permissible with or without development consent.

Division 12 of the Transport and Infrastructure SEPP provides that recreation areas, when delivered by or on behalf of Council and on land controlled by Council, is development without consent.

- (3) Any of the following development may be carried out by or on behalf of a council without consent on a public reserve under the control of or vested in the council—
 - (a) development for any of the following purposes—
 - (i) roads, pedestrian pathways, cycleways, single storey car parks, ticketing facilities, viewing platforms and pedestrian bridges,
 - (ii) recreation areas and recreation facilities (outdoor), but not including grandstands,
 - (iii) visitor information centres, information boards and other information facilities,
 - (iv) lighting, if light spill and artificial sky glow is minimised in accordance with the Lighting for Roads and Public Spaces Standard,
 - (v) landscaping, including landscape structures or features (such as art work) and irrigation systems,
 - (vi) amenities for people using the reserve, including toilets and change rooms,

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- (vii) food preparation and related facilities for people using the reserve,
- (viii) maintenance depots,
- (ix) portable lifeguard towers,
- (b) environmental management works,
- (c) demolition of buildings (other than any building that is, or is part of, a State or local heritage item or is within a heritage conservation area).

This provision relates to the construction of the toilet facility, The landscaping, pathways and equipment fall under exempt development in the Codes SEPP (see below).

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

The Codes SEPP makes provisions for a range of land uses as Exempt Development. These include the following;

Subdivision 15 Earthworks, retaining walls and structural support

Subdivision 24 Landscaping Structures

Subdivision 28 Pathways and Paving

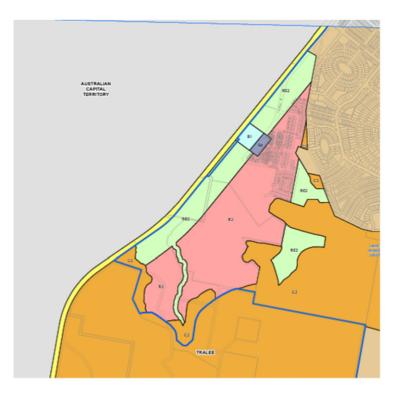
Despite the exemption, all of these elements have been considered holistically in the REF package.

3.2 Local Environment Plan

The land is within the Queanbeyan-Palerang Regional Local Environmental Plan 2022 (QPRLEP) and is zoned RE2 Private Recreation.

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Permissibility

A recreation area is defined in the LEP as follows;

recreation area means a place used for outdoor recreation that is normally open to the public, and includes—

- (a) a children's playground, or
- (b) an area used for community sporting activities, or
- (c) a public park, reserve or garden or the like, and any ancillary buildings, but does not include a recreation facility (indoor), recreation facility (major) or recreation facility (outdoor).

As outlined above, the Infrastructure SEPP, Codes SEPP and QPRLEP operate in unison to authorise the proposed land use as development without consent.

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4 Impacts and Mitigation

4.1 General

The potential for impact is greatest during the construction phase of the project and include;

- · Noise and vibration
- Waste
- Traffic
- Water quality and drainage

Rehabilitation of disturbed areas, including areas used for stockpiling and material storage will also occur during construction.

These matters will generally be considered in a Construction Environmental Management Plan. The CEMP should incorporate the mitigation measures and requirements of this REF as outlined in this section and meet the requirements of Council.

Construction Site Management Plan

Following endorsement of the proposal by Council it is recommended that prior to construction commencing, a Construction Site Management Plan will be prepared to ensure that appropriate environmental protocols are adhered to during the construction period.

The plan will include specific details pertaining to the following matters to the extend they are relevant to the proposal;

- · Location and materials for protective fencing and hoardings to the perimeter on the site
- Provisions for public safety
- Pedestrian and vehicular site access points and construction activity zones

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- Details of construction traffic management, including proposed truck movements to and from the site and estimated frequency of those movements, and measures to preserve pedestrian safety in the vicinity of the site
- · Details of any bulk earthworks to be carried out
- · Location of site storage areas
- · Equipment used to carry out all works
- · A garbage container with a tight-fitting lid
- · Dust, noise and vibration control measures
- · Location of temporary toilets.

Mitigation

The proponent will prepare a Construction Site Management Plan prior to the commencement of any activities on the site. The plan should include, but not be limited to the matters identified above and include the relevant control measures proposed. The plan will be the primary mitigation tool used by Council in ensuring that any potential impacts area identified and addressed.

4.2 Noise and Vibration

There will be temporary construction noise and vibration from heavy equipment and general construction activity during this phase. Noise can be managed through the implementation of reasonable hours of operation limited noise generating activities from 7am to 7pm. It is acknowledged that, from time to time it may be necessary to outside of the core hours, for example to limit disruption to traffic in peak periods.

Mitigation

Construction Site Management Plan.

4.3 Traffic

The proposal is likely to general additional light and heavy vehicle traffic for the duration of construction.

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Mitigation

Traffic impacts should be addressed in the Construction Site Management Plan and include the number and type of vehicles and plant proposed.

4.4 Water Quality and Drainage

It is anticipated that temporary arrangements will need to be in place to manage drainage on the site for the duration of the construction phase and prior to the final drainage plan implementation. The details of management of water on site pre and post construction will need to be included in the final plans.

Mitigation

The Construction Site Management Plan will include water and drainage for the construction phase and proposal.

4.5 Site Disturbance

Plans include the area of the site subject to disturbance, stockpiling of materials and temporary work areas will be contained to this area. The disturbed area will need to be reinstated as part of the landscaped area on completion.

Interim measures, including erosion and sedimentation control will be undertaken to manage site disturbance.

Mitigation

Preparation of erosion and sediment control plan. Disturbed area to be included on bulk earthworks plan.

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4.6 Safety and Security

The proposal has been designed consistent with the Crime Prevention Through Environmental Design (CPTED) principles to improve the safety and security of the South Jerrabomberra Dog Park.

The NSW Crime Prevention and Assessment of Development Applications (2001) guidelines identifies four principles that need to be used in the assessment of a proposal or activity to minimise the opportunity for crime:

- Surveillance
- Access Control
- Territorial Enforcement
- · Space Management

Mitigation

The proposed park will offer an increased level of safety for users and the wider community by considering the functional relationship between the open space and its planned use of areas by;

- Offer clear sightlines with no visual obstructions from landscape features such as low limbed trees, shrubs and hedges, walls or level changes;
- Encourage the use of the small and large dog play areas to ensure that there is separation between them.
- Avoid planting medium to large shrubs and focus on trees and grass where appropriate;
- Create nearby accessible pathways and connected to other areas, free from hazardous trip points and be easily maintained;
- · Consider the CPTED recommendations of crime risk assessment;
- Encourage walking which overlooks the recreational facilities of the park;
- · Clear and visible signage and appropriate lighting for safety and way-finding; and,
- · Adequate clearances and setbacks of landscape elements from adjoining infrastructure.

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4.7 Summary of Impact

Clause 228 of the EP&A Regulation lists the factors that an authority must take into account when assessing the impact of the proposed activity on the environment. These factors and summarises of the findings of the REF are identified in the table below.

EP&A Reg	Comment
(a) any environmental impact on a community,	Minor impacts during the construction phase of the proposal with potential noise, dust, access and traffic issues to be managed through the CSMP.
	Construction to occur ahead of residents moving into the area.
	The design of the park incorporates CPTED principles to discourage criminal activity and improve safety and security
(b) any transformation of a locality,	Positive improvement in general aesthetic and activation of the public domain
(c) any environmental impact on the ecosystems of the locality,	Existing disturbed environment, no impact. Biodiversity report has been provided with the REF.
(d) any reduction of the aesthetic, recreational, scientific or other environmental quality or value	Objective of the proposal is to improve the recreational outcomes of the community.
of a locality,	Includes the delivery of the Dog Park and will result in an improvement in the aesthetic presentation of the immediate area
(e) 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,	No. Not applicable.
(f) any impact on the habitat of protected animals (within the meaning of the Biodiversity Conservation Act 2016),	No. Not applicable
(g) any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air,	No. No applicable
(h) any long-term effects on the environment,	The proposal is unlikely to have any long-term impact on the environment
(i) any degradation of the quality of the environment,	The proposal is unlikely to lead to the degradation of the environment

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(j) any risk to the safety of the environment,	Low risk, managed through CSMP
(k) any reduction in the range of beneficial uses of the environment,	No/Not applicable.
(I) any pollution of the environment,	Risk of pollution during construction managed through the CSMP. Short term and manageable
(m) any environmental problems associated with the disposal of waste,	Construction waste can be managed through the construction and operational phase of the activity
 (n) any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply, 	
(o) any cumulative environmental effect with other existing or likely future activities,	The proposal is unlikely to have any cumulative effects
(p) any impact on coastal processes and coastal hazards, including those under projected climate change conditions	Not applicable

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5. Conclusion

This REF seeks to identify the potential environmental impacts of the proposed South Jerrabomberra Dog Park.

The works are to be undertaken on behalf of Council. The Infrastructure SEPP allows the work to be undertaken on behalf of Council without the need to obtain development consent. However, the project is required to be assessed under Part 5 of the EP&A Act which requires Council to examine all matters likely to affect the environment as a result of the activity.

This REF concludes there will be relatively minor and temporary impacts associated with the construction phase of the delivery of the Dog Park and that this would have no impact on residents as the area is yet to be developed. Proceeding with the construction of the Dog Park ahead of the population will significantly minimise disruption that would otherwise be inevitable once people have started to move into the area.

The construction impacts will, therefore, be minimal but include noise, waste management, site disturbance and traffic during construction. It is a recommendation of this REF that a Construction Site Management Plan be prepared prior to construction commencing and incorporate the mitigation measures and requirements to manage these impacts.

The REF has considered the short- and long-term environmental impacts of the activity and identified mitigation measures to minimise potential impacts. The REF provides a summary of the matters that are required to be considered in clause 228 of the EPA Reg. Based on the supporting information and provided the mitigation measures identified in the REF are satisfactorily implemented, the proposed scheme is unlikely to have a significant environmental impact.

Accordingly, the preparation of an EIS is not considered necessary in this instance.

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Annexure 1 -Dog Park South Jerrabomberra Bulk Earthworks Village Building Company

Dropbox Link:

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Annexure 2 – Civil Set South Jerrabomberra Dog Park Road REF Village Building Company

Dropbox Link:

 $\frac{\text{https://www.dropbox.com/s/vo7mhb0rbx9ib44/309962\%20SOUTH\%20JERRABOMBERRA\%20DOG\%20PARK\%20}{-\%20CIVIL\%20REF\%20-\%20REV\%20B.pdf?dl=0}$

Annexure 3 – Dog Park Landscape Architecture Drawings for Village Building Company

Dropbox Link:

 $\frac{\text{https://www.dropbox.com/s/ubm9u4ofahg6z1a/309962\%20SOUTH\%20JERRABOMBERRA\%20ESTATE\%201\%20DG\%20PARK.pdf?dl=0}{\text{bog\%20PARK.pdf?dl=0}}$

Canberra – Head Office Argyle Corner, 92 Hoskins Street Mitchell ACT 2911

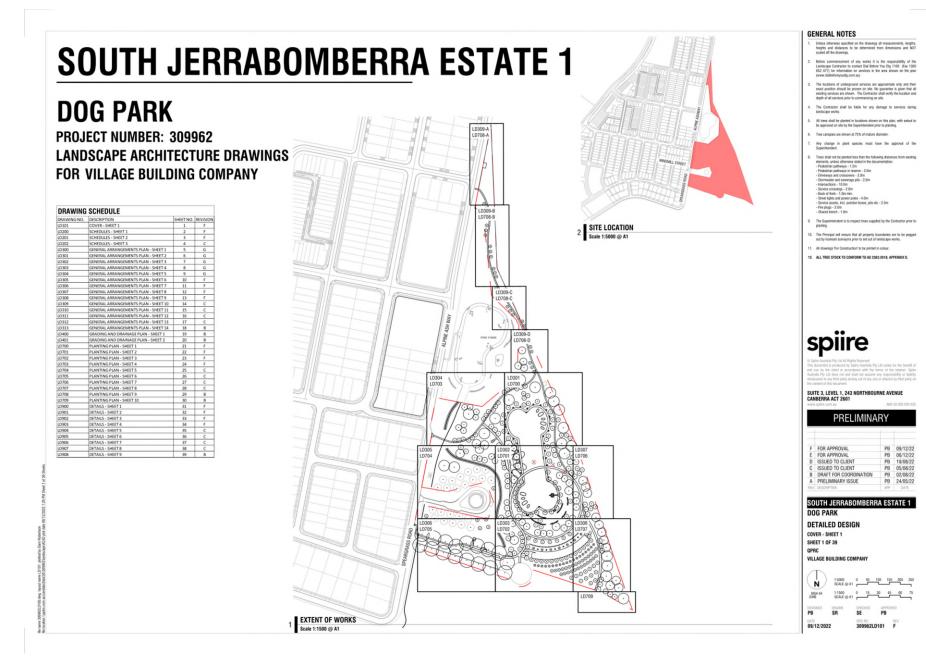
QUEANBEYAN-PALERANG REGIONAL COUNCIL

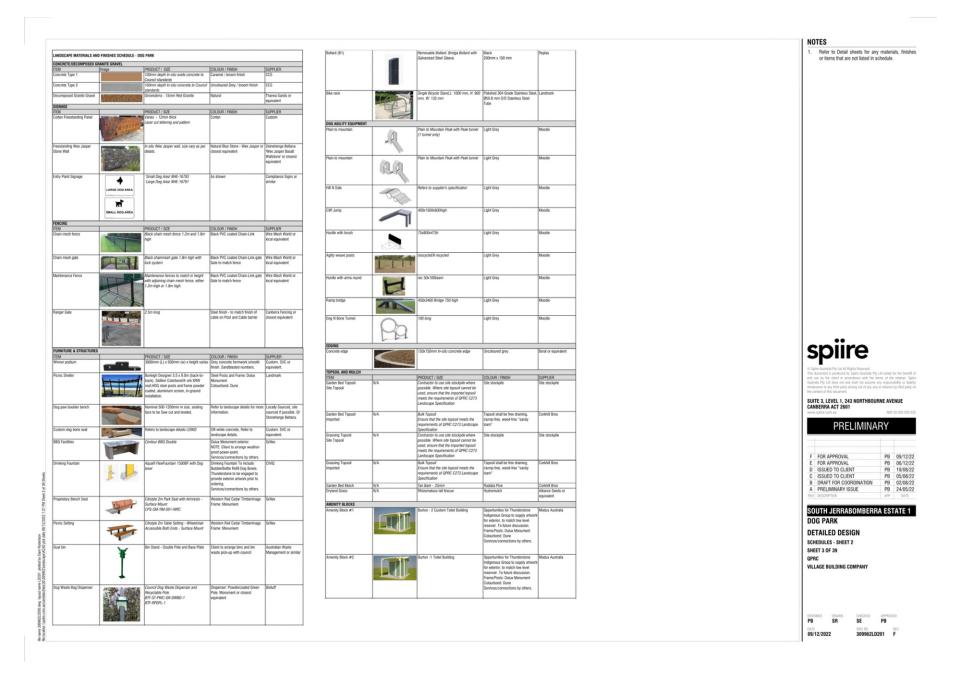
Council Meeting Attachment

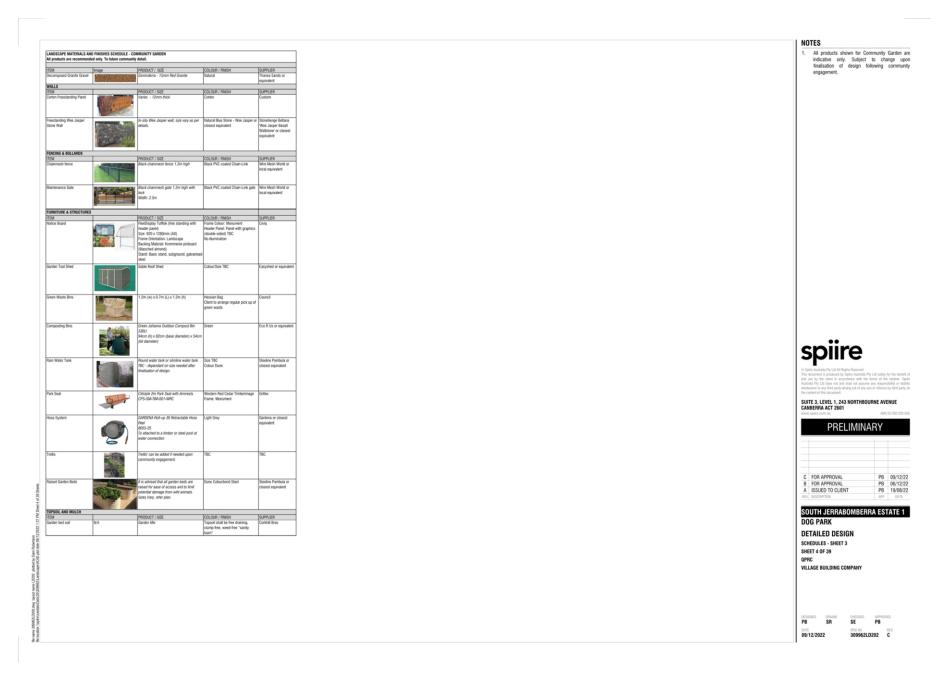
8 MARCH 2023

ITEM 9.3 SOUTH JERRABOMBERRA DOG PARK REF

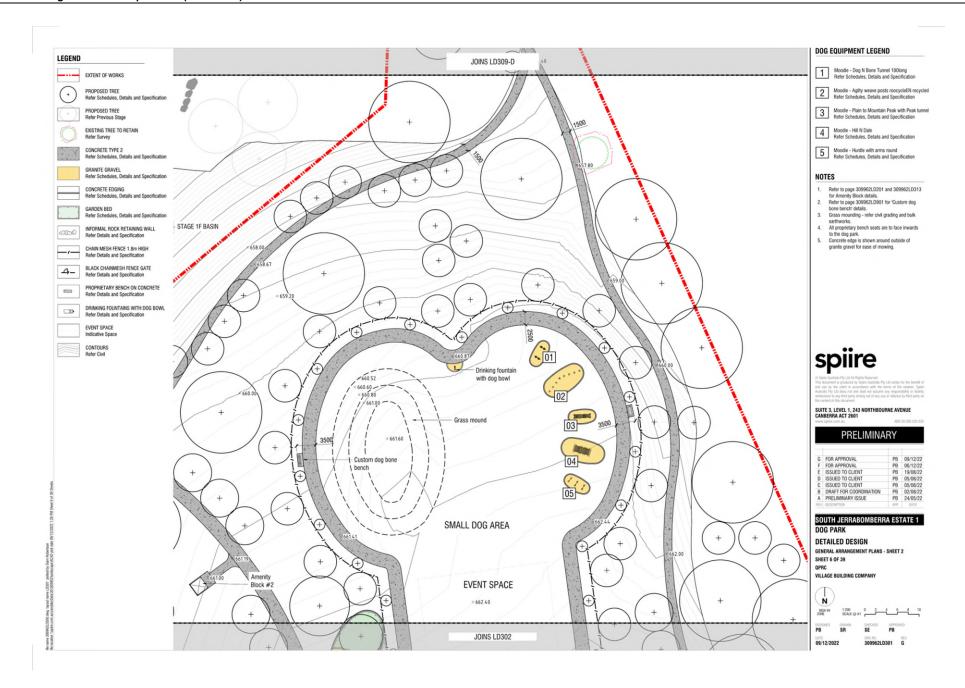
ATTACHMENT 2 DOG PARK LANDSCAPE PLANS

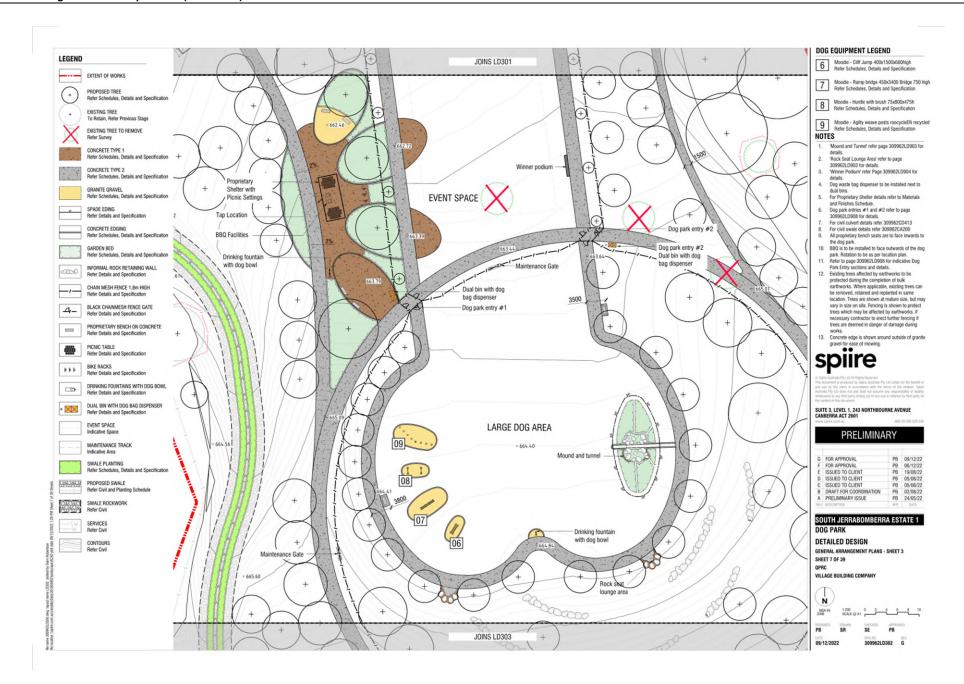










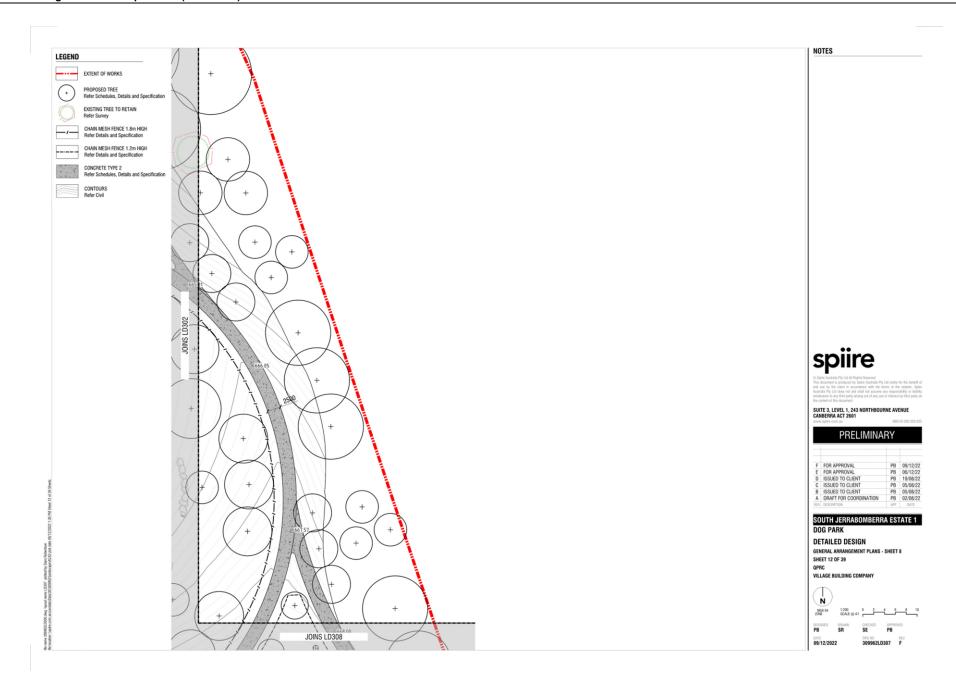


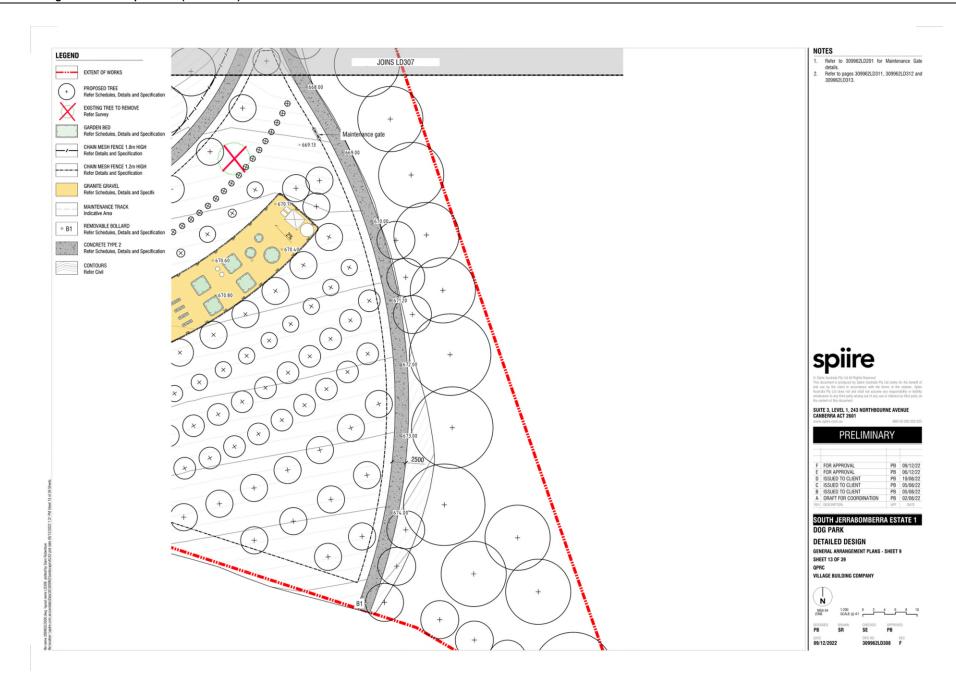


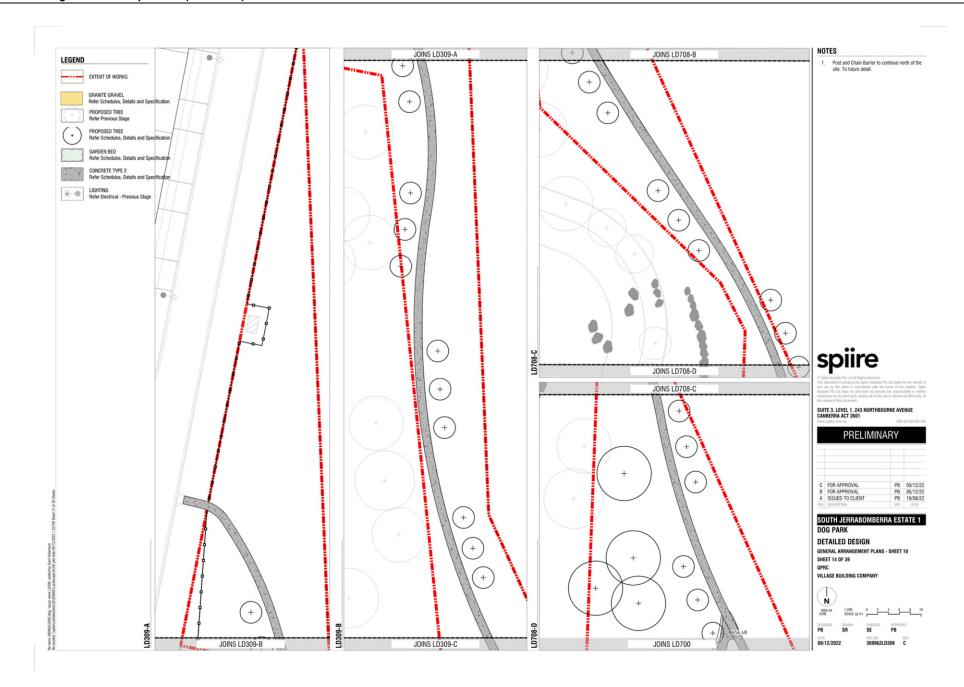


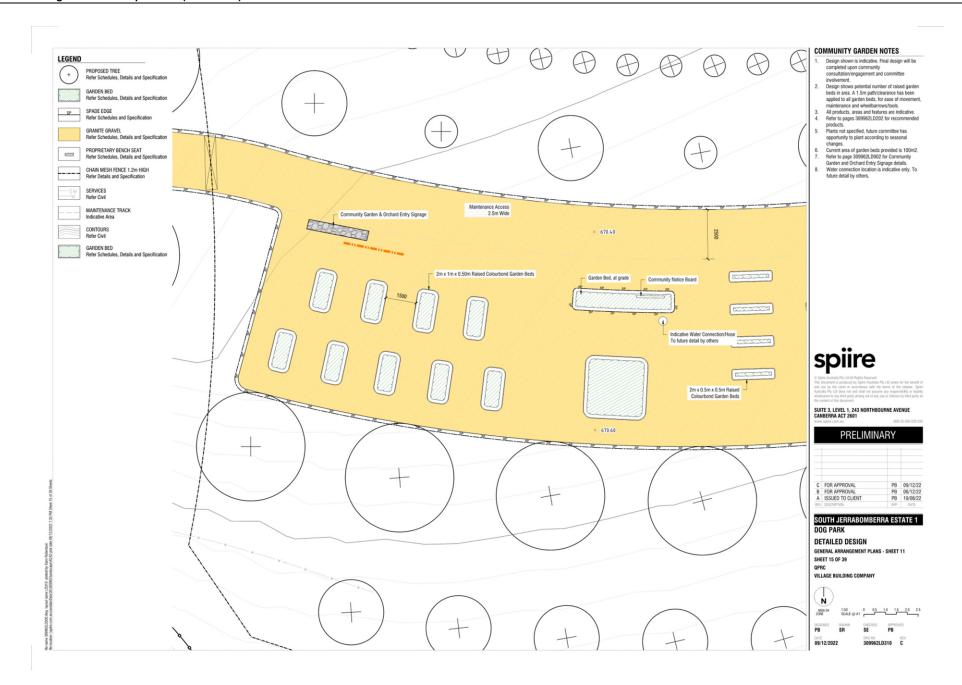


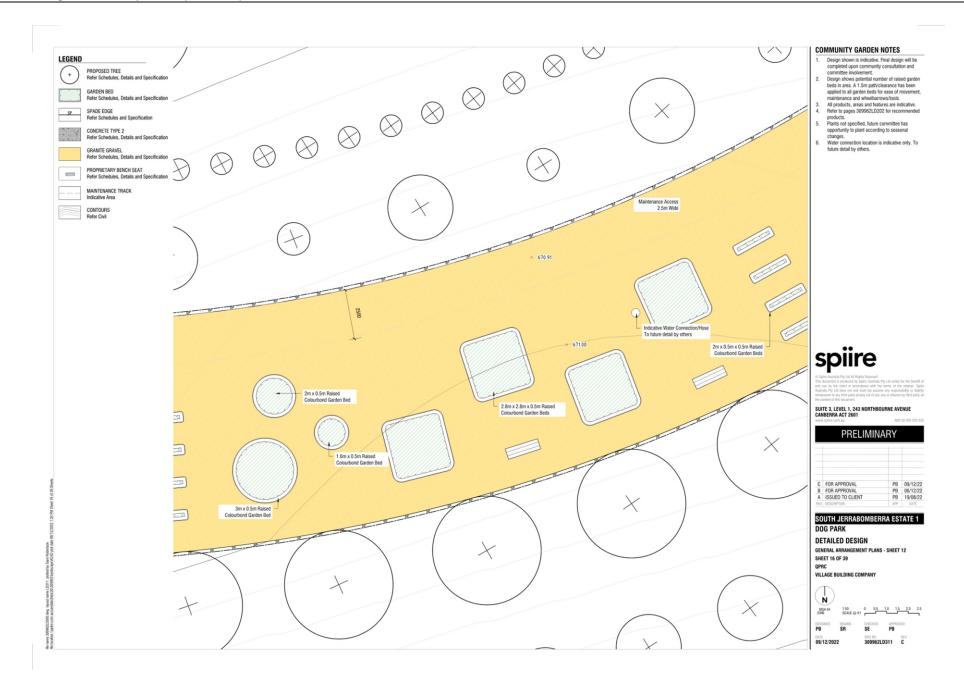




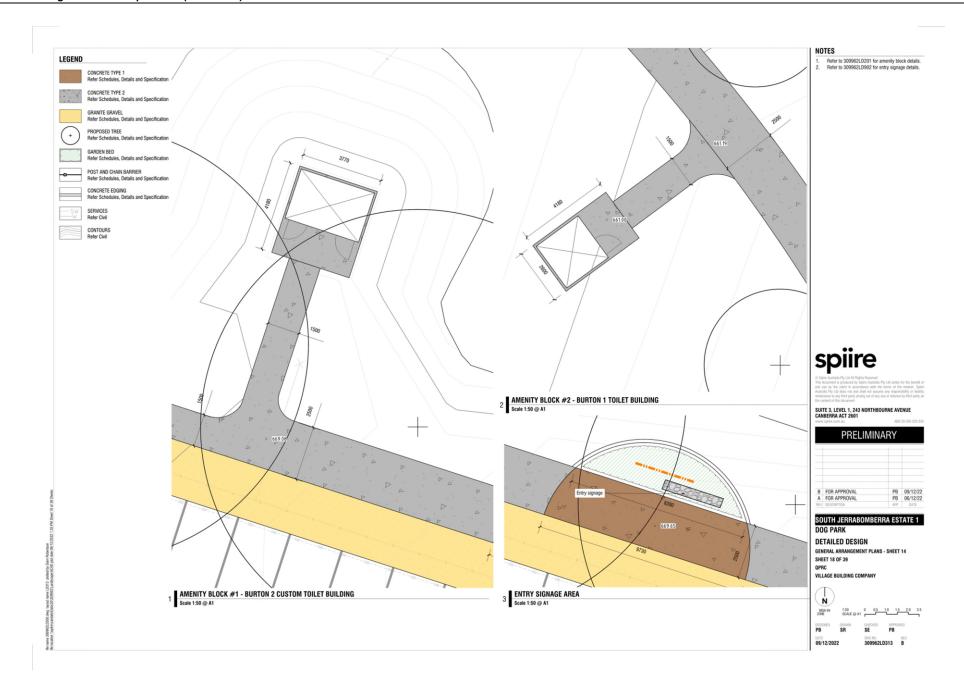






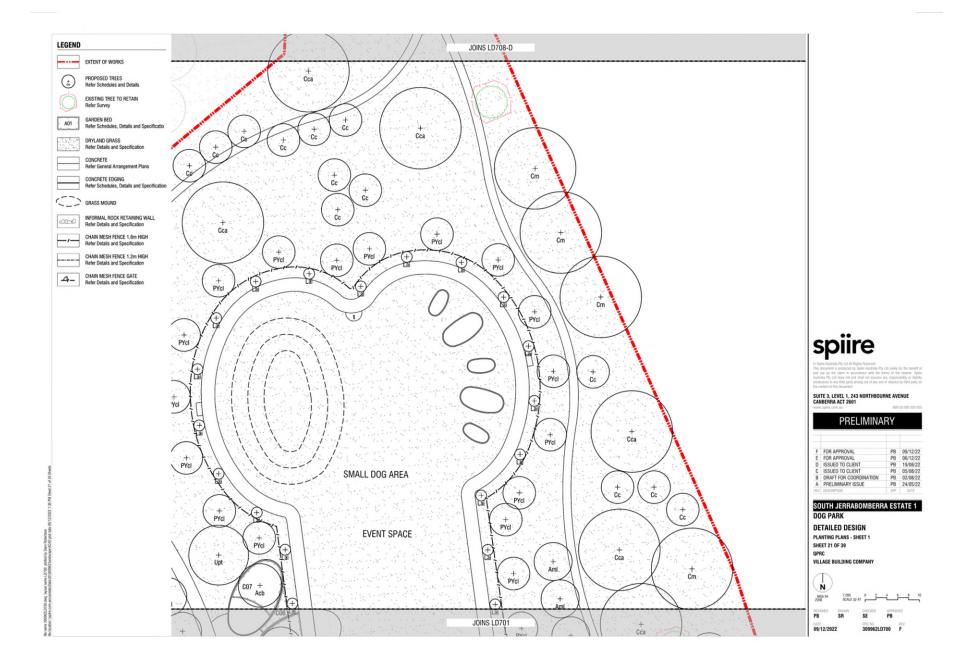


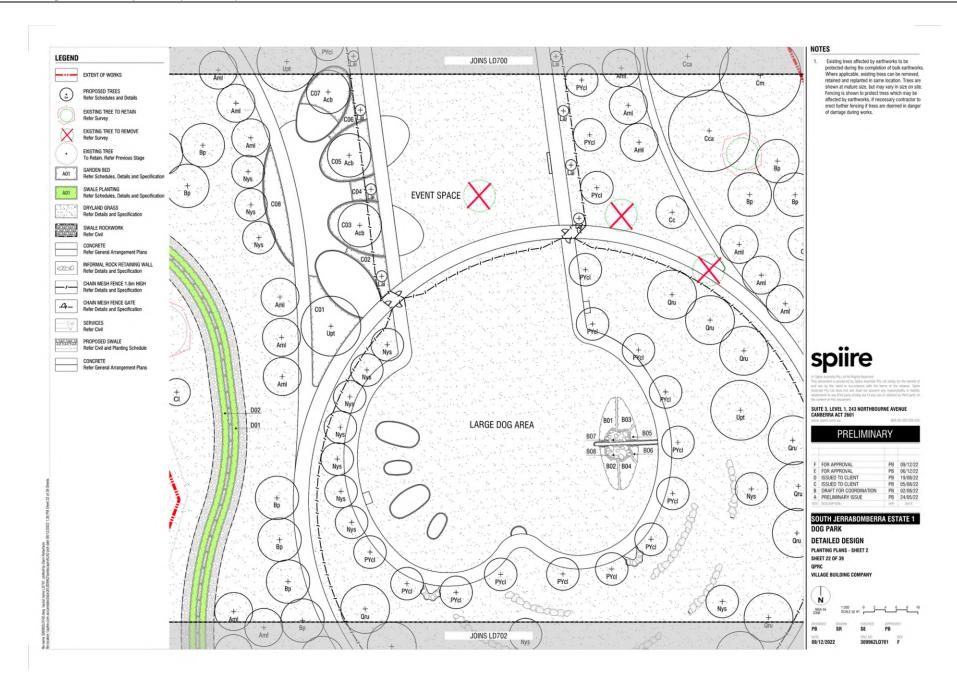










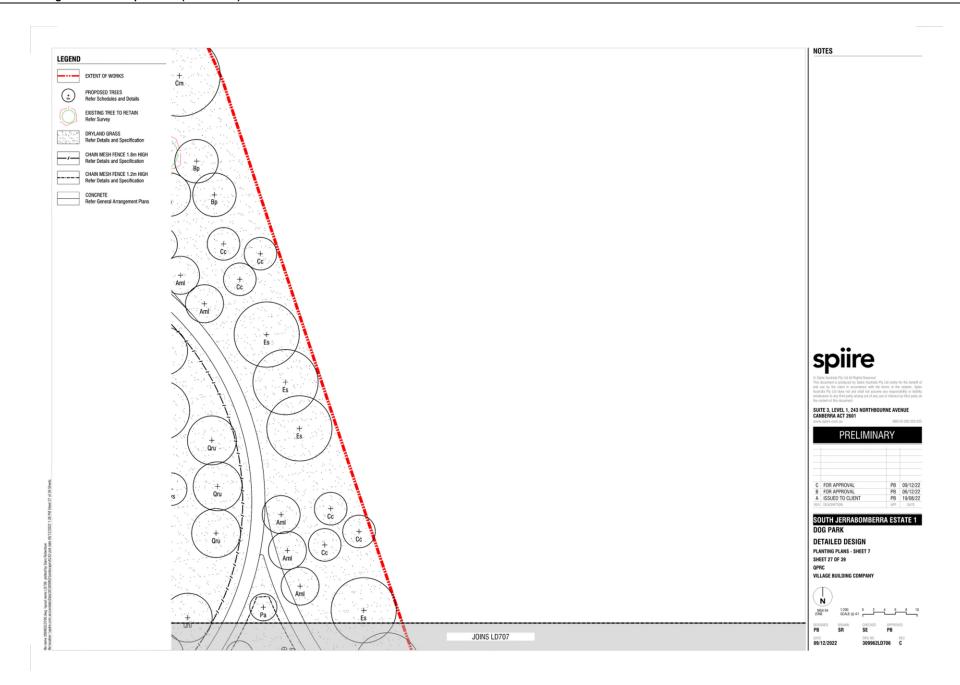


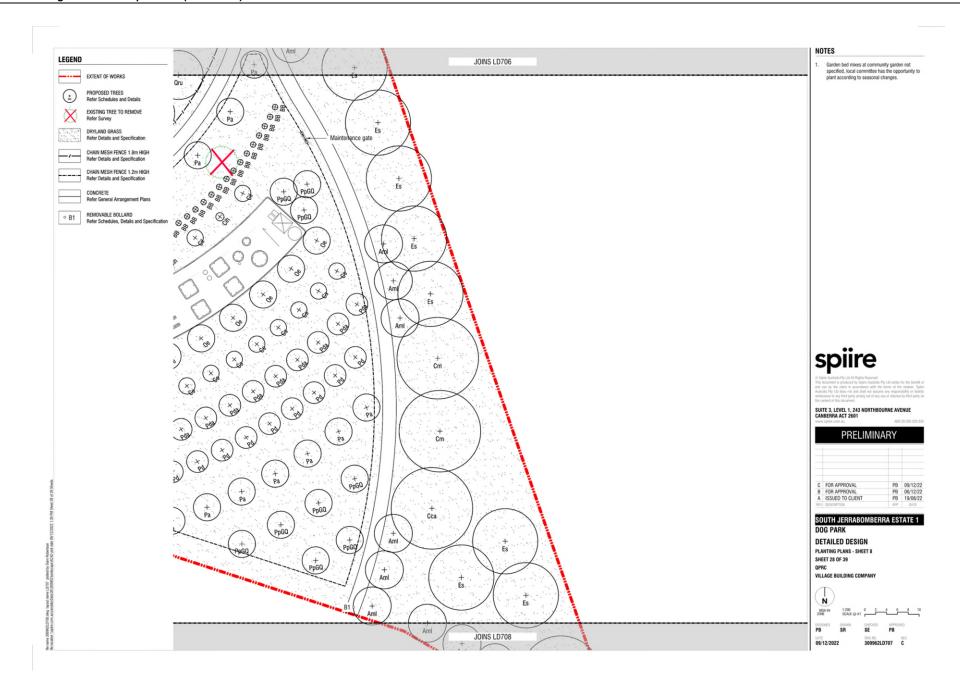




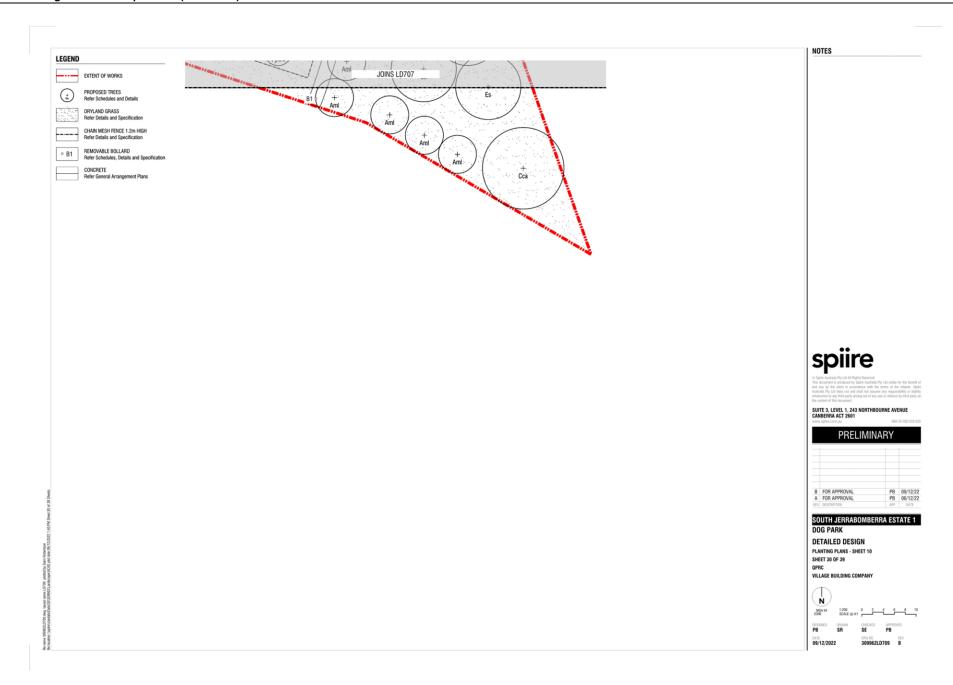


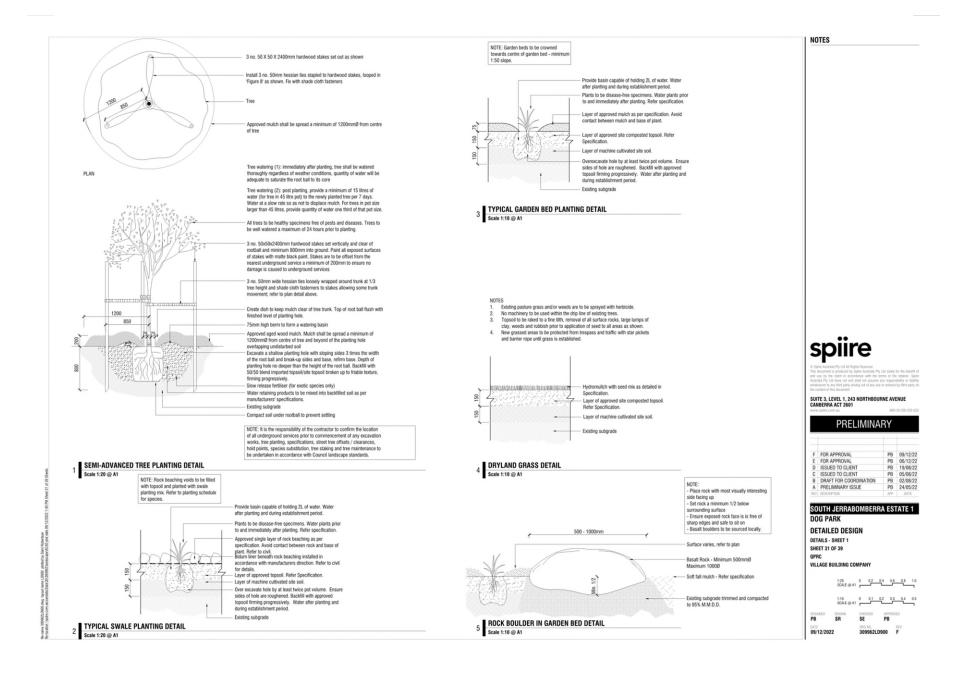


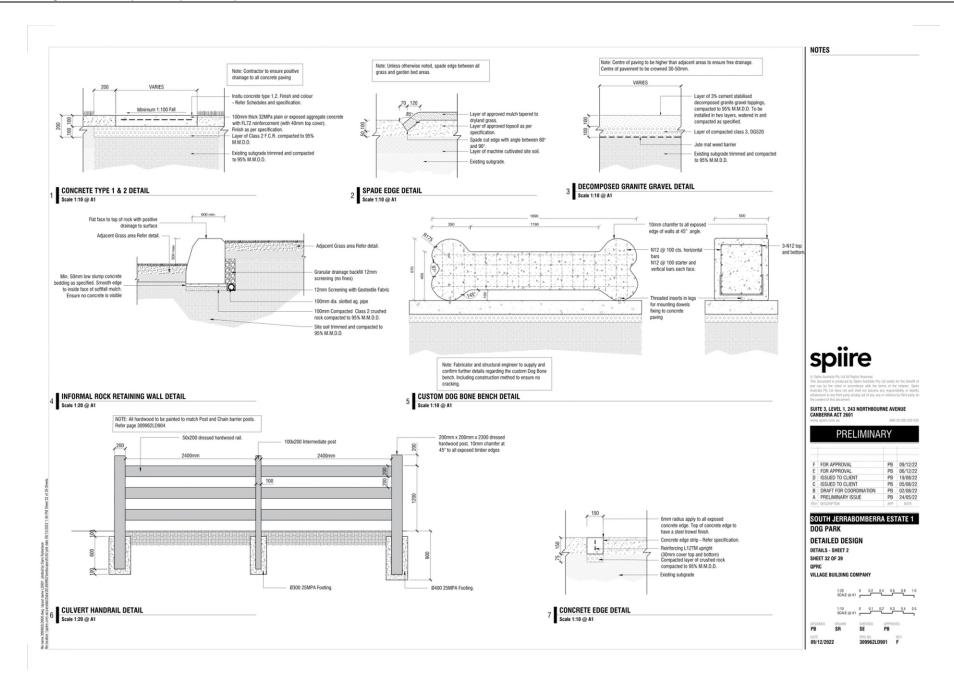


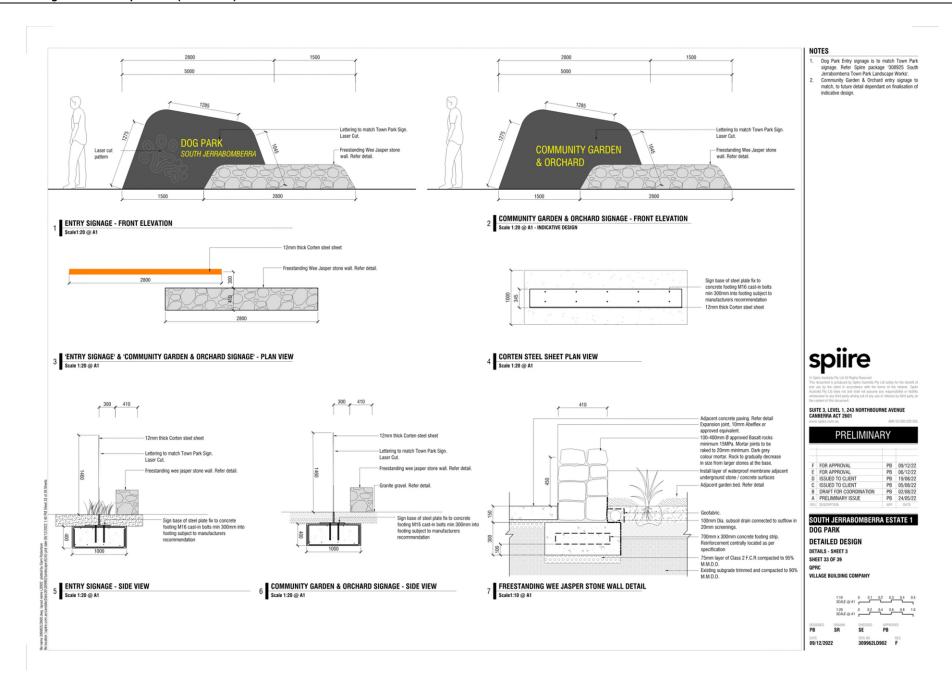


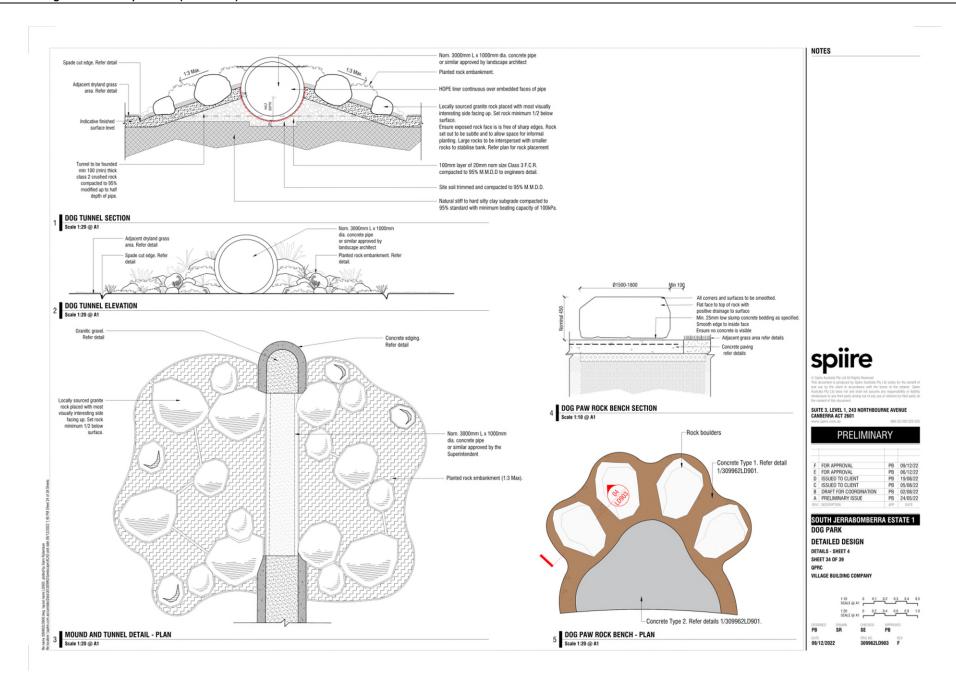


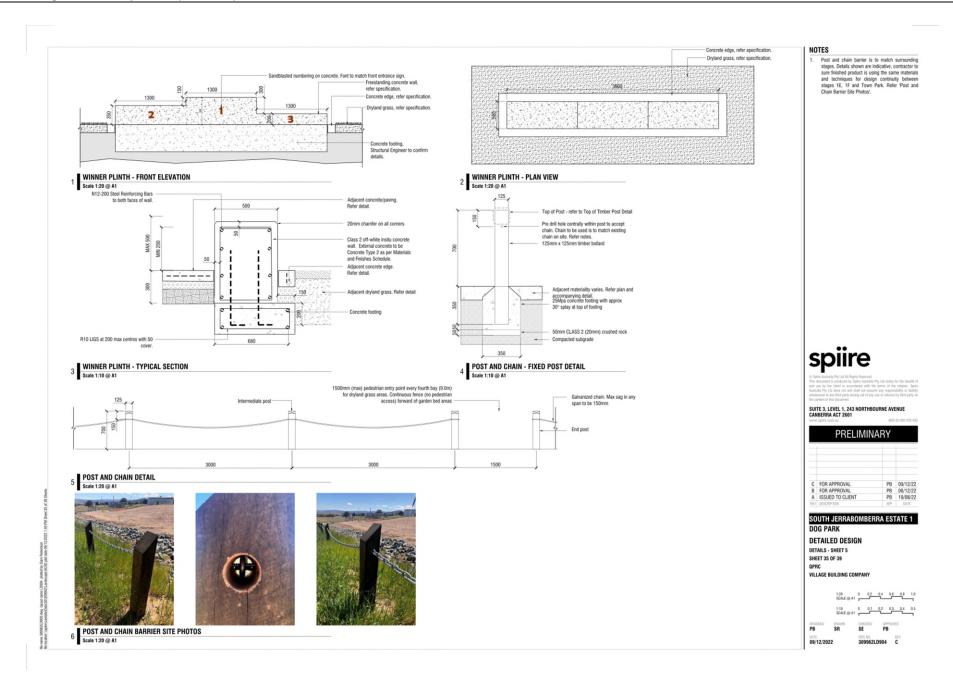


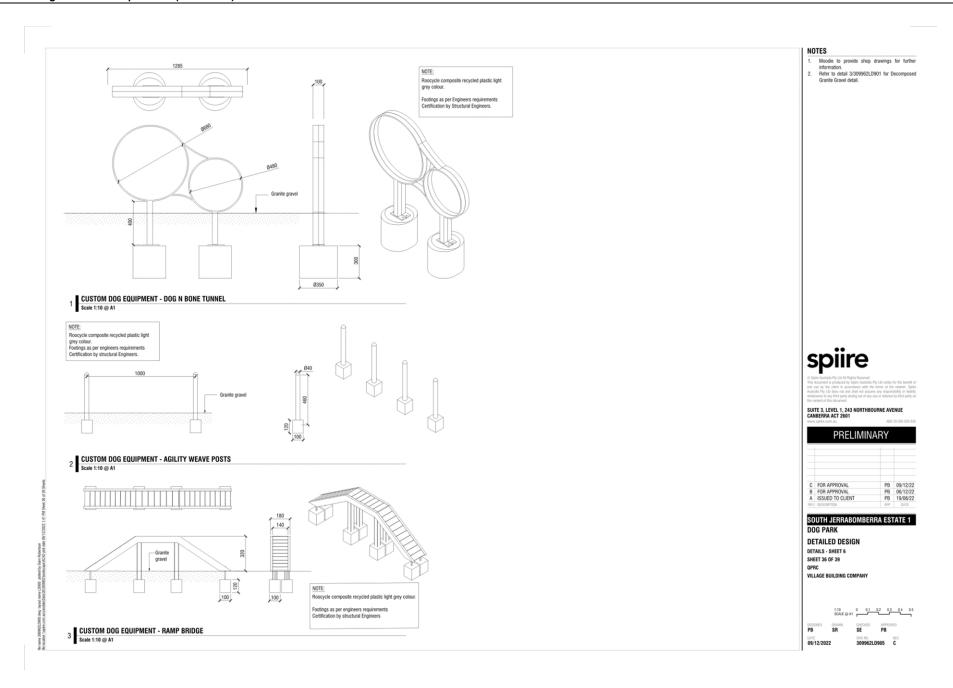


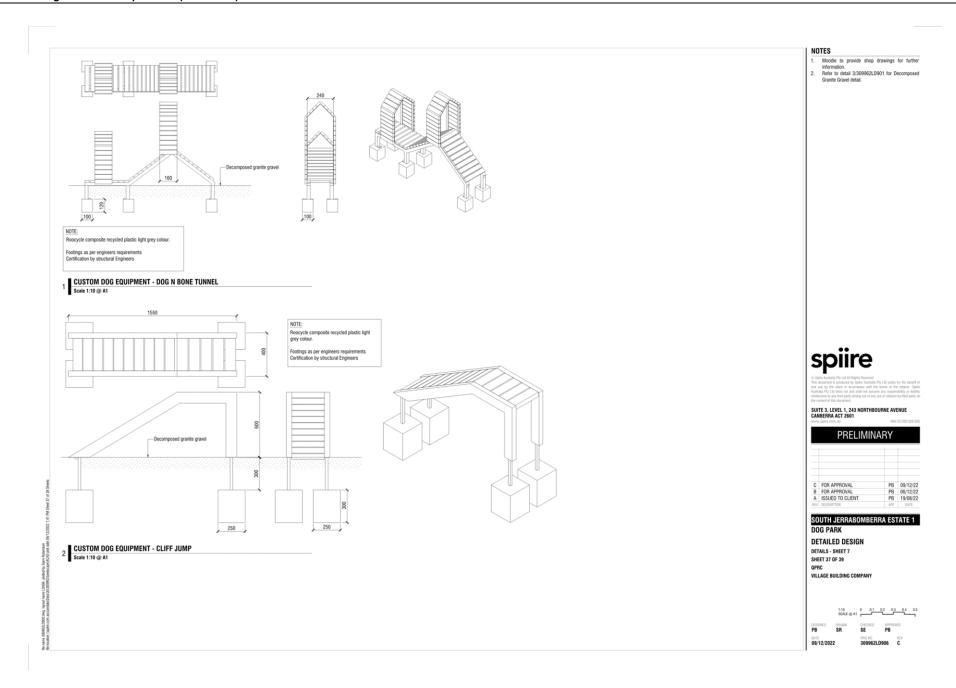


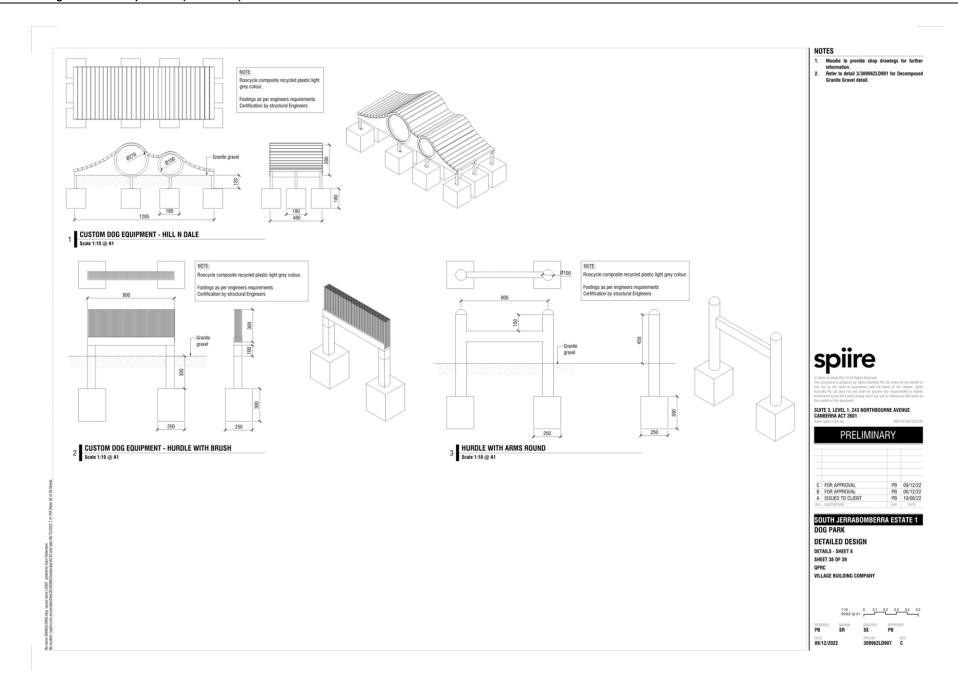


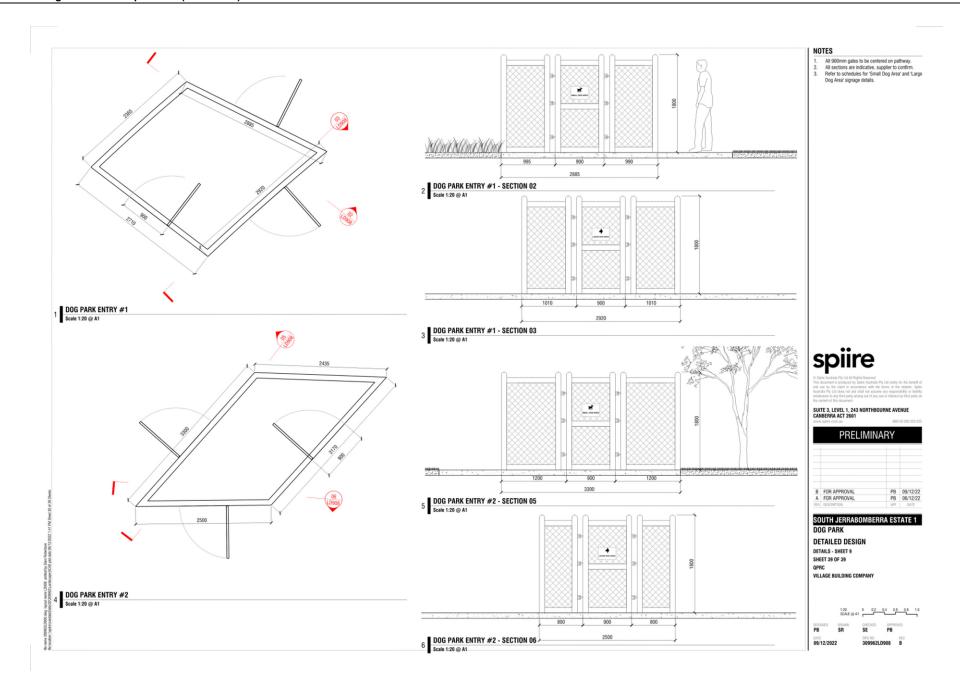












QUEANBEYAN-PALERANG REGIONAL COUNCIL

Council Meeting Attachment

8 MARCH 2023

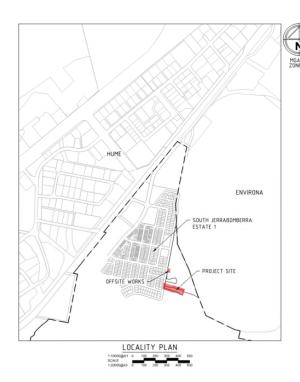
ITEM 9.3 SOUTH JERRABOMBERRA DOG PARK REF

ATTACHMENT 3 DOG PARK CIVIL PLANS

SOUTH JERRABOMBERRA DOG PARK ROAD REF VILLAGE BUILDING COMPANY

GENERAL NOTES:

- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA) 94 70NF 55.
- ALL EXISTING SURFACE LEVELS PROVIDED BY MMB SURVEYORS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF GUANTIES.
- 3. ALL WORK SHALL BE IN ACCORDANCE WITH QPRC'S DESIGN AND CONSTRUCTION SPECIFICATIONS
- 4. EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA. THE PRINCIPAL DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION AND IT IS THE CONTRACTORS RESPONSIBILITY TO ESTABLISH THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCING WORK (LEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITIES.
- PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL CONFIRM THE POSITION AND LEVEL OF ALL EXISTING SERVICE CONNECTION POINTS AND NOTIFY THE SUPERINTENDENT IMMEDIATELY IF A DISCREPANCY IS FOUND.
- 6. ALL EXISTING AND FINISHED SURFACE LEVELS ARE TO THE AUSTRALIAN HEIGHT DATUM (AHD).
- WHERE NEW WORK ABUTS EXISTING WORK THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT (HANGES IS OBTAINED.
- ALL EARTHWORKS, BATTERS AND TRENCH LINES TO BE TOPSOILED WITH 100mm SITE TOPSOIL, TEMPORARY GRASSED & BITUMEN STRAW MULCHED.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL TEMPORARY SUPPORT OF EXISTING SERVICES DURING EXCAVATION OF TRENCHES TO THE SATISFACTION OF THE SERVICE OWNER/AUTHORITY.
- ALL EXISTING DAMS ARE TO BE DEWATERED AND DESILTED PRIOR TO COMMENCEMENT OF ANY EARTHWORKS.
- ALL TREE PROTECTION FENCING TO BE CHAINWIRE FENCE TYPE, 18m HIGH AND ERECTED 2.0m-5.0m OUTSIDE THE TREE CANOPY AS AGREED WITH THE SUPERINTENDENT.
- ALL OLD TREE STUMP HOLES TO BE TRIMMED, BACKFILLED AND COMPACTED TO 95% CONTROLLED FILL LEVEL 1.
- SUPERINTENDENT TO BE NOTIFIED IF ANY ROAD OR FOOTPATH GRADE EXCEEDS 12.5% PRIOR TO CONSTRUCTION.





DRAWING	DESCRIPTION	SHEET No.	REVISION
CC001	COVER SHEET - SHEET 1	1	В
CC001	GENERAL ARRANGEMENT PLAN - SHEET 1	2	A
CC030	ROAD LAYOUT PLAN - SHEET 1	3	В
CC060	TYPICAL CROSS SECTIONS - SHEET 1	4	A
CC080	TYPICAL DETAILS - SHEET 1	5	A
CC100	ROAD LONGITUDINAL SECTIONS - SHEET 1	6	A
CC140	ROAD CROSS SECTIONS - SHEET 1	7	A
CC270	INTERSECTION PLAN - SHEET 1		A
CC400	HYDRAULICS - NOTES & LEGEND - SHEET 1	9	A
CC410	HYDRAULKS - STORMWATER LAYOUT PLAN - SHEET 1	10	В
CC411	HYDRAULICS - STORMWATER PROFILES - SHEET 2	11	A
CC412	HYDRAULICS - STORMWATER DETAILS - SHEET 3	12	A
CC413	HYDRAULICS - STORMWATER DETAILS - SHEET 4	13	A
00414	HYDRAULICS - WATER LAYOUT PLAN - SHEET 5	16	A
CC415	HYDRAULICS - WATER PROFILES - SHEET 6	15	A
CC700	SIGNAGE & LINEMARKING PLAN - SHEET 1	16	A



WARNING BEWARE OF UNDERGROUND/OVERHEAD

THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THER EXACT POSITION SHOULD BE PROVIN ON SITE NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN, SPECIAL DISIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURE

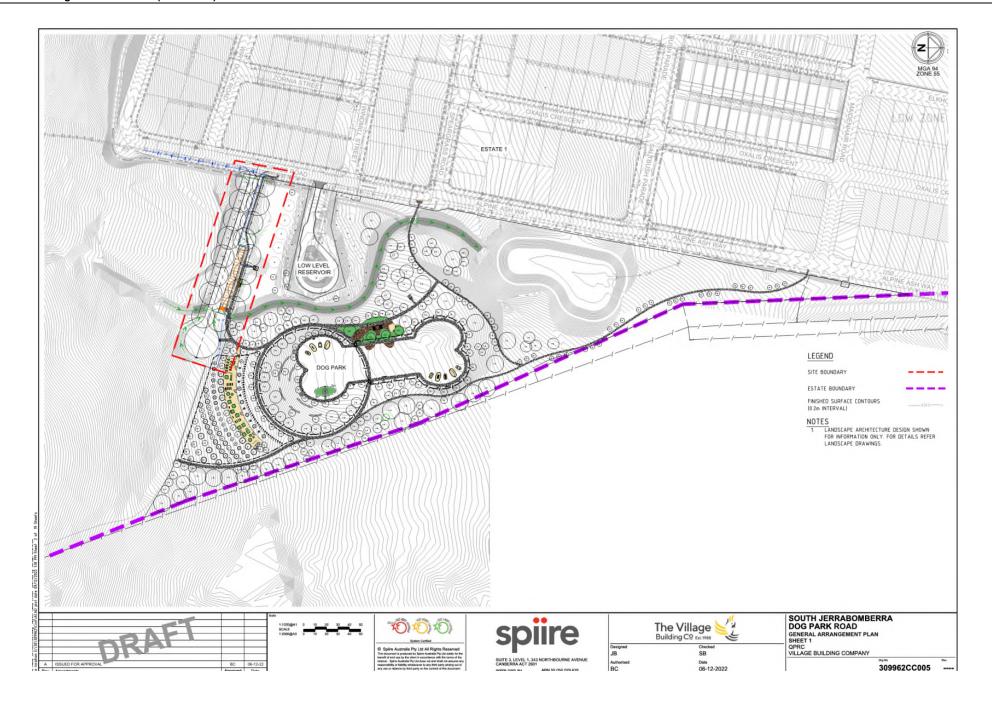
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8	CLIENT COMMENTS ADDRESSED	BC	09/12/22
A	ISSUED FOR APPROVAL	BC	06/12/22
Deci	Amandmanto	Annual	Date

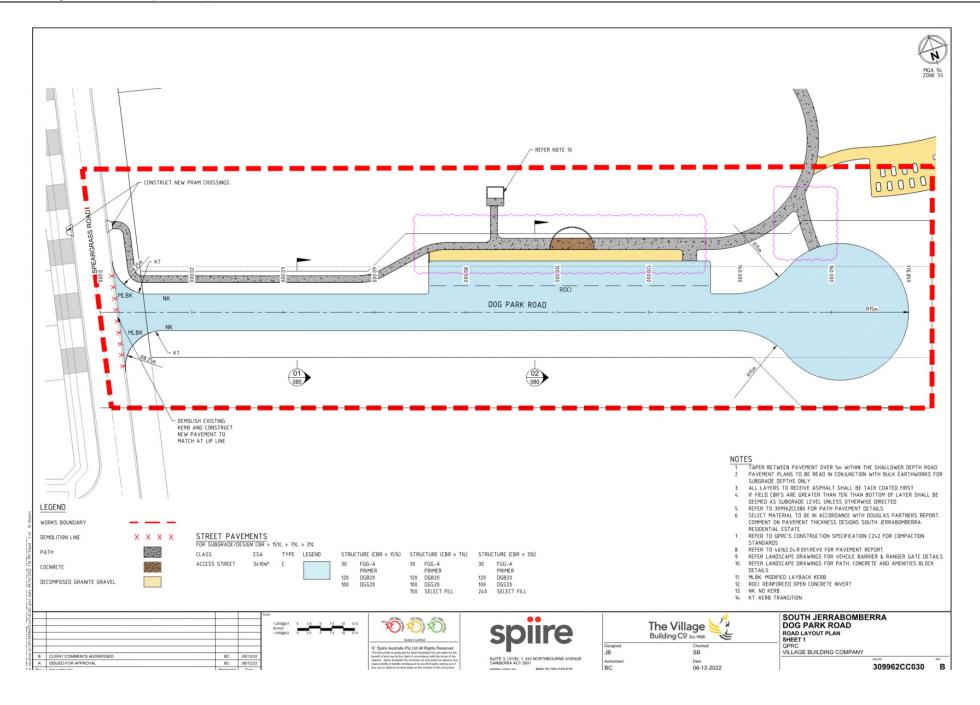


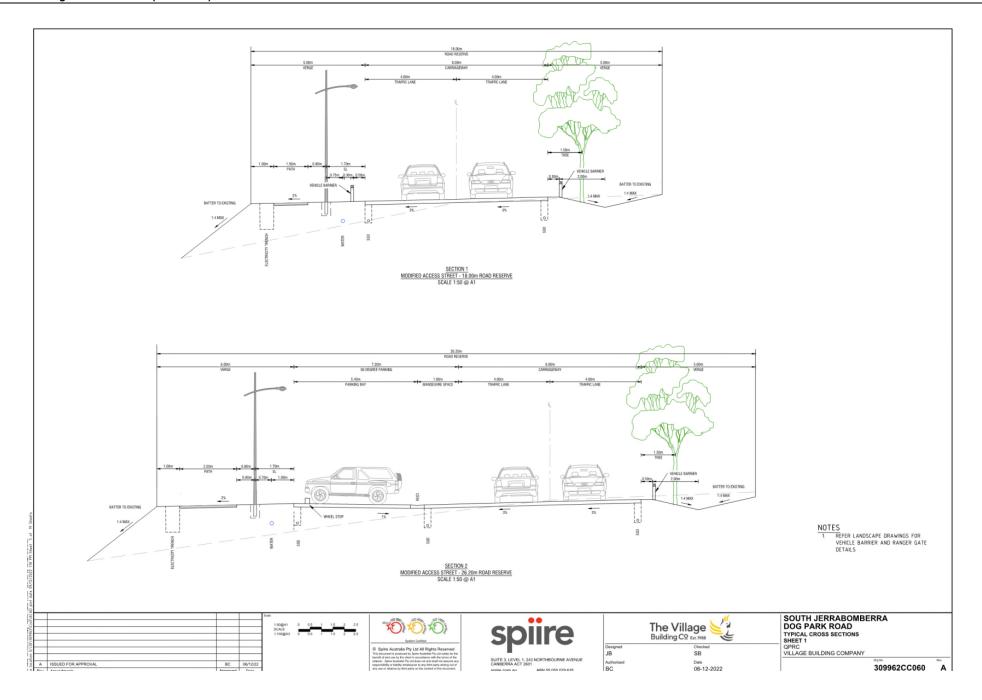


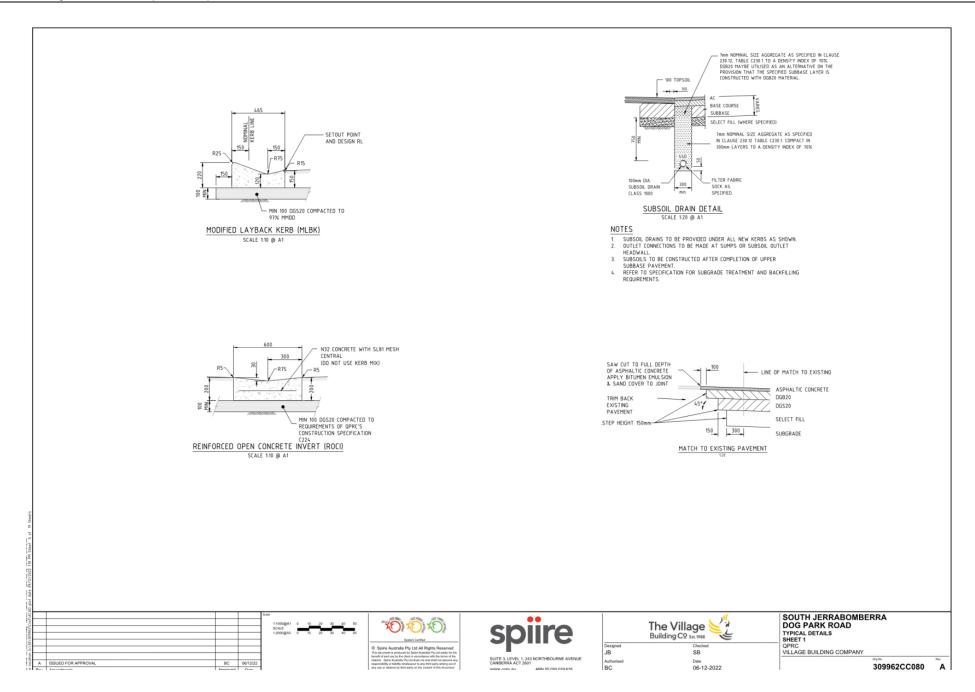


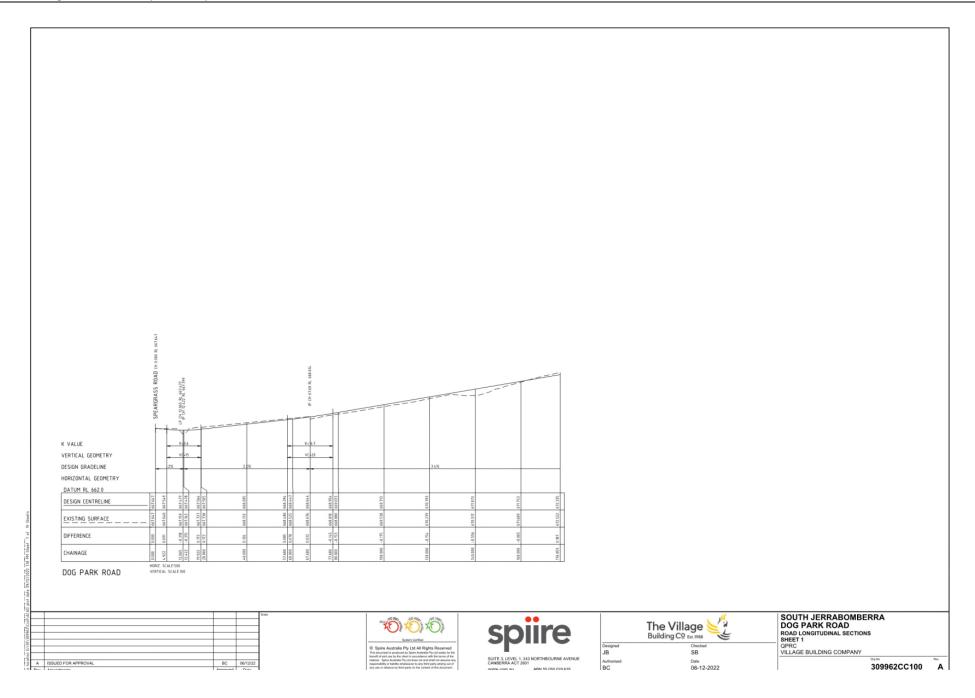


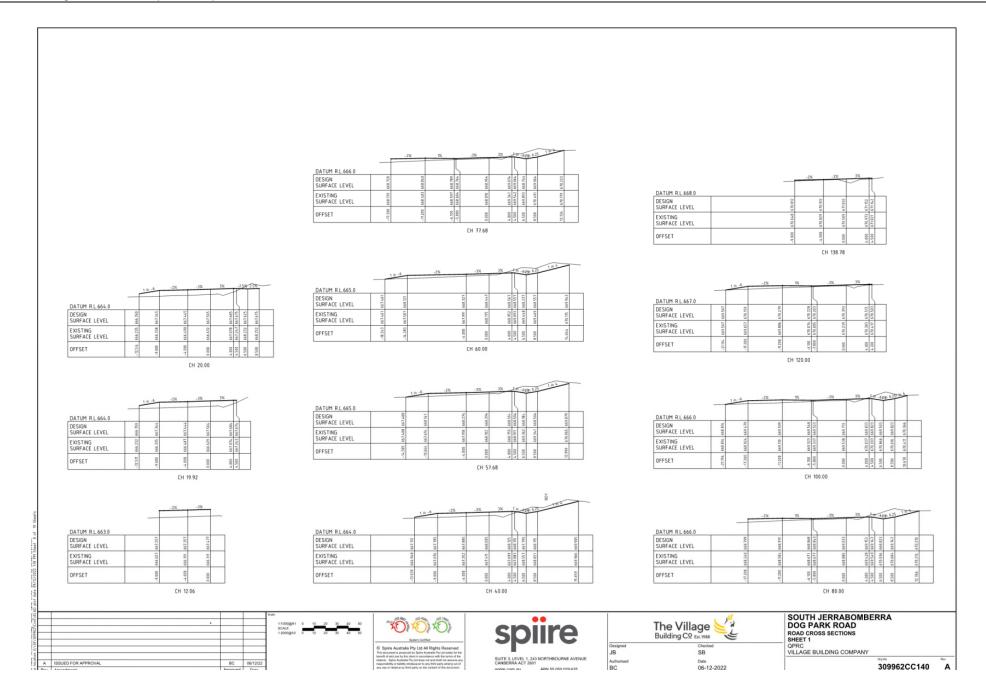


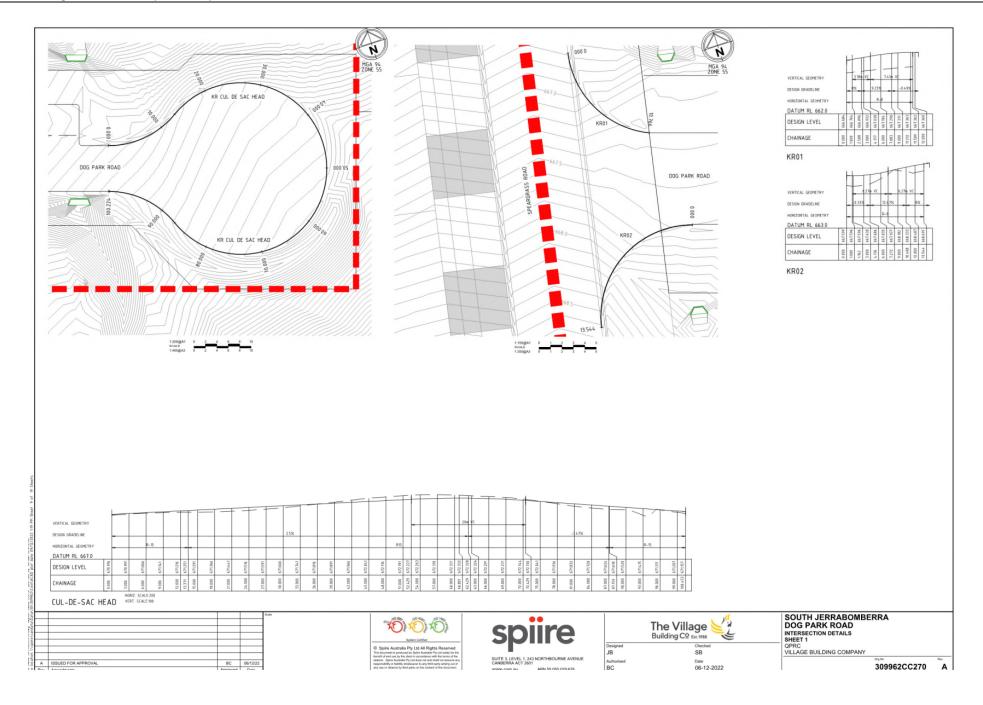














- STORMPRO < 900¢, ASSO6S

GENERAL HYDRAULIC NOTES

- WORKS TO BE IN ACCORDANCE WITH QUEANBEYAN-PALERANG REGIONAL COUNCIL'S (QPRC) DEVELOPMENT DESIGN SPECIFICATIONS AND DEVELOPMENT CONSTRUCTION SPECIFICATIONS.
- SPECIFICATIONS. BACKFILL UNDER ROADS, PATH AND DRIVEWAYS IN LAYERS NOT EXCEEDING 150mm AND BEHIND KERBS IN LAYERS NOT EXCEEDING 400mm.
- 3. FOR CONDUIT TRENCHING, BEDDING AND BACKFILLING REQUIREMENTS REFER TO RELEVANT DETAILS PROVIDED BY SERVICE AUTHORITIES.

STORMWATER NOTES

- 1. ALL DESIGN LEVELS SHOWN ON STORMWATER LINES ARE AT THE CENTRE OF THE MANHOLE OR SUMP UNLESS SHOWN OTHERWISE, NOTE THE SPECIFICATION REQUIREMENTS FOR THE CONSTRUCTION TOLERANCES FOR INVERT LEVELS.
- 2. ALL STORMWATER PIPES UP TO 900mm DIA CAN BE CORRUGATED POLYPROPYLENE OR REINFORCED CONCRETE RRJ CLASS 4. PIPES GREATER THAN 900mm DIA TO BE REINFORCED CONCRETE RRJ CLASS 4.
- 3. FOR STORMWATER PIPE GRADES EXCEEDING 7% IN DESIGN SPEC, PLACE BULKHEADS AT 5m SPACINGS.
- 4. STORMWATER TIE BRANCHES TO BE 100mm DIA, LAID AT MIN. 1% FROM INVERT OF SLOPE JUNCTION OR BRANCH CONNECTION UNLESS INVERT OTHERWISE NOTED.
- 5. SUBSOIL DRAINS TO BE 100mm DIA CORRUGATED PLASTIC PIPE, CLASS 1000. SUBSOIL DRAIN ROAD CROSSINGS SHALL BE CONSTRUCTED WITH 100¢ PVC PIPE, CLASS SN6. SUBSOIL DRAINS SHALL BE MIN.
- SUBSOIL PIPES ARE DRAWN DIAGRAMMATICALLY FOR CLARITY. CAD DATA SHALL NOT BE USED FOR SETOUT. REFER DRG. 310356CC080 FOR TYPICAL DETAIL

STORMWATER DESIGN

MAJOR STORM : 1% AEP MINOR STORM : 20% AEP

HGL SHOWN ON LONGITUDINAL SECTIONS: 20% AEP

WATER NOTES

- ANGLES OF DICL BENDS SHALL BE THE NEAREST AVAILABLE. THE CONTRACTOR SHALL, WITHOUT EXTRA COST, EITHER ADAPT THE BEND TO PROVIDE THE REQUIRED ANGLE OR LAY THE ADJACENT SECTIONS OF THE MAIN SO THAT THEY INTERSECT AT THE BEND ANGLE.
- ALL CONNECTIONS TO LIVE WATER SUPPLY MAINS SHALL BE MADE BY THE CONTRACTOR UNDER THE SUPERVISION OF OPPC.
- 3. UNLESS WATER MAINS SHALL BE CLASS PN16 PVC-M BLUE COLORED WITH JOINTS COMPATIBLE WITH DUCTILE IRON PIPES AND FITTINGS. RECYCLED WATER MAINS SHALL BE CLASS PN16 PVC-0 PURPLE COLORED WITH JOINTS. PLACE TRACING WIRE ON ALL PVC PIPES.
- 4. WHERE WATER FITTINGS ARE IMMEDIATELY ADJACENT TO EACH OTHER THE FITTINGS SHALL BE BOLTED TOGETHER WITH FLANGED JOINTS.
- 5. SLUICE VALVES WHERE ADJACENT TO TEES, SHALL BE FLANGED TO THE TEE. SLUICE VALVES SHALL BE LOCATED BEHIND KERBS (AND NOT IN PAVEMENTS AS SOMETIMES NOTIONALLY
- 6. FOR WATER PIPE GRADES EXCEEDING 5% CONSTRUCT TRENCH STOPS, FOR GRADES EXCEEDING 15% CONSTRUCT BULKHEADS, IN ACCORDANCE WITH WSA 03-2002-2.3, AND DRGS. WAT-1209 AND 1210.
- 7. ALL WATER PROPERTY CONNECTIONS (PC) SHALL BE HDPE CLASS PE100, 20mm DIA UNLESS NOTED
- 8. WATER PCS SHALL BE CONNECTED TO THE MAIN IN ACCORDANCE WITH WSA 03-2002-2.3 DRAWING
- 9. WATER PC ROAD CROSSINGS SHALL BE PLACED IN A 32mm UPVC CONDUIT WHICH EXTENDS 300mm PAST THE KERB LINE.







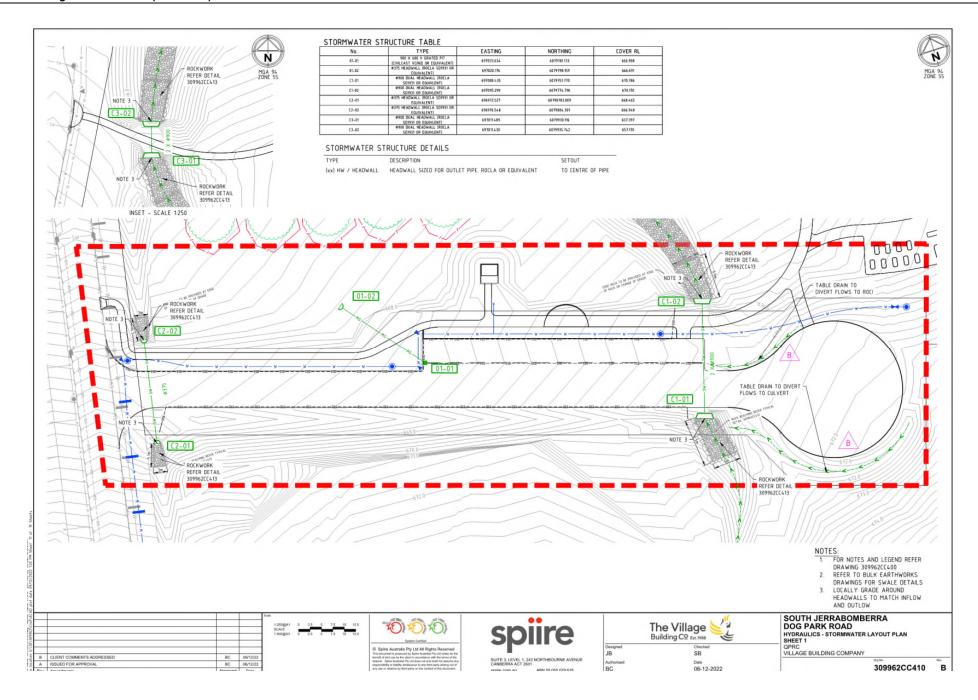


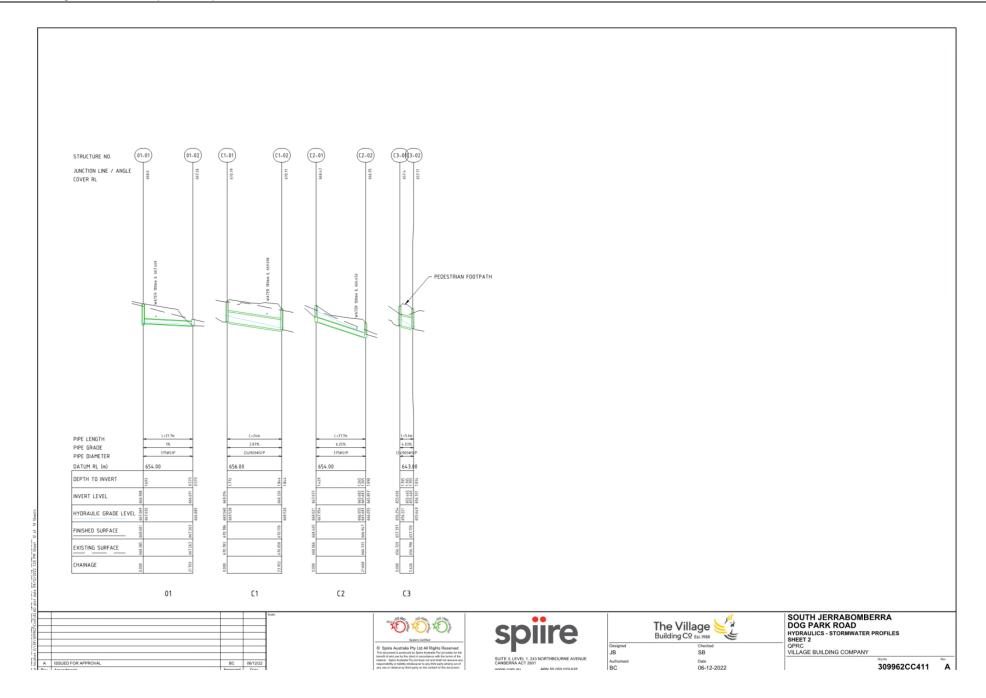
SB 06-12-2022

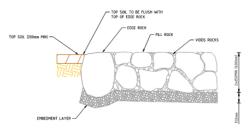
SOUTH JERRABOMBERRA DOG PARK ROAD HYDRAULICS - NOTES & LEGEND VILLAGE BUILDING COMPANY

309962CC400

Α







158mm IMNI THICK LAYER, COMPACTED WELL 40mm NDCR (NON-DESCRIPT CRUSHED ROCK) d100 DIA. OB LARGER 555-d100 DIA. ANGUAR, LOCKED, WELL GRADED ROCKS INTERLOCKED IN PLACE d10-640 DIA. ANGUAR, LOCKED, WELL GRADED ROCKS INTERLOCKED IN PLACE

FILL ROCK dSO TO BE CALCULATED. ROUND TO NEAREST SORM AND 100mm. MIN FILL ROCK SIZE dS0x300mm MN.

TYPICAL ROCK BEACHING DETAIL

UNLESS SPECIFIED ELSEWHERE ROCK BEACHING TO COMPLY TO THE FOLLOWING SPECIFICATION.

ROCK DIA %	ROCK SIZE (mm)	
d50	500 (UNLESS SPECIFIED OTHERWISE)	
d100	2 x d50 0.65 x d50	
d40		
d10	0.2 x d50	

dSo IS DEFINED AS THE PARTICLE SIZE OF WHICH SOM OF THE ROCKS ARE SMALLER BY WEIGHT. dso, 96% ETC.

ROCK SIZE DISTRIBUTION TABLE



EXAMPLE OF WELL INTERLOCKED ROCKWORK WITH SEALED VOIDS

ROCK BEACHING INSTALLATION PROCEDURE:

- THE DEAL FIRST WAS ALLEST HOM PROJECTIONS.

 1. EXCAMATINGS ON THACE RESIDENT THAT THE SUB-CENTER SEEP DOUGHT O ALLOW EDGE ROCKS TO BE MIN 2/3 IMPREDICTION TO VIGIGA GROUND OR APPROVED CIPIENT FOR FURTHER THROCKS.

 2. REFLACE THE TO VIGIGA GROUND OR APPROVED CIPIENT TO ALLOW SEED THROCKS.

 2. PLACE FRIST LATE OF THE ROCK USE METHODS FOR HANDRING AND PLACEMENT OF ROCK THAT WILL AVOID SEGREGATION OF ROCK STATE FRACTIONS.

 3. PLACE FRIST LATE OF THE ROCK USE METHODS FOR HANDRING AND PLACEMENT OF ROCK THAT WILL AVOID SEGREGATION OF ROCK STATE FRACTIONS.

 4. PLACE FRIST LATE OF THE ROCK USE METHODS FOR HANDRING AND FACEMENT OF ROCK THAT WILL AVOID SEGREGATION OF ROCK STATE SETTLE WITH OWORD.

 5. PLACE SECOND LATES OF THE ROCK USE METHODS FOR HANDLESS OF PLACEMENT OF ROCK THAT WILL AVOID ROCKS TO FRACT SECOND LATES OF THE ROCK USE METHODS FOR HANDLESS OF PLACEMENT OF ROCK THAT WILL AVOID ROCKS TO FRACT SETTLE WITH OWORD OF PLACEMENT OF ROCK AND WESTER FROMOUGH TO PLACE FOR THE WITH PLACE FOR ROCK AND USED THROUGH TO PLACE FOR THE WITH PLACE FOR ROCK AND USED THROUGH TO PLACE FOR THE WITH PLACE FOR ROCK AND USED THROUGH TO PLACE FOR THE WITH PLACE FOR ROCK AND USED THROUGH TO PLACE FOR THE WITH PRESSURE TO ALLOW YOU ROCKS TO FRALLY SETTLE WITH OWN OWN.

ROCK BEACHING NOTES:

- ROCK SHALL BE CAREFULLY PLACED INTO POSITION, ROCK SHALL NOT BE DUMPED DIRECTLY.
 IT IS PREATIVE THAT FLL ROCKS USED TO FRIEN THE ROCK PAID ARE WELL GRADED WITH MINIMAL VOIDS TO PRODUCE A
 VOIDS SHAULD BE BUT AURIEST THAN SHALL NOT ROCK STEWN, BUT BUT AURIEST THAN THE ROCK BUT AU

		-	
A	ISSUED FOR APPROVAL	BC	06/12/2

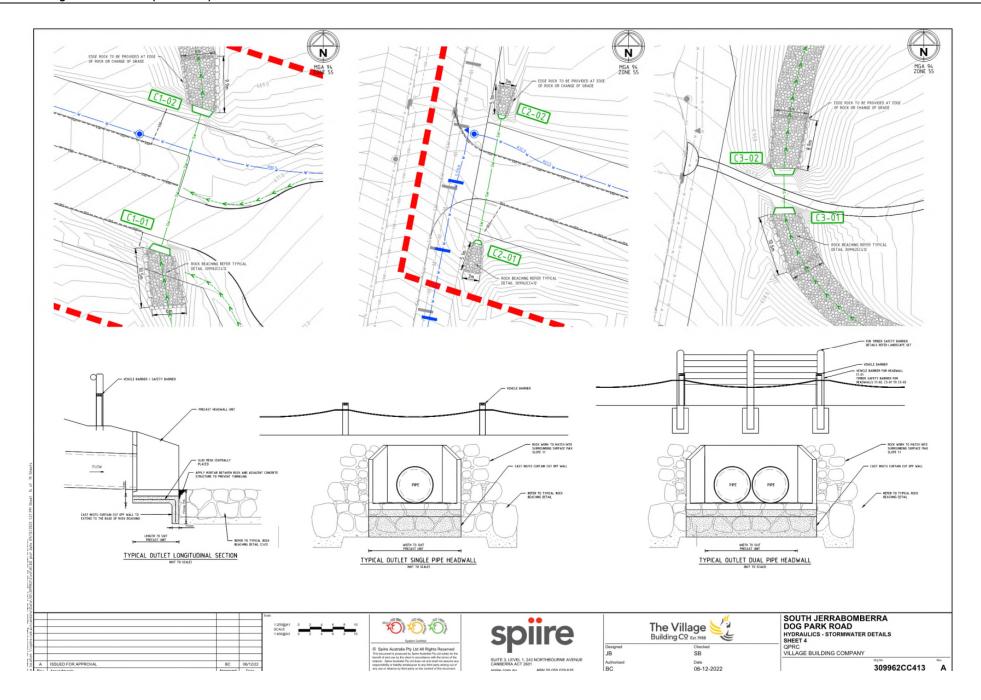


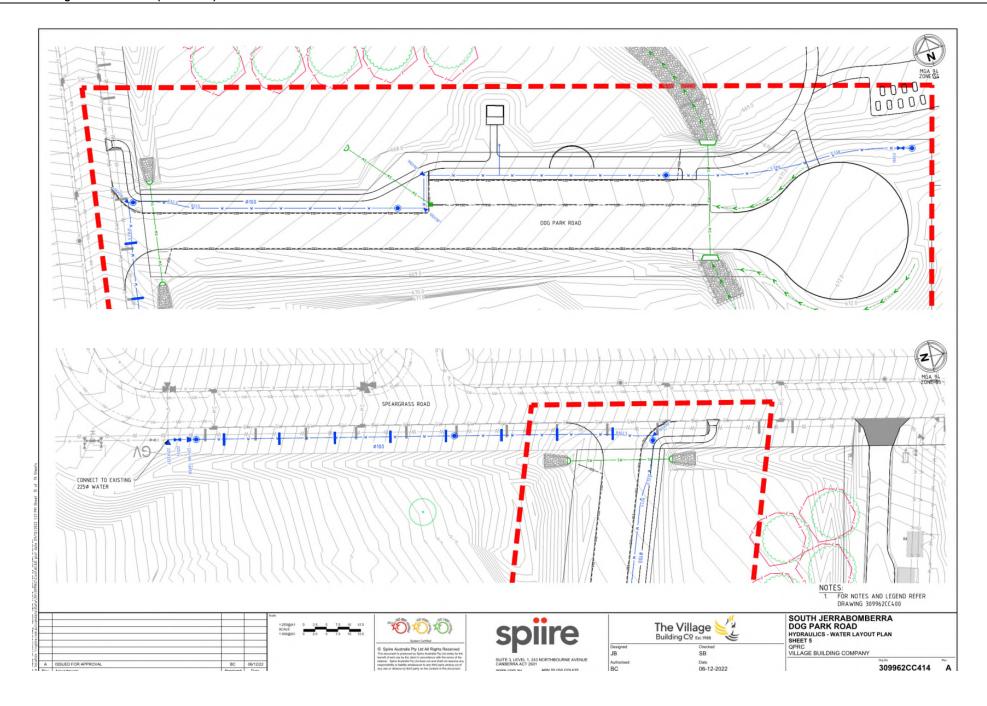


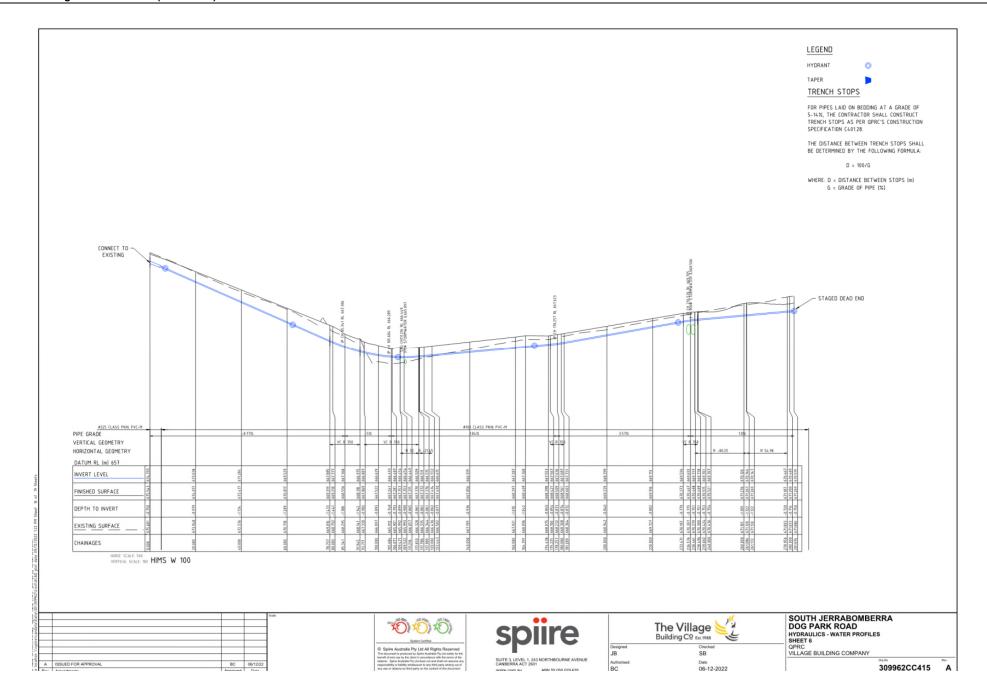


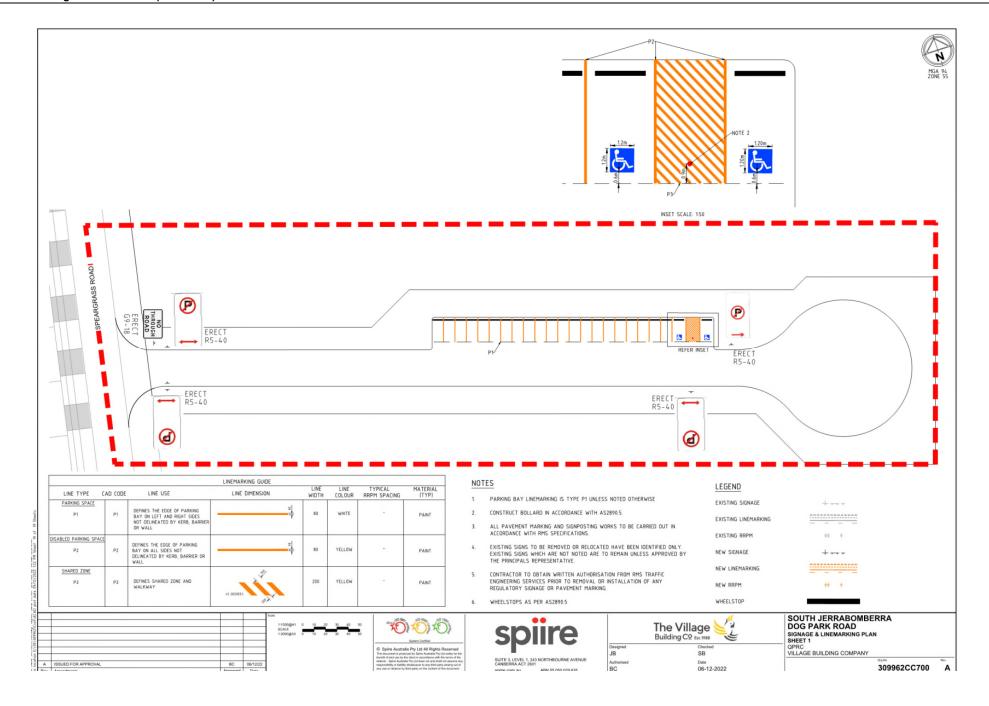
SB Date 06-12-2022 SOUTH JERRABOMBERRA DOG PARK ROAD HYDRAULICS - STORMWATER DETAILS SHEET 3 OPRC VILLAGE BUILDING COMPANY

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QUEANBEYAN-PALERANG REGIONAL COUNCIL

Council Meeting Attachment

8 MARCH 2023

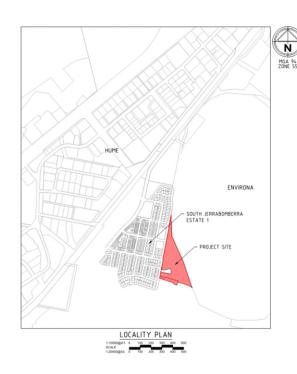
ITEM 9.3 SOUTH JERRABOMBERRA DOG PARK REF

ATTACHMENT 4 DOG PARK CIVIL - EARTH WORKS

DOG PARK SOUTH JERRABOMBERRA BULK EARTHWORKS VILLAGE BUILDING COMPANY

GENERAL NOTES:

- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA) 94, ZONE 55.
- 2. REFER TO MMB SURVEYS FOR CADASTRE INFORMATION.
- ALL EXISTING SURFACE LEVELS PROVIDED BY MMB SURVEY SHOWN ON THE ENGINEERING DRAWNGS HAVE BEEN INTERPOLATED FROM A DIDITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF GUANTITIES.
- ALL WORK SHALL BE IN ACCORDANCE WITH QPRC QUEANBEYAN DESIGN AND CONSTRUCTION SPECIFICATIONS
- ENSTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA. THE PRINCIPAL DOES NOT GURBANITE THE ACCURACY OF THIS NORPHATION AND IT IS THE CONTRACTIONS RESPONSIBILITY TO ESTABLISH THE LOCATION OF ALL EXISTING. SERVICES PRIOR TO COMMENCING WORK. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITIES.
- PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL CONFIRM THE POSITION AND LEVEL OF ALL EXISTING SERVICE CONNECTION POINTS AND NOTIFY THE SUPERINTENDENT IMMEDIATELY IF A DISCREPANCY IS FOUND.
- WHERE NEW WORK ABUTS EXISTING WORK THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- ALL EARTHWORKS, BATTERS AND TRENCH LINES TO BE TOP SOILED WITH 100mm SITE TOPSOIL, TEMPORARY GRASSED & BITUMEN STRAW MULCHED.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL TEMPORARY SUPPORT OF EXISTING SERVICES DURING EXCAVATION OF TRENCHES TO THE SATISFACTION OF THE SERVICE OWNER/AUTHORITY.
- ALL TREE PROTECTION FENCING TO BE CHAINWIRE FENCE TYPE, 18m HIGH AND ERECTED 2.0m-5.0m OUTSIDE THE TREE CANOPY AS AGREED WITH THE SUPERINTENDENT.



DRAWING SCHEDULE

DRAWING	DESCRIPTION	SHEET No.	REVISION
CA001	COVER SHEET - SHEET 1	1	A
CN050	EXISTING SERVICES PLAN - SHEET 1	2	A
CA040	CONSTRUCTION MANAGEMENT PLAN - SHEET 1	3	A
CA150	TYPICAL DETAILS - SHEET 1	4	A
CA200	GRADING PLAN - SHEET 1	5	A
CA201	GRADING PLAN - SHEET 2	- 6	A
CA202	GRADING PLAN - SHEET 3	7	A
CA203	GRAONG PLAN - SHEET 4		A
CA284	GRADING PLAN - SHEET 5	9	A
CA800	ENVIRONMENTAL CONTROLS CONCEPT PLAN - SHEET 1	10	A
CA801	ENVIRONMENTAL CONTROLS CONCEPT PLAN - SHEET 2	11	A

WARNING
BEWARE OF UNDERGROUND/OVERHEAD
SERVICES
E LOCATION OF SERVICES ARE APPROXIMATE ONEY AND THEIR
ACT POSITIONS SHOULD BE PROVING NO SITE NO GUARANTEE IS
GOVEN THAT ALL EXISTING SERVICES ARE SHOWN SPECIAL
SECRETAIN SHOULD BE GOVEN TO SOST REACT OF SHOULD SHOULD
SECRETAIN SHOULD BE GOVEN TO SOST REACT ON PROCEDURES.

0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |

Spiire

The Village
Building CP Ex 1984

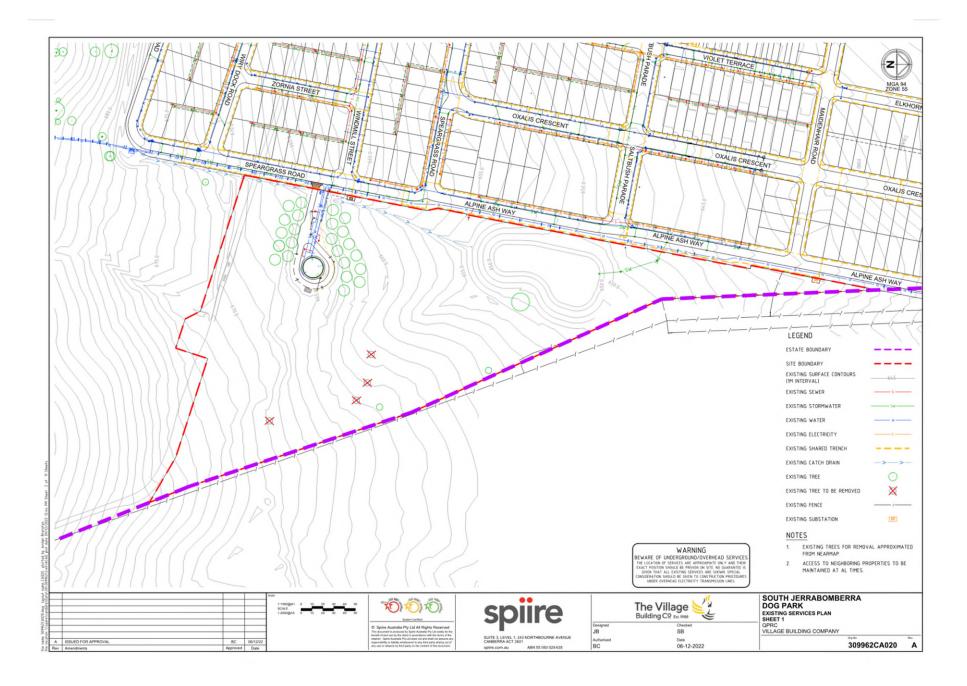
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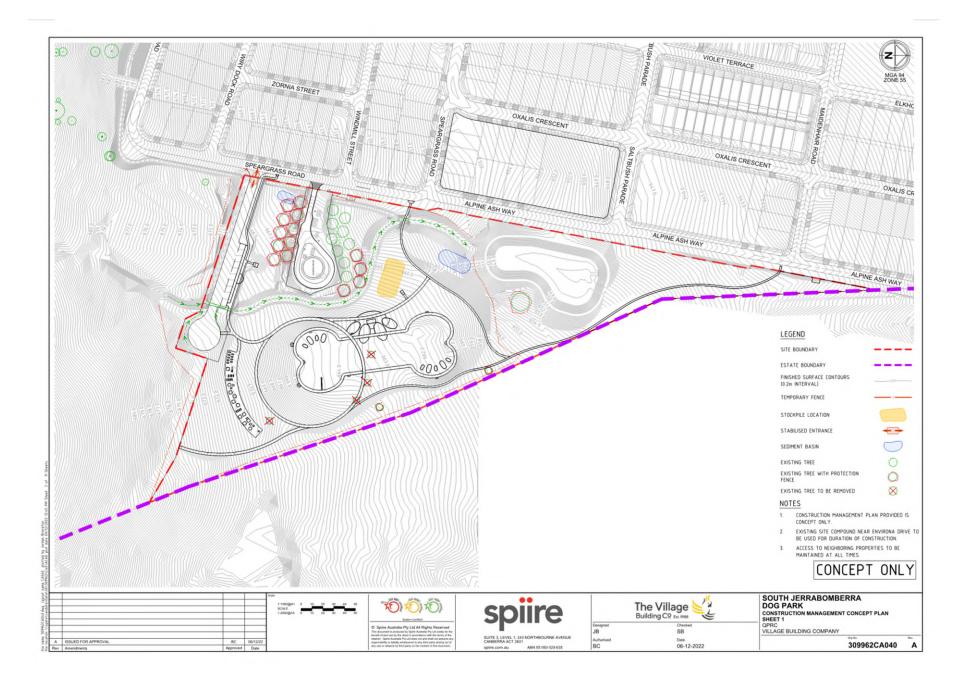
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SB

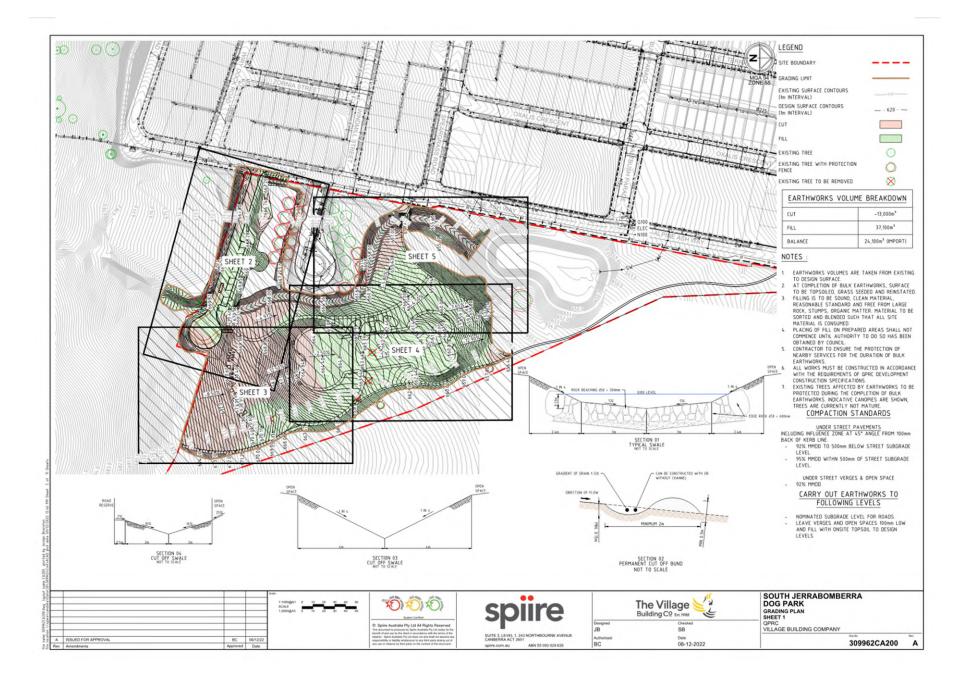
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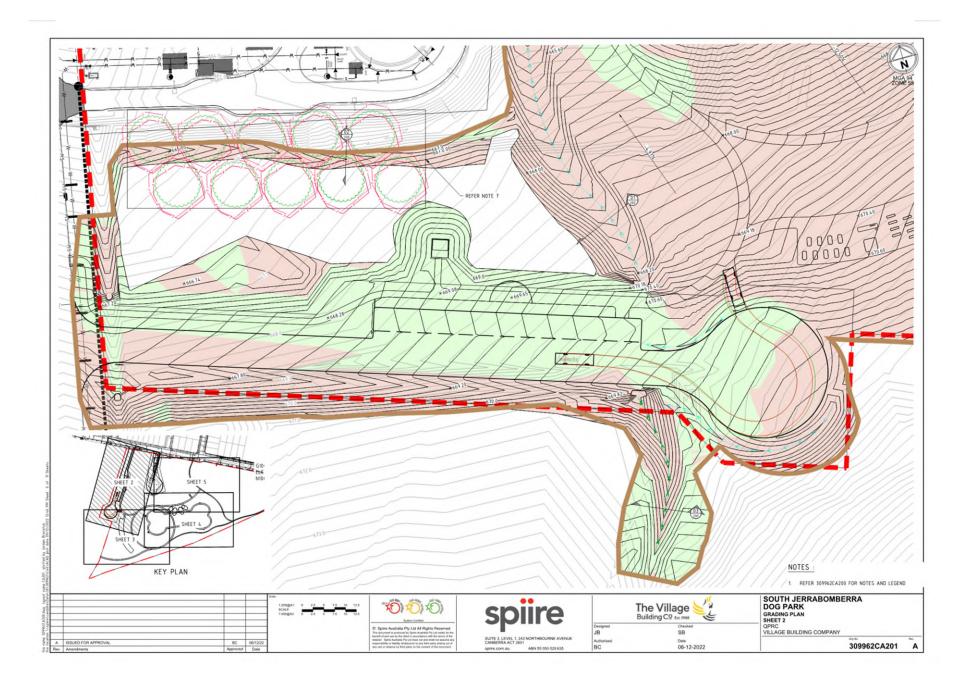
SOUTH JERRABOMBERRA DOG PARK COVER SHEET SHEET 1 OPPC VILLAGE BUILDING COMPANY

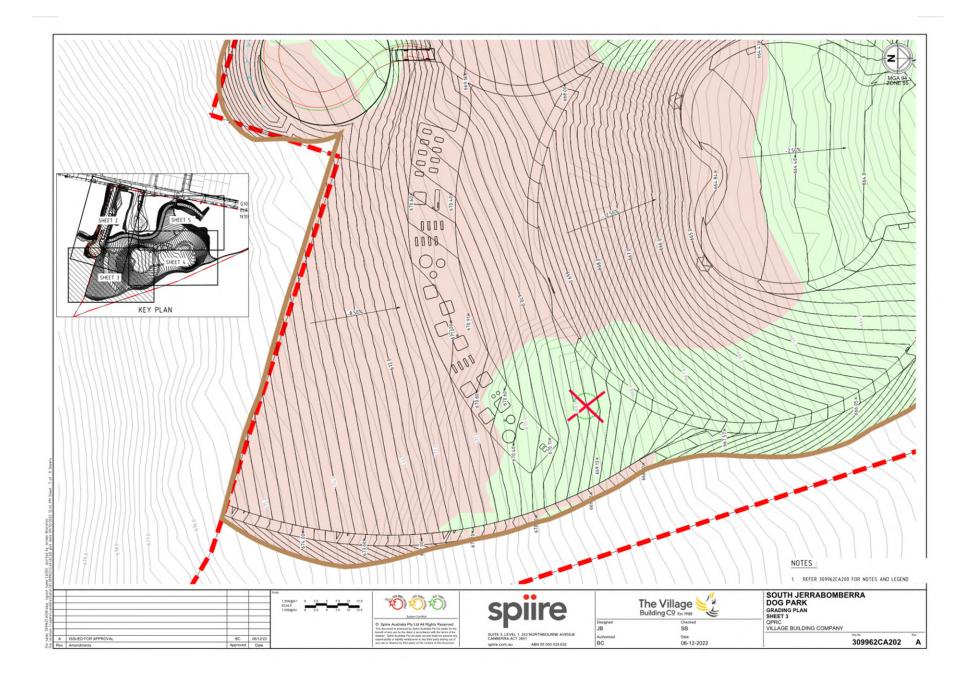
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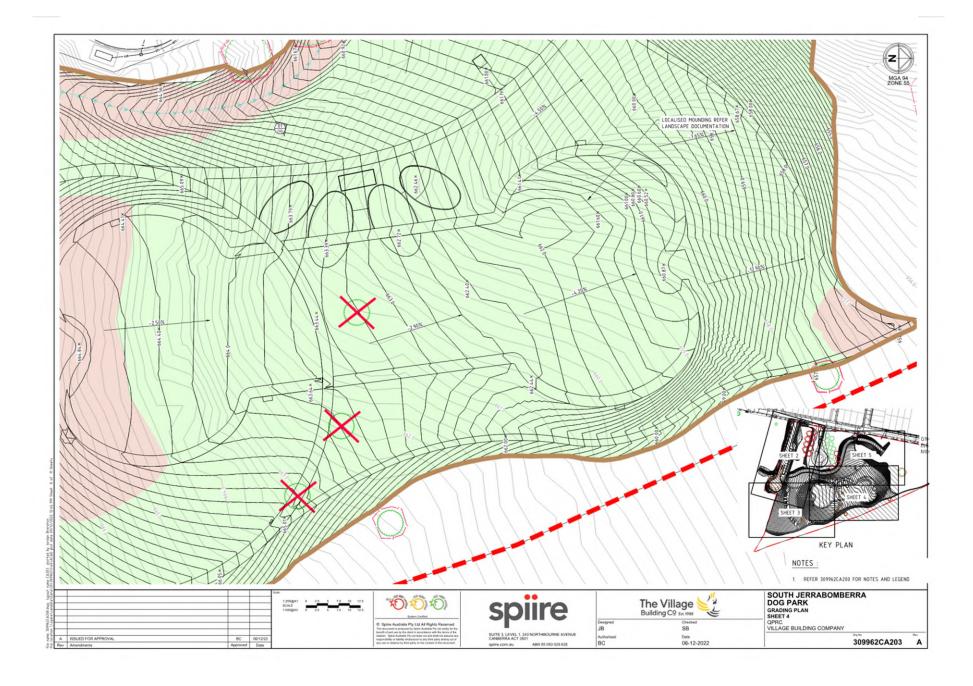


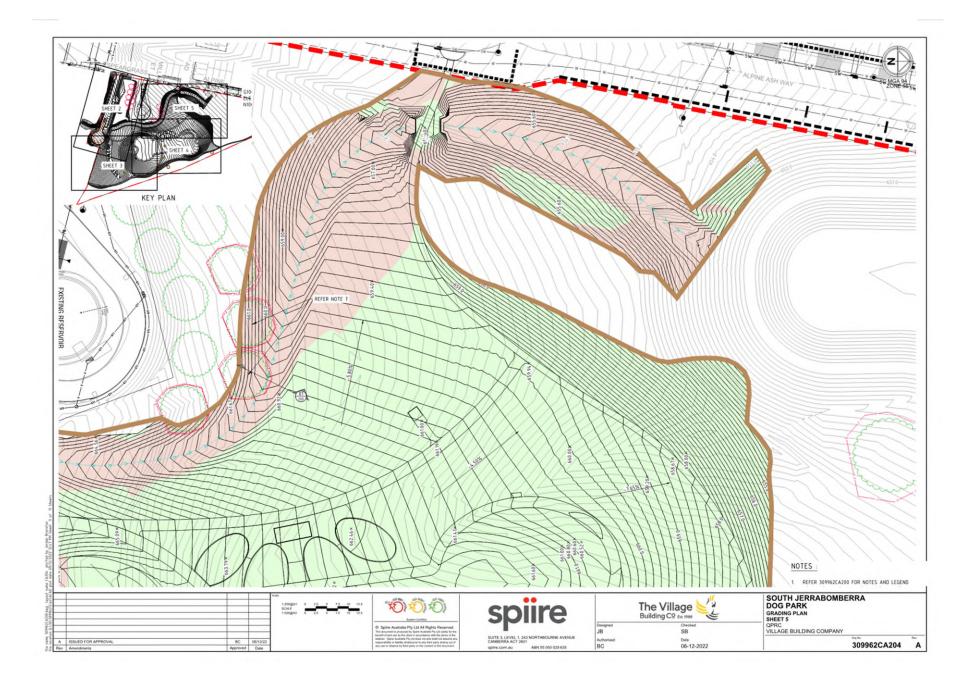












GENERAL NOTES

- THIS DRAWING TYPIFIES THE EROSION CONTROL PRINCIPLES REQUIRED FOR WORKS WITHIN THE QUEANBEYAN PALARANG REGIONAL COUNCIL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN, CONSTRUCT AND MAINTAIN TEMPORARY EROSION CONTROL MEASURES TO COMPLY WITH THE REQUIREMENTS OF THE QPRC SPECIFICATION C211 - CONTROL OF EROSION AND SEDIMENTATION, VERSION 1 JANUARY 2019.

 VARIATIONS TO APPROVED CONCEPTS AND PROPOSALS ARE TO BE ENDORSED.
- BY OPEC PRIOR TO IMPLEMENTATION.
 SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE CONSTRUCTED AND
- MAINTAINED AS PER THE MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION, 4TH EDITION. 2004.

PRE CONSTRUCTION PHASE

- CONSTRUCT STABILISED DRIVEWAY ENTRANCES. CONSTRUCT SEDIMENT BASINS, DIVERSION CATCH DRAINS, DIVERSION BANKS OR OTHER DIVERSION WORKS AS REQUIRED, GRASS EMBANKMENTS AND INVERTS. PLACE BITUMEN STABILISED STRAW MULCH AND JUTE MESH TO WHITE WATER
- 3. CONSTRUCT SILT FENCES AND COMBINED HAY BALE/SILT FENCES AS SHOWN.

CONSTRUCTION PHASE

- NO STOCKPILES, HAUL ROADS OR TRACKS ARE TO BE ESTABLISHED IN AREAS OTHER THAN THOSE SPECIFIED IN THE DOCUMENTS AND AS SHOWN ON THE PLAN. THE WORKS SHALL BE PLANNED TO ENSURE THAT A MINIMUM AREA OF THE SITE IS DISTURBED AT ANY ONE TIME.
 ALL OVERLAND FLOW CHANNELS SHALL BE TOPSOILED, GRASSED AND MULCHED
- IMMEDIATELY AFTER THEIR COMPLETION.
- ALL EARTHWORKS SHALL BE CARRIED OUT EXPEDITIOUSLY, TOPSOILED GRASSED AND MULCHED IMMEDIATELY ON COMPLETION SITE RESTORATION SHALL BE CARRIED OUT PROGRESSIVELY AS THE WORKS PROCEED.
 ALL AREAS OF THE SITE BEYOND EARTHWORKS AND DRAINAGE WORKS LIMITS
- DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED IMMEDIATELY AND AT THE CONTRACTOR'S EXPENSE.

 SILT FENCES ARE TO BE CONSTRUCTED ON THE DOWNSTREAM SIDE OF ANY
- STOCKPILES THAT DO NOT HAVE A GRASSED BUFFER OF 20m OF UNDISTURBED NATURAL VEGETATION. PLACE SILT FENCES ACROSS FLOW PATHS BURING CONSTRUCTION STAGING
- WHERE INTERMEDIATE SILT FENCES CAN BE DOWNSTREAM OF CONSTRUCTION
- ALL TRUCKS EXPORTING MATERIALS OFF SITE SHALL HAVE THE LOAD COVERED.

POST CONSTRUCTION PHASE

- SILT FENCES FOR BLOCKS AND STABILISED DRIVEWAY ENTRANCES ARE TO REMAIN AFTER CONSTRUCTION

SEDIMENT CONTROL NOTES

- SEDIMENT AND EROSION CONTROL DEVICES TO BE INSTALLED AND FULLY
- OPERATIONAL PRIOR TO STRIPPING OF SITE TOPSOIL. STOCK PILE/S TO BE LOCATED AWAY FROM DRAINAGE LINES AND SURFACE FLOW PATHS. CONTOURED STRIATIONS OR FURROWS TO BE PROVIDED TO STOCK PILES TO MINIMISE EROSION.
- STABILISED CONSTRUCTION ENTRANCE TO BE CONSTRUCTED PRIOR TO ACCESS
 TO SITE BY CONSTRUCTION VEHICLES. AGGREGATE TO BE TURNED WHEN SEDIMENT BUILDS UP.
- TOTAL SITE AREA IS 7.765ha.
- TOTAL DISTURBED AREA IS 4 793ha
- CONTRACTOR IS TO ESTABLISH A MAINTENANCE PROGRAM FOR SEDIMENT AND EROSION CONTROL DEVICES TO ENSURE INSPECTION AFTER SIGNIFICANT RAINFALL AND THAT ANY REPAIRS NECESSARY ARE QUICKLY ATTENDED TO. LIMIT ACCESS TO SITE DURING AND IMMEDIATELY AFTER WET WEATHER.
- REGULARLY REMOVE ANY SOIL FROM ROADS ADJACENT TO THE SITE
- NO STORAGE OF CONSTRUCTION MATERIALS, PARKING OF VEHICLES NOR EQUIPMENT PERMITTED IN VERGES OR OPEN SPACE WITHOUT ORPC APPROVAL
- NO SITE SHEDS, STORAGE SHEDS, SITE AMENITIES TO BE ERECTED ON VERGES OR OPEN SPACE WITHOUT ORPC APPROVAL.
- PROVIDE KERBSIDE FILTER ROLL TO EXISTING DOWNSTREAM SUMPS
- KERBSIDE FILTER ROLLS TO BE REMOVED, CLEANED AND REINSTATED ON WEEKLY BASIS AT A MINIMUM. TRAPPED SEDIMENT AROUND SUMPS ALSO TO BE REMOVED. CLEANING IS ALSO TO TAKE PLACE IMMEDIATELY AFTER PERIODS OF RAINFALL DURING CONSTRUCTION.
- 13. EXCESS SOIL IS TO BE DISPOSED AT A LOCATION APPROVED BY SUPERINTENDENT. ALL BUILDING MATERIAL AND WASTE STOCKPILES SHALL BE LOCATED WITHIN A WASTE ENCLOSURE OR WASTE CONTAINMENT AREA ON THE

SEDIMENT BASINS

- SEDIMENT BASINS SHALL BE FULLY MAINTAINED BY THE CONTRACTOR UNTIL THE DISTURBED CATCHMENT AREA IS PROTECTED AGAINST EROSION BY PERMANENT STABILISATION PROTECTION SHALL BE PROVIDED FOR THE FINAL LANDSCAPE WORKS UTILISING SILT CONTROL FENCING.
- THE SEDIMENT BASIN SHALL BE CLEANED OUT WHEN THE VOLUME REMAINING IS REDUCED BY SEDIMENTATION TO 90%.
 THE EMBANKMENT SHALL BE STABILISED WITH HESSIAN TEMPORARILY.
- ORPC TO BE ADVISED OF PROPOSED POND DISCHARGE PRIOR TO DISCHARGE.

MAINTENANCE SCHEDULE

TURN OVER STABILISED CONSTRUCTION ENTRY MATERIAL AND TOP UP AS REQUIRED

- WEEKLY: CHECK AND REINSTATE SILT CONTROL DEVICES.
- MONITOR CONDITION AND STORAGE VOLUMES OF ALL SEDIMENT AND TEMPORARY SEDIMENT BASINS
- 4 SWEEP AND REMOVE ANY DIRT TRACKED ONTO PUBLIC ROADS BY VEHICLES. ALL NECESSARY STEPS SHOULD BE TAKEN THAT ARE PRACTICAL AND
 REASONABLE TO MINIMISE DUST POLLUTION FROM THE SITE.
- CHECK WEATHER REPORT AT www.bom.gov.au FOR ANTICIPATED PRECIPITATION. EMPTY TEMPORARY SEDIMENT BASINS IF STORM EVENT IS FORECAST OR

DUST MANAGEMENT

- A WATER CART/S OR SUFFICIENT WATER SPRAYS SHALL BE MADE AVAILABLE IN DRY AND WINDY CONDITIONS TO MAINTAIN DUST SUPPRESSION.
- WATER SHALL BE APPLIED TO SUPPRESS DUST FROM OPEN EARTHWORKS AS
- WELL AS UNPROTECTED STOCKPILES.

 STOCKPILES SHALL BE EITHER COVERED OR SEEDED TO PREVENT DUST.
- AREAS OF COMPLETED EARTHWORKS SHALL BE PROGRESSIVELY REHABILITATED WITH DRYLAND GRASS AND FENCED OFF AS SOON AS PRACTICABLE TO PREVENT FURTHER FROSION.
- THE CONTRACTOR SHALL CONTACT ORPC TO OBTAIN AN EXEMPTION TO USE WATER ON THE SITE
- IN THE EVENT OF HIGH WINDS, WHERE DUST CANNOT BE CONTROLLED, WORK SHALL CEASE IMMEDIATELY.

CONTROL OF WASTE

ALL BUILDING MATERIAL AND WASTE STOCKPILES MUST BE LOCATED ON SITE. THE WASTE ENCLOSURE IS TO BE USED AND IS TO BE CAPABLE OF HOLDING ALL WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF IN AN APPROPRIATE

EXPORT OF SOIL

 IF SOIL IS TO BE REMOVED FROM OR IMPORTED TO SITE, THE DETAILS OF THE ORIGIN OF THE SOIL IMPORTED OR THE LOCATION WHERE THE SOIL IS TO BE EXPORTED ARE TO BE PROVIDED TO GRPC A MINIMUM OF 2 WEEKS IN ADVANCE

THE PRINCIPLES OF THESE PLANS ARE BASED ON THE MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION 4TH EDITION 2004 GUIDELINES.



WITHOUT TRENCH

LEGEND

FINISHED SURFACE CONTOURS -0.2m MINOR INTERVA STABILISED ACCESS

SITE STOCKPILE

STABILISE STOCKPILE SURFACE

SEDIMENT PENCE ON

THE LOW SIDE

GEOTEXTILE FABRIC

ALL BATTER GRADES 200 NVI MAY

ALL SUPPORT POSTS (1.5kg/m STEEL

STAR PICKET) WITH SAFETY CAP PLACED DOWN-SLOPE OF FABRIC

AN BE CONSTRUCTED WITH OR

TEMPORARY CONSTRUCTION FENCE

SILT FENCE

DIVERSION DRAIN CONSTRUCTION SWALE

EXISTING SURFACE OVERLAND FLOW DIRECTION

TEMPORARY SEDIMENT BASIN

DISTURBED AREA

CLEAN CATCHMENT

SEDIMENT BASIN A

SITE AREA
- TOTAL CATCHMENT AREA = 0.753 HECTARES DISTURBED CATCHMENT AREA = 0.753 HECTARES

- 30

RAINFALL DATA - DESIGN RAINFALL DEPTH = 5 DAYS

- DEISGN RAINFALL DEPTH = 90%
- X-DAY, Y PERCENTILE RAINFALL EVENT = 33mm R FACTOR = 1500
- SOIL ERODIBILITY (K-FACTOR) = 0.049
- SLOPE LENGTH = 80m
- SLOPE GRADIENT = 5%
- L-S FACTOR = 1.19
- P-FACTOR = 1.3 C-FACTOR = 1
- STORAGE ZONE DESIGN = 3 MONTHS C_ = 0.56
- SEDIMENT BASIN STORAGE VOLUME = 16m3
- SEDIMENT BASIN SETTLING VOLUME = 139m3

SEDIMENT BASIN TOTAL VOLUME = 155m³

SEDIMENT BASIN B

TOTAL CATCHMENT AREA = 4.04 HECTARES DISTURBED CATCHMENT AREA = 4.04 HECTARES

- RAINFALL DATA
 DESIGN RAINFALL DEPTH = 5 DAYS
- DEISON RAINFALL DEPTH = 90%
- X-DAY, Y PERCENTILE RAINFALL EVENT = 33mm R FACTOR = 1500
- RUSLE FACTORS

 SOIL ERODIBILITY (K-FACTOR) = 0.049
- SLOPE LENGTH = 300m
- SLOPE GRADIENT = 10% L-S FACTOR = 6.92
- P-FACTOR = 13
- C-FACTOR = 1
- SEDIMENT BASIN CRITERIA
 STORAGE ZONE DESIGN = 3 MONTHS
- C_ = 0.56

SEDIMENT BASIN STORAGE VOLUME = 514m3

SEDIMENT BASIN SETTLING VOLUME = 747m3

SEDIMENT BASIN TOTAL VOLUME = 1261m³

SOUTH JERRABOMBERRA DOG PARK

ENVIRONMENTAL CONTROLS CONCEPT PLAN SHEET 1

VILLAGE BUILDING COMPANY





STOCKPILES SHOULD BE STORED

DRAINAGE LINES.

FLOW

CONSTRUCTION

JZ RUNOFF DIRECTED

GRADIENT OF DRAIN 1-5%

OTHERWISE 2m (max

DIRECTION OF

FLOW

"RETURNS PLACED IN ACCORDANCE WITH TABLE 01-

SEDIMENT FENCE

TO SEDIMENT TRAP/FRENCE

OUTSIDE HAZARD AREA SUCH AS

EARTH BANK

GEOTEXTILE FABRIC WITH -

12mm CRUSHED ROCK

TYPICAL TOPSOIL STOCKPILES

Min. LENGTH 15n

DGB20 ROADBASE OR

STABILSED CONSTRUCTION ACCESS

DIVERSION DRAIN DETAIL

30mm AGGREGATE

WITH TRENCH

