MAINBRACE
CONSTRUCTIONS

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

PROJECT NAME: BUNNINGS LEPPINGTON

DATE: 01/03/21

WE ARE RETAIL SPECIALISTS

Document Version Control register

Version	Date	Details
Draft	August 2014	Consolidation of individual assessments to a combined impact and aspects assessment.

Impact and Aspects Assessment Revisions

The below table outlines the revisions made to the Impact and Aspects Assessment during the course of the project.

System updates will use whole numbers. Project updates are to use decimal numbers. I.e. rev 1.1 would be the development of the assessment. Rev 1.2 would be the updated document following the start up meeting and 1.3 onwards could include changes in scope, and other changes. The document will be reviewed and updated at least every three months.

Version	Date	Details
1.1	03.02.21	Initial Aspects and Impacts Plan
1.2	1.03.21	Updated to include Construction Traffic Management and Community Consultation and Complaints Handling Plan.

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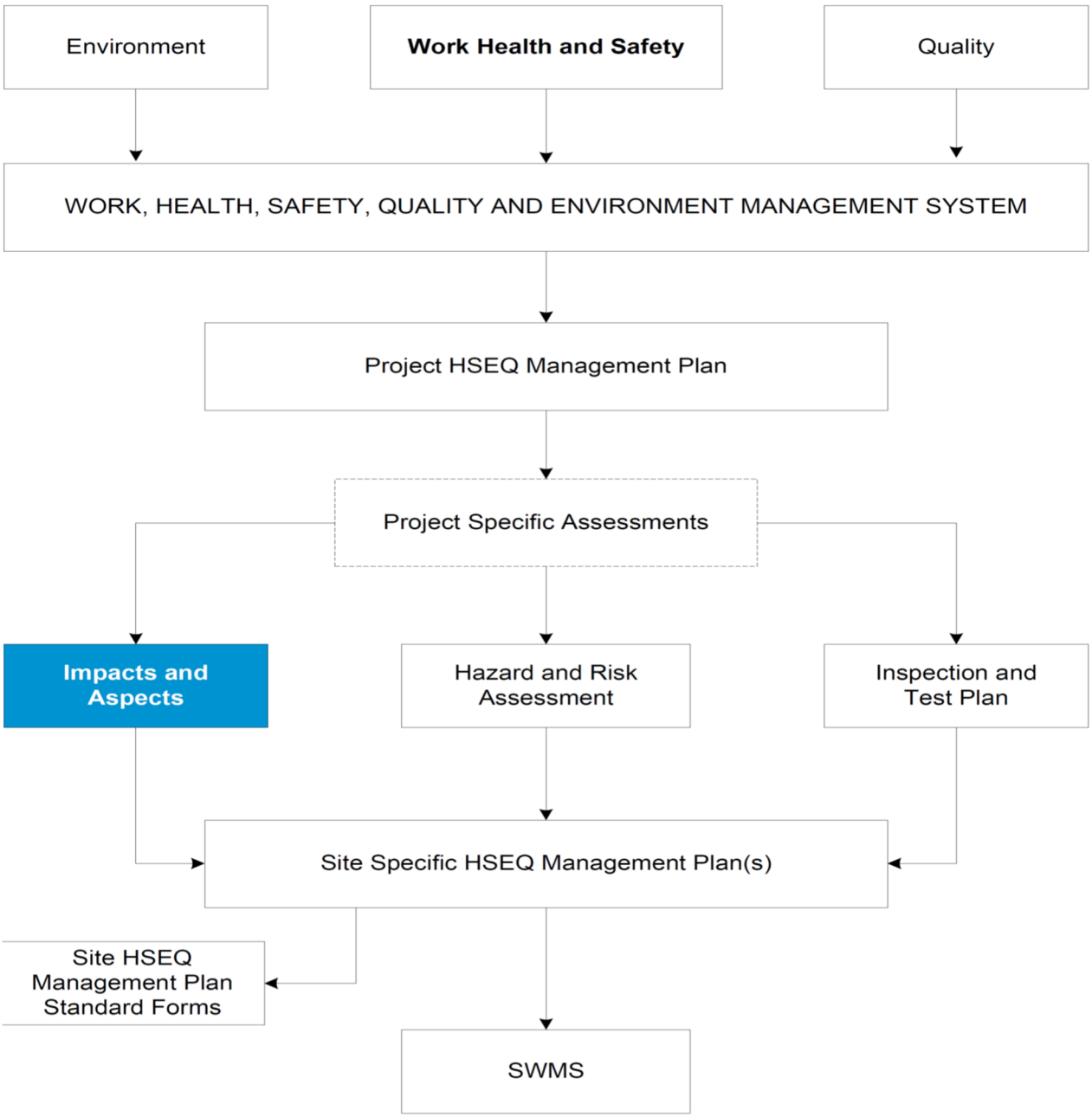
1. INTRODUCTION

This site specific Impact and Aspect Assessments is to be used in conjunction with the Project HSEQ Management Plant Plan and the HSEQ Standard Forms.

This is assessment identifies the potential environmental impacts and provides control measures to be implemented to either reduce the impact, or change the impact from a negative to a positive impact.

The assessment should also include any environmental development consent conditions that are required during construction.

This assessment will be reviewed and updated appropriately (not more than 3 monthly) and then implemented / followed as per the Project HSEQ Management Plan.



Assessment Matrix					
		L - Likelihood - How likely is it?			
		Very Likely	Likely	Unlikely	Very Unlikely
C - Consequence – How will it impact the Environment		1	2	3	4
Very Negative Outcome	A	1	1	2	3
Moderate Negative Outcome	B	1	2	3	4
Moderate Positive Outcome	C	2	3	4	5
Very Positive Outcome	D	3	4	5	6

Aspect	Impacts:	Assessment Rating (pre control)		Proposed Controls: *Decide what controls are to be implemented to reduce the negative impact, or make the impact positive.+*
		Rating L/C	Score	
Waste	• Recyclable materials going to landfill	3A	2	• Waste management plan to be implemented. – Refer appendix A – Site Waste Management Plan.
	• Excessive volume of waste bins sent to landfill	3A	3	• Excess bulk materials to be removed from site. • Waste management plan to be implemented. – Refer appendix A – Site Waste Management Plan.
	• Reusable materials taken off site	D2	4	• Materials to be recycled and reused on site. • Waste management plan to be implemented. – Refer appendix A – Site Waste Management Plan.
Water pollution	• Pollution of local stormwater / waterway from site run off	A3	2	• Sediment control to be provided to site perimeter as per the intent of the sediment control plan. Please refer to Sediment Control Plan included within Appendix C.

				• Sediment control to be provided to pits / outlets as per the intent of the sediment control plan. • Site to be cut to allow for drainage to a designated point on the project. • Significant stockpiles to have dedicated sediment control provided. • Cattle grids to be provided at site vehicle access points. • Wash down facilities to be provided at vehicle access points. • Designated roadways provided on site. • Designated wash out trays / wash out areas to be nominated for concrete pumps and trucks.
	• Contaminates discharged into stormwater / waterways	A3	2	• Water pumped off site to be discharged onto a grassy areas. • Pump out area to be established and water flocculated prior to pumping off site. • Water pumped off site to be pumped through a sediment tank. • Dewatering management plan to be implemented. • Paint tools, wheel barrows, buckets, brushes etc. to be washed and cleaned in designated washout areas.
	• Contamination of ground	A3	2	• Site ablution to be connected to existing sewerage or a pump out tank is to be used, with pumping out effluent using a licensed company. • Fuel >20l to be stored in a bunded area / area that can contain volume of fuel. • Spill kits to be provided to site.
Air Quality	• Emission of dust from construction works	D2	4	• Water carts and water sprays to dampen site dust particularly when the site is dry and it is windy. • Wet cutting methods used for concrete cutting, core holes etc. • Area to be dampened down. • Roadways to be swept regularly. • Vacuum attachment to be used for floor grinding and wall chasing. • Vacuum attachment to be used for plasterboard sanding works.

				• Vacuum attachment to be used for MDF cutting in a designated cutting area. • Ventilation / fresh air to be provided internally.
	• Natural dusts caused from construction works	B1	1	• Stabilise non construction areas which have been stripped of vegetation. • Areas of site stripped with no works to follow to be minimised. • Use water carts and water sprays to dampen site dust particularly when the site is dry and it is windy.
	Emission of fumes during construction works	A3	2	• Plant used internally to be gas / electric powered. • Ventilation to be provided where diesel / petrol powered plant is used. • Plant to be shut down when not in use. • Food bins to be covered. Regular maintenance checks on required equipment to reduce the fumes and emissions produced.
	• Fumes from use of chemicals during construction	A3	2	• Ventilation to be provided. • Mechanical system to be shut down.
	• Disturbance to workers and other staff	B4	4	• Noisy works to be completed out of normal trading hours. • Noise monitoring to be completed during each shift. • Works to be completed within an ICP hoarded areas. • Cutting to be carried out with alternate equipment that create less noise, i.e.; – Block saw fitted with laminated blades. – ICP panel cut with a cold saw, not a beta blade. • Locate noisy fixed equipment behind site structures to deflect noise away from sensitive areas.
	• Local residents	A3	2	• Works that impact residents to be completed within allowable site working hours. • Inform local residents on the intended scope of works, work hours and expected construction impacts on the neighbourhood prior to the

				commencement of construction if they may be effected in any adverse way
Noise	• Public	A3	2	• Noisy works to be completed out of normal trading hours. • Stop works if noise complaint is received. Review noise measures and re-implement prior to commencing works again. Log noise compliant within register located within Appendix B.
	• Discovery of archaeological and heritage Items	A4	3	• Stop all work. • Consult appropriate authority. • Protect sensitive objects. • Protect sensitive areas. • Clearly delineate / signage to be erected. • Complete
	• Damage to known archaeological and heritage Items	A4	3	• Ensure all workers are aware of cultural heritage items. • Protect sensitive areas • Clearly delineate / sign post
Flora and Fauna	• Damage to existing flora	A4	3	• Trees and tree root zones that require protection to be barricaded / fenced. • Trees to be removed to be clearly identified. • Vehicle protection to be provided to protection areas on access roads. • Revegetation to be completed progressively as the works proceed.
Resource Use	• Excess power used	A3	2	• Sheds and amenities to have appliance turned off daily. • Heating equipment to be placed on timers where required outside site work hours.
	• Water wastage	A3	2	• Temp water supply to be maintained without leeks. • Amenities to be checked daily on lock up to ensure all taps are off. • Outlets / hoses on site maintained without damage / leakage.

Environmental Authority Notifications

Please refer to Appendix D for Incident / Non-Compliance Reporting Protocol

Pollution incidents causing or threatening material harm to the environment must be notified.

A pollution incident includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur. Material harm to the environment includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

Appendix A	NSW	EPA	131 555
Appendix B	QLD	Dept of Environment and Heritage Protection	1300 130 372
Appendix C	VIC	EPA	1300 372 842
Appendix D	ACT	EPA	132 281
Appendix E	NT	EPA	1800 064 567
Appendix F	WA	Dept of Environment Regulation	1300 784 782
Appendix G	SA	EPA	1800 623 445

PROJECT PREPLANNING SIGN OFF

By signing this statement page, the senior responsible parties acknowledge having agreed on all aspects of the Environmental controls the site as set out in this Impacts and Aspects Assessment.

Project Manager Signed: _____ Dated: _____

Senior Site Manager Signed: _____ Dated: _____

By signing the table below, each Mainbrace supervisor with EMS responsibly is acknowledging that they have reviewed and been consulted on the formation and content of the Impact and Aspect Assessment.

Name	Position	Signed	Date

APPENDIX A - WASTE MANAGEMENT PLAN

MAINBRACE
CONSTRUCTIONS

WASTE MANAGEMENT PLAN

Bunnings Leppington

February 2021

WE ARE RETAIL SPECIALISTS

Document Version Control

Version	Date	Details
1.0	October 2020	Drafted for use.

Waste Management Plan Revisions

The below table outlines the revisions made to the Waste Management Plan during the course of the project. Should the change effect a particular trade, the revised Plan will be sent to the relevant sub-contractor.

System updates will use whole numbers. Project updates are to use decimal numbers. I.e. rev 1.1 would be the development of the plan. Rev 1.2 would be the updated document following the start-up meeting and 1.3 onwards could include changes in scope, site teams or other changes.

Version	Date	Details
1.1	February 2021	Reviewed for Bunnings Leppington

Table of Contents

WASTE MANAGEMENT PLAN / GUIDELINES

The agreed documented waste management / recycling strategy for the project is as follows;

GENERAL

- Site Management will ensure waste management as per the below strategies are included in all Scope of Works sent out and contract documents.
- A dedicated Construction Waste and Demolition facility will be engaged to ensure compliance to Councils, EPA and the Principal Contractors KPI's are achieved. A strategy of bin type provision and placement will be agreed with the facility management and will be documented as part on the final Waste Management Plan. The Waste Management Plan forms a subset to the overall Environmental Management Plan.
- Waste to be minimised on-site by the provision of dedicated bins for recycling and through enforcing the sorting of materials on site into these bins.
- General waste bin costs to be minimised by recycling of materials and the efficient packing of the general waste bins.
- Waste management strategies and bin situation/locations as per below to be included in the subcontractors site induction.
- All bins (areas) are to have signs displaying what type of bins they are (i.e. Steel, Timber, Concrete, General waste…). Signage to be as per Mainbrace Standard.
- All subcontractors are responsible for placing all their own rubbish and waste in the bins provided.
- All subcontractors to be responsible for the removal of their own pallets and large recyclable and excess material off site.
- Waste management to be included in toolbox talks periodically throughout the job, both internal and subcontractor toolbox talks.
- General waste and recycling bins are to be stacked in an orderly and efficient manner to minimise voids and avoid wasted space in the bin.
- All site staff to do visual inspection daily to ensure subcontractor compliance with this plan and the separation of materials is being carried out accurately, and to ensure that bins are stacked correctly and that there are no massive voids.
- Non-conformances to be issued to subcontractors not adhering to the waste management process on-site.

BIO WASTE

- Food scrap bins to be provided in amenities area and lunchroom, these are to be bagged and tied prior to being placed in general waste bins.

CONCRETE and STEEL

- Dedicated concrete and steel bins to be provided and monitored for subby compliance.

- All excess concrete from pours, pump hoppers etc. to be kept to a minimum. Any additional concrete to be used to provide all weather access to sheds and offices where possible. If not required, then concrete to be placed in a dedicated area or bin and recycled accordingly.
- Any excess steel, reinforcement etc. to be stockpiled neatly in an allocated area on site until a sufficient quantity has been accumulated to warrant removal via a dedicated bin OR placed directly into the bin provided for recycling.

TIMBER and PALLETS

- No full pallets to be placed in the bin, General Waste or timber.
- All full pallets to be separately collected and recycled for use.
- If pallets are not able to be recycled, they must be cut up and stacked neatly in the timber bin (or general waste bin if no timber bin on-site) by the subby who owns them.
- Ensure that all large packaging, pallets, left-over materials and the like are taken away by the subbie, i.e. Electrician to take all cable drums, packaging and the like away themselves.

CARDBOARD

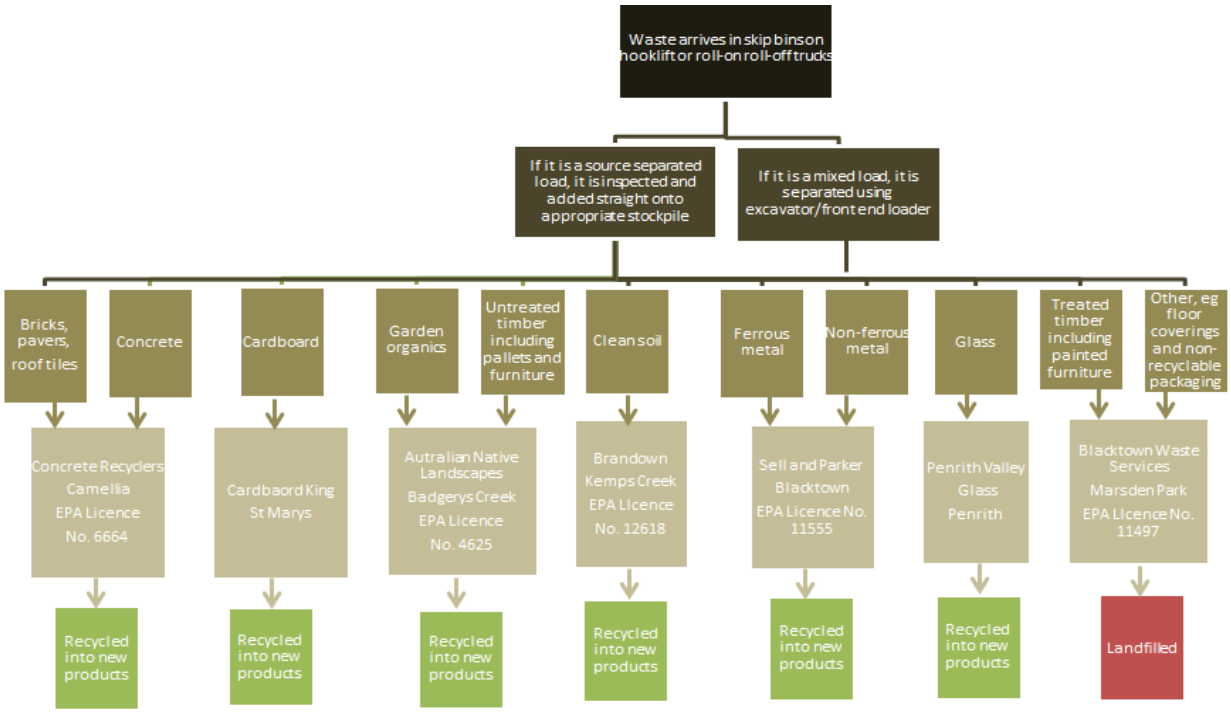
- Cardboard to be laid flat and wet down (Saturated) in the bottom of bins to reduce its impact. May require stockpiling cardboard adjacent to the bins so this can be laid flat into the bottom of an empty bin.
- All Cardboard is to be placed in a created area (by temp fencing) for collection by dedicated cardboard recycler.

PLASTERBOARD / ICP

- Contractor to take unused panels away; not to be placed in our bins.
- Contractor to ensure they stack any offcuts/waste neatly in the bin to prevent voids.
- Dedicated plasterboard bin to be provided if deemed suitable.
- Ceilings / wall linings contractor to take all left-over material away and not to dispose in site bins.

THE RECYCLING PROCESS

The figure below provides an overview of how materials sent to the recycling facility are to be inspected, assessed, sorted, processed and tested to maximise the recovery of materials in waste loads received. Following the sorting and testing of recovered materials, these materials are then on sold to recyclers who use the materials to manufacture a range of construction and related products. Examples of the partners used for that support are listed below.



RESOURCE RECOVERY

Below are the KPI's set down for the recycling of construction waste from the site. These are the current outputs achieved by Mainbrace's preferred Waste Management facility located near the site. Note this does not include food related waste.

Material	Status at time of delivery	Estimated resource recovery
Mixed construction	Mixed	80%
Bricks/pavers	Separated	100%
Mixed bricks and concrete	Mixed load containing only bricks and concrete	100%
Concrete	Separated	100%
Roof tiles	Separated	100%
Clean soil	Separated	100%
Mixed timber	Mixed load of different types of timber	85%
Untreated timber	Separated	100%
Metal	Mixed load of different types of metal	100%
Ferrous metal	Separated	100%
Non-ferrous metal	Separated	100%
Average of all incoming waste	All deliveries	85%

APPENDIX B – EROSION AND SEDIMENT CONTROL PLAN

LEGEND:

PROVIDE 1m RETURNS TO SILT FENCE AT 30m MAX. INTERVALS.
TYPICAL (N.S.O.P.)

- SILT FENCE ONLY
- SILT FENCE WITH CATCH DRAIN
- DIVERSION DRAIN
- OVERLAND FLOW PATH

SEDIMENTATION BASIN NOTE:

FOR SEDIMENT & EROSION CONTROL DETAILS REFER TO DRAWING C011994.06-C25.
SEDIMENTATION BASIN SIZING BASED ON RECOMMENDATIONS OF 'SOILS AND CONSTRUCTION, MANAGING URBAN STORMWATER-THE BLUE BOOK'.
CAPACITY BASED UPON 5 DAY RAINFALL DEPTH AT 85th PERCENTILE INTENSITY (24.4mm).

APPROXIMATE AREA OF DISTURBED SITE = 4.ha

SEDIMENT BASIN 1:

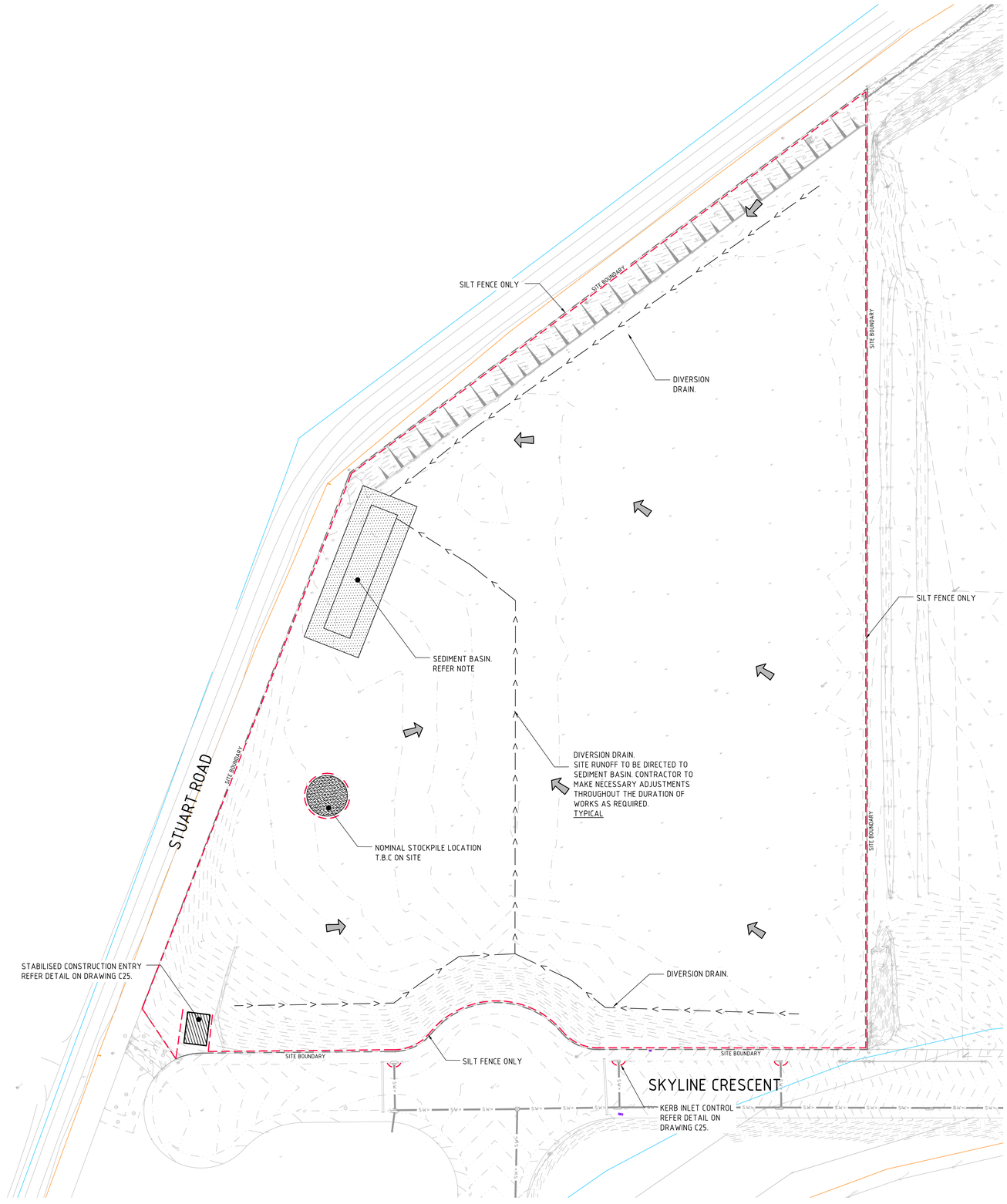
CATCHMENT AREA	= 4.097ha
REQUIRED BASIN VOLUME	= 750m^3
BASE DIMENSIONS (L X W)	= 7.5m x 39.0m
TOP DIMENSIONS (L X W)	= 16.5m x 48.0m
MAX SIDE SLOPE	= 1V:3H
DEPTH	= 1.5m
PROVIDED BASIN VOLUME	= 783m^3

SEDIMENTATION BASINS TO COLLECT RUN-OFF IN EXTREME RAINFALL EVENTS. COLLECTED RUN-OFF TO BE ASSESSED BY A QUALIFIED LABORATORY FOR DOUSING RATES OF ALUM OR GYPSUM TO ENSURE COAGULATION OF SEDIMENTS PRIOR TO WATER BEING DISCHARGED TO COUNCIL STORMWATER SYSTEM.

EACH BASIN IS TO HAVE A MARKER PLACED AS PER THE DETAIL TO INDICATE WHEN SEDIMENT IS TO BE REMOVED. REMOVED SEDIMENT IS TO BE CLASSED AND DEWATERED PRIOR TO REMOVAL FROM SITE.

ALLOWANCE TO BE MADE DURING BENCHING OF SITE TO ENSURE RUN-OFF IS DIRECTED TO SEDIMENTATION BASINS.

NOTES:
1. ASSUME TYPE D SOIL (CLAY/SILTY CLAY)
2. ASSUME GROUP D SOIL (HIGH PLASTICITY AND SHRINK/SWELL PROPERTIES)



EROSION & SEDIMENT CONTROL PLAN
SCALE 1:500

5m 0 10 20 30 40 50m
SCALE 1:500 AT A0 SIZE SHEET

FOR INFORMATION

ISSUED FOR INFORMATION	05.02.21	A
AMENDMENTS	DATE	ISSUE

AMENDMENTS	DATE	ISSUE

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CLIENT
MAINBRACE CONSTRUCTIONS
BUNNINGS warehouse

PROJECT
BUNNINGS WAREHOUSE
LOT 3, BRINGELLY ROAD
HORNINGSEA PARK, NSW

DESIGNED	DRAWN	DATE	CHECKED	SIZE	SCALE	CAD REF:
M.W.	I.O		M.W	A0	AS SHOWN	C011994.06-C 20

Costin Roe Consulting Pty Ltd.
Consulting Engineers ACN 003 696 448
Level 1, 8 Windmill Street
Walsh Bay, Sydney NSW 2000
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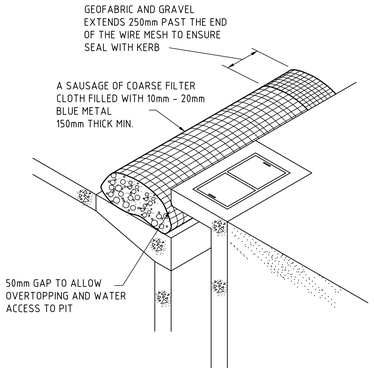
Costin Roe Consulting

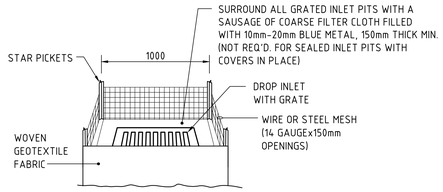
PRECISION | COMMUNICATION | ACCOUNTABILITY

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN

DRAWING No. C011994.06-C20 ISSUE A

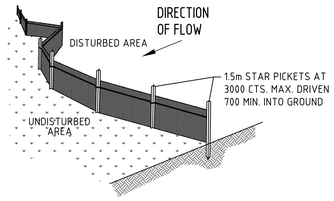


KERB INLET CONTROL
NTS

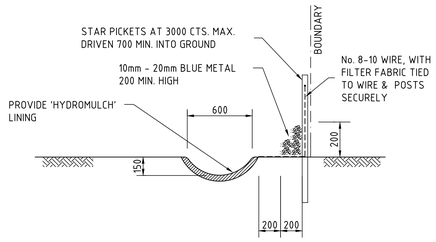


GRATED INLET PIT FILTER DETAIL
N.T.S

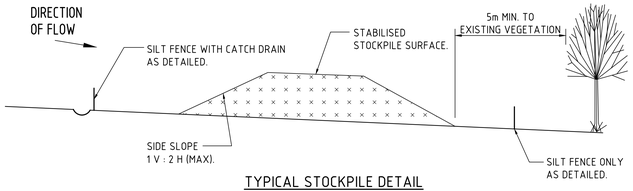
NOTE : ADOPT ABOVE DETAILS AROUND ALL PITS WITHIN AREA ENCOMPASSED BY SILT FENCE & TO PITS ON THE ROAD ADJACENT TO SITE BOUNDARY.



TYPICAL SILT FENCE DETAIL
N.T.S.
PROVIDE 1m RETURNS AT 30m INTERVALS.
TYPICAL

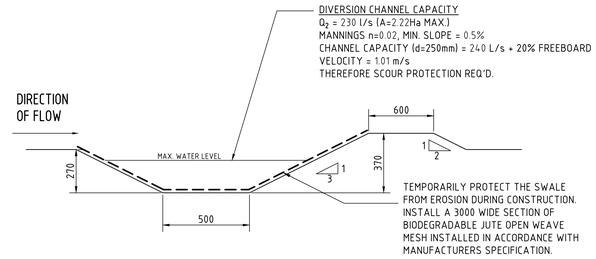


TYPICAL OPEN DRAIN & SILT FENCE
SCALE 1 : 20

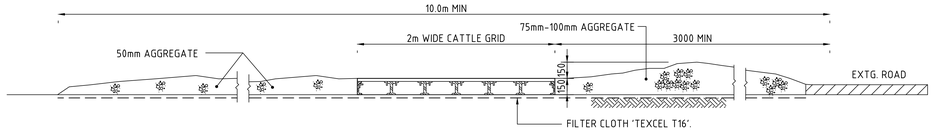


TYPICAL STOCKPILE DETAIL
N.T.S.

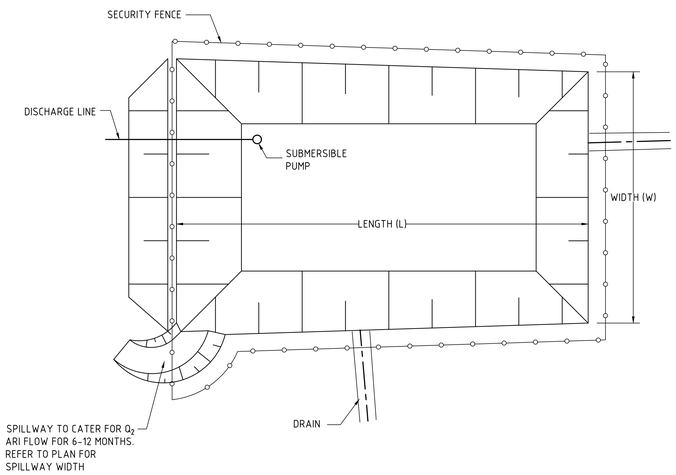
STOCKPILE NOTES
1. PLACE ALL STOCKPILES IN LOCATIONS MORE THAN 5m FROM EXISTING VEGETATION, ROADS & HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT ELONGATED MOUNDS. SIDE SLOPE TO BE 1 V: 2 H MAX.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE STOCKPILES ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE USING WOOD CHIP MULCH - 16 TONNE/Ha.
5. CONSTRUCT SILT FENCE WITH CATCH DRAIN ON UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES & SILT FENCE ONLY 1 TO 2m DOWNSLOPE AS SHOWN.



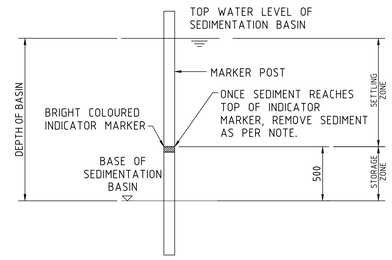
DIVERSION DRAIN SECTION
SCALE 1:20



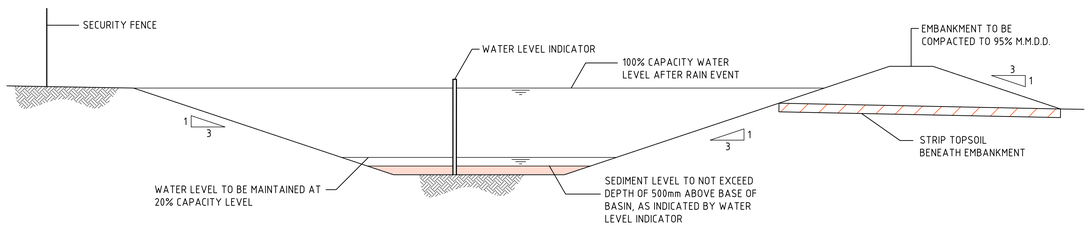
SECTION 1:20 (1 / C20) : STABILISED CONSTRUCTION ENTRANCE 'TRUCK SHAKER'



TYPICAL SEDIMENT CONTROL POND PLAN
SCALE 1:250



SEDIMENT STORAGE MARKER
SCALE 1:20



TYPICAL SEDIMENT CONTROL BASIN SECTION
SCALE 1:50

NOTES:
ALL EROSION & SEDIMENT CONTROL MEASURES TO BE INSPECTED & MAINTAINED DAILY BY SITE MANAGER.

MINIMISE DISTURBED AREAS.

ROADS & FOOTPATHS TO BE SWEPT DAILY.

1.2m TURF TO BE PLACED BEHIND KERBS.

DUST MINIMISATION CONTROL BY WATERING TO BE IMPLEMENTED BY SITE MANAGER AS REQUIRED OR AS DIRECTED BY THE EPA.

2m 0 5 10 15 20 25m
SCALE 1:250 AT A0 SHEET SIZE

500mm 0 1 2 3 4 5m
SCALE 1:50 AT A0 SHEET SIZE

200mm 0 500 1000 1500 2000mm
SCALE 1:20 AT A0 SHEET SIZE

FOR INFORMATION

ISSUED FOR INFORMATION	05.02.21	A
AMENDMENTS	DATE	ISSUE

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ARCHITECT
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CLIENT
MAINBRACE CONSTRUCTIONS
BUNNINGS warehouse

PROJECT
BUNNINGS WAREHOUSE
LOT 3, BRINGELLY ROAD
HORNINGSEA PARK, NSW

DESIGNED	DRAWN	DATE	CHECKED	SIZE	SCALE	CAD REF:
M.W.	I.O		M.W	A0	AS SHOWN	C01994.06-C25

Costin Roe Consulting Pty Ltd.
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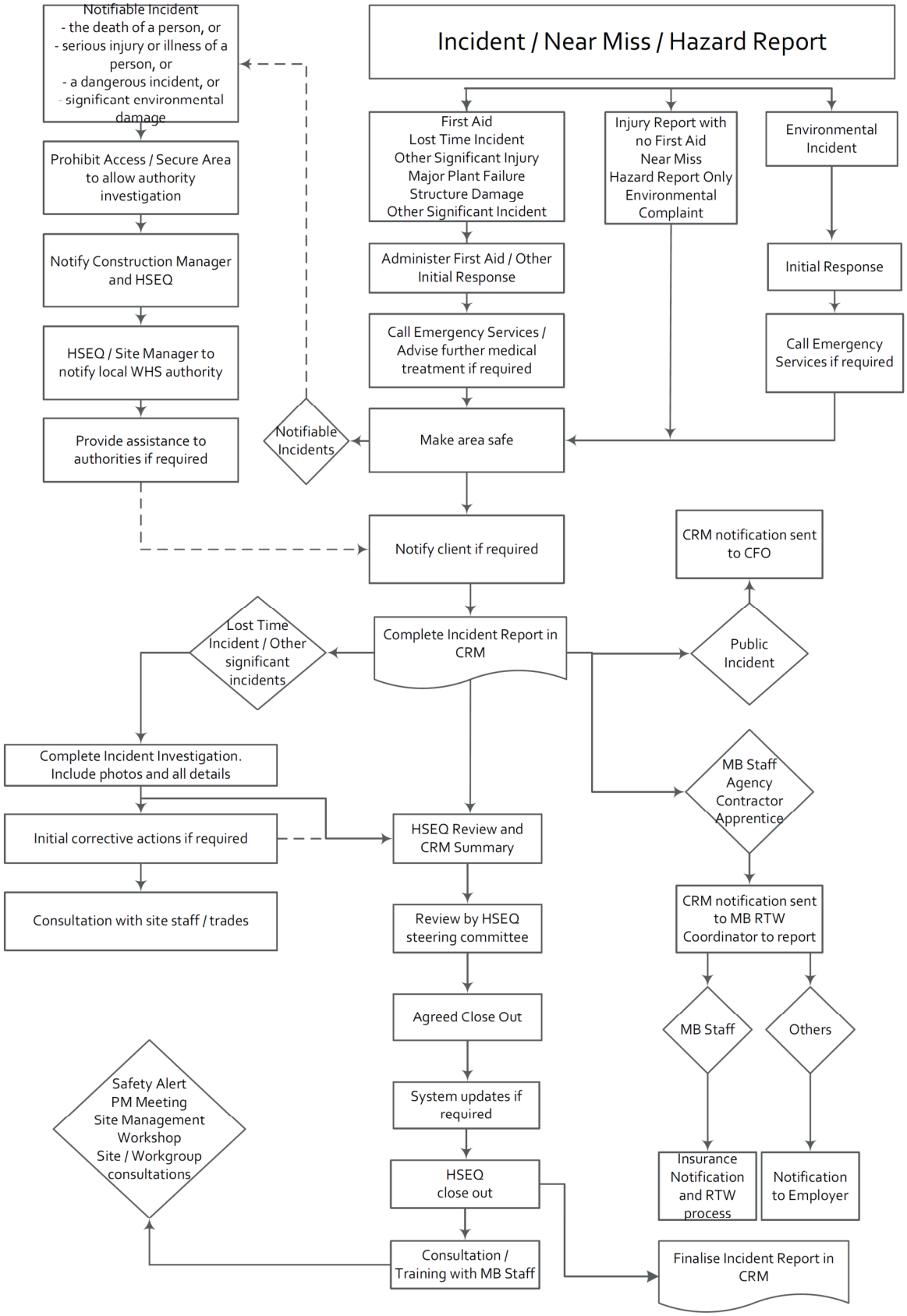
DRAWING TITLE
EROSION & SEDIMENT CONTROL DETAILS

DRAWING No C01994.06-C25 ISSUE A

APPENDIX C – INCIDENT AND NON-COMPLIANCE REPORT PROCESS



APPENDIX D – COMMUNITY CONSULTATION AND COMPLAINTS HANDLING

MAINBRACE
CONSTRUCTIONS

COMMUNITY CONSULTATION & COMPLAINTS HANDLING

Bunnings Leppington

26/02/2021

WE ARE RETAIL SPECIALISTS

Introduction

This report will provide our methodology and processes to ensure smooth delivery through the construction of Bunnings Leppington minimising public & community impacts.

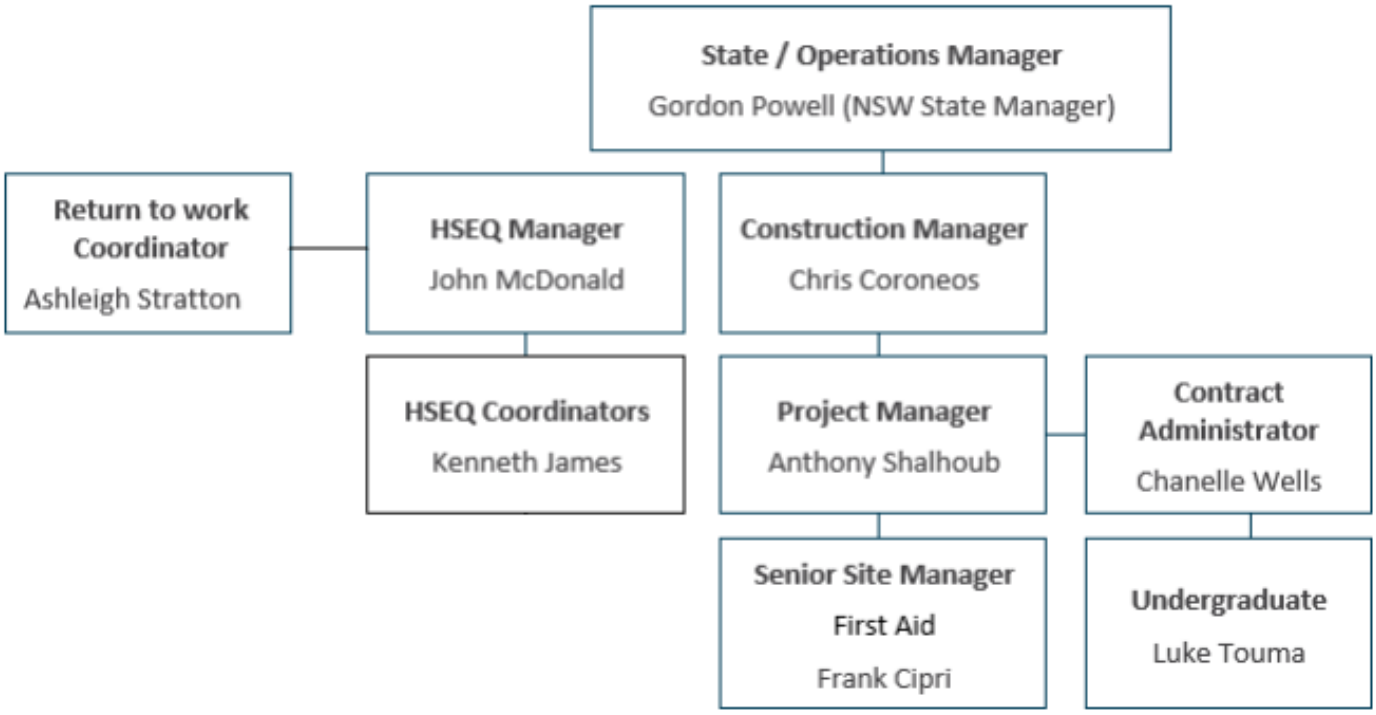
Community Consultation

Our strategy for managing the stakeholders will be framed around a transparent collaborative approach which will include sharing information and expertise, identifying opportunities for innovation and value add, fostering cooperative relationships and identifying areas of risk and mitigation strategies to limit exposure to the client.

Our strategy will include:

- Being open, honest and transparent in all our dealings.
- Developing strong and trusting relationships created by effective and regular communication between Mainbrace and the general public in relation to construction activities that could effect the local community.
- Establish a monthly PCG meeting to ensure all stakeholders are updated regarding project status and any project impacts.
- Providing early warning of any issues that have the potential to impact the site and other stakeholders.
- Working closely with all public members affected by the works in a way that limits the impact of the construction works on the local community.

Project Organisational Chart



Community Consultation

We believe that the residential housing adjacent to our site needs to be intimately addressed and concisely updated with our activities on an ongoing basis which will promote better harmony between the public and construction operations.

Mainbrace will play a key role in delivering stakeholder engagement and communication for the upgrades to Bunnings Leppington.

We will use the following overarching principles to guide the communications and consultation approach:

- Identification and engagement of the community from the outset of the project to ensure everyone is informed throughout the project phases.
- Relevant information - Information is current and accessible to all impacted stakeholders as required.
- Collaboration. Internal collaboration is encouraged for all members involved in the delivery of the project to ensure a unified approach.

Mainbrace will enable this by adopting a proactive approach to communications with the local community and other stakeholders. By adopting the stance that the team is 'always available', Mainbrace will provide opportunities for community members to communicate their concerns and seek understanding about the construction process, which will assist work planning and help to minimise potential disruptions.

A key role of the Mainbrace team will be to ensure issues and concerns raised are addressed in a timely and efficient manner. All stakeholders and community members involved will have a clear understanding about how their feedback and comments are to be used.

‘Personal and targeted communication’ will be focussed at a strategic level with stakeholders and the community to create robust, respectful relationships with members most directly affected by the project.

The Mainbrace Site Manager will be appointed as the single contact point for all community issues and responsible for the contact and complaints register. The Site Manager will report back to the Project Manager and is responsible for the implementation of the contact/complaints register.

Any works requiring disruption to the surrounding community will be advised a minimum of two weeks prior to the proposed commencement. All stakeholders will be involved in this proposal and any potential impact will be minimised.

As with all of Mainbrace projects, the project teams moral and community focus will be paramount and will concentrate on meeting the community’s concerns.

Complaint Handling

Effective complaints management requires a structured, timely and knowledgeable response. Protocols will be established to ensure the correct person handles the issue, clear lines of communication are in place and project members who have the authority to respond are always available.

Concerns will be monitored on a regular basis through the client and internal project communications. The process will include reports detailing management and close-out of issues, and evaluation of the effectiveness of community relations activities, environmental management systems and corporate responsiveness.

A complaints and issue management register will be used throughout the project to ensure accountability, review and evaluation of our performance in satisfying the community.

Concerns raised by the community will be assessed and recorded on the Management Register by Mainbrace. Details will include:

- Name;
- Telephone number;
- Date;
- Issue Raised; and
- Preliminary Action.

A response action will be formulated by Mainbrace which will address:

- Person to be advised;
- Corrective action required;
- Date completed / Close-out; and
- Preventative actions to minimise the reoccurrence.

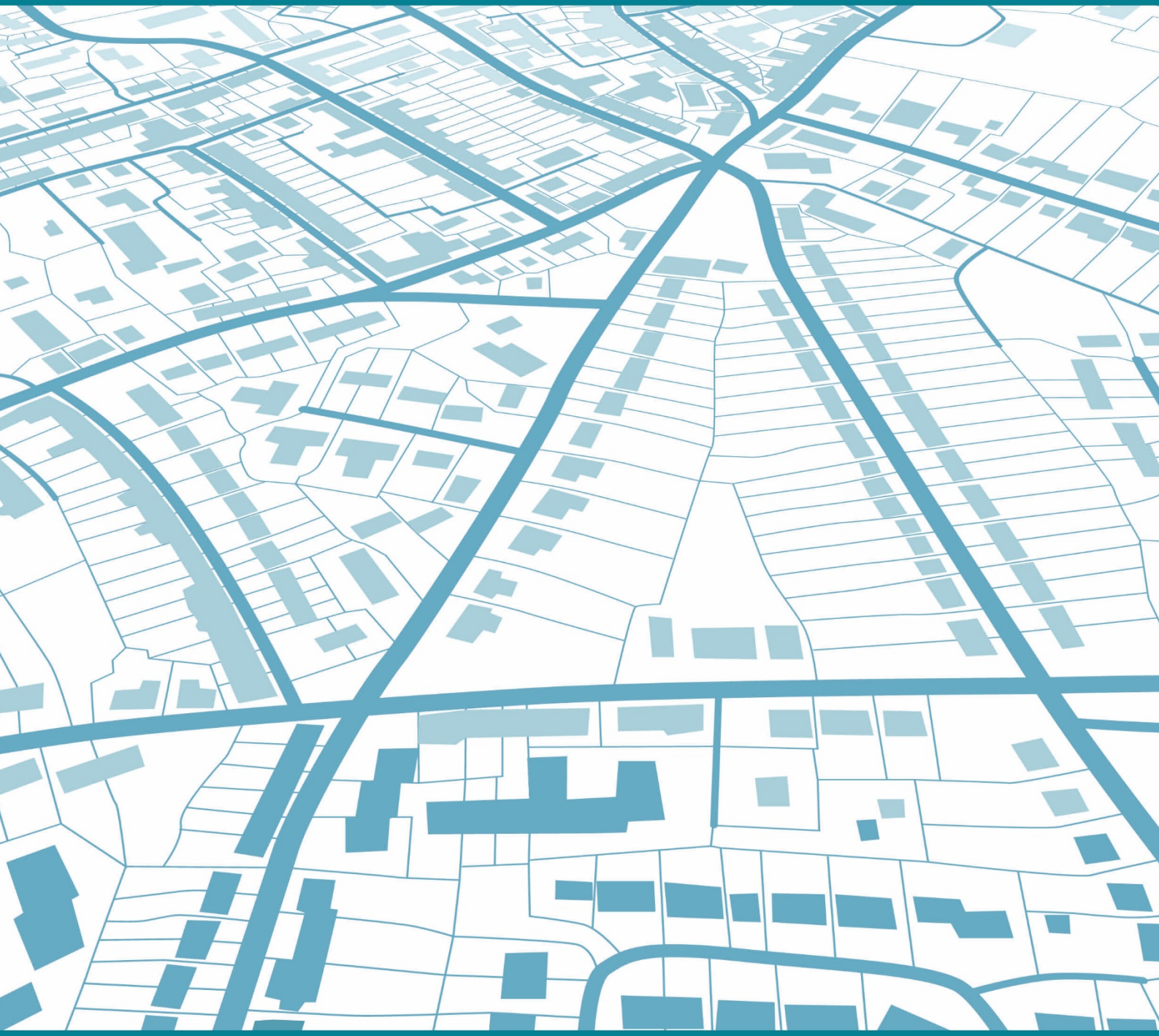
Sample of a Complaint Register

Name	Date	Time	Telephone Number	Method	Type	Issue Raised	Preliminary Action	Preventative Action	Minimise Reoccurrence	Closed-out

APPENDIX E – CONSTRUCTION AND TRAFFIC MANAGEMENT PLAN

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994

Suite 502, Level 5, 282 Victoria Avenue
Chatswood NSW 2067
T (02) 9411 5660 | F (02) 9904 6622
E info@ttpa.com.au | ttpa.com.au



Proposed Bunnings Development

Skyline Crescent, Leppington

Construction Traffic Management Plan

Ref: 19132
Date: March 2021
Issue: B

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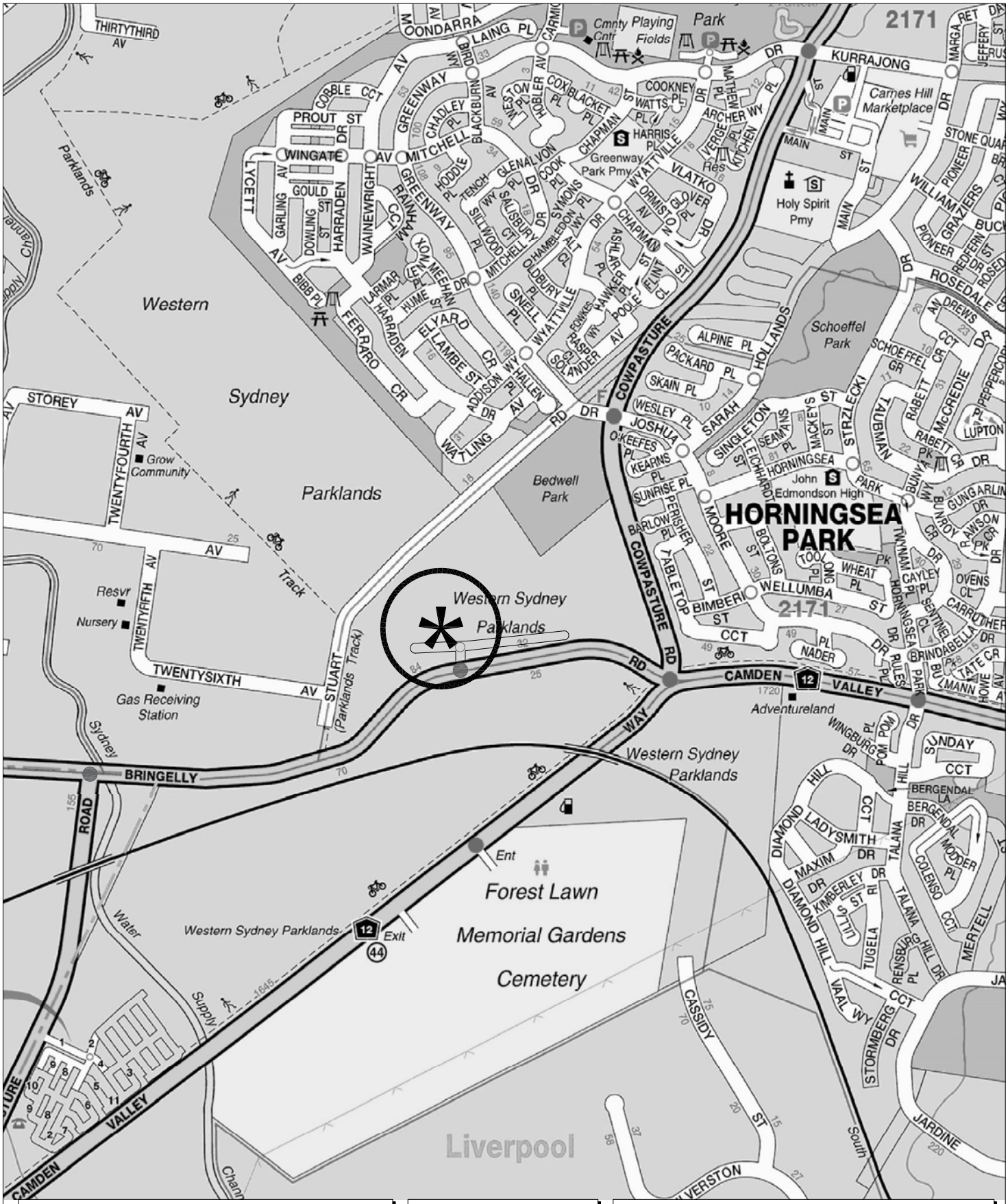
List of Appendices

1.0 Introduction

A Development Application has been approved by the Development of Planning, Industry and Environment for construction of a new Bunnings warehouse on a site in Skyline Crescent at Leppington (Figure 1).

This report has been prepared in satisfaction of Consent Conditions № B1 of SSD-10366 which requires preparation of a Construction Traffic Management Plan in consultation with TfNSW (see details overleaf) which is to be approved before construction commences.



LEGEND

LOCATION

FIG 1

2.0 Proposed Development Scheme

2.1 Site, Context and Existing Circumstances

The site (Figure 2) is proposed Lot 3 in the Bringelly Road Business Hub being an irregular shaped area of some 4.1ha with frontage to the Skyline Crescent access road which connects to Bringelly Road (see subdivision plan overleaf).

The site is located just to the north-east of the proposed Leppington Town Centre which will extend around the new Railway Station.

The nearby uses comprise:

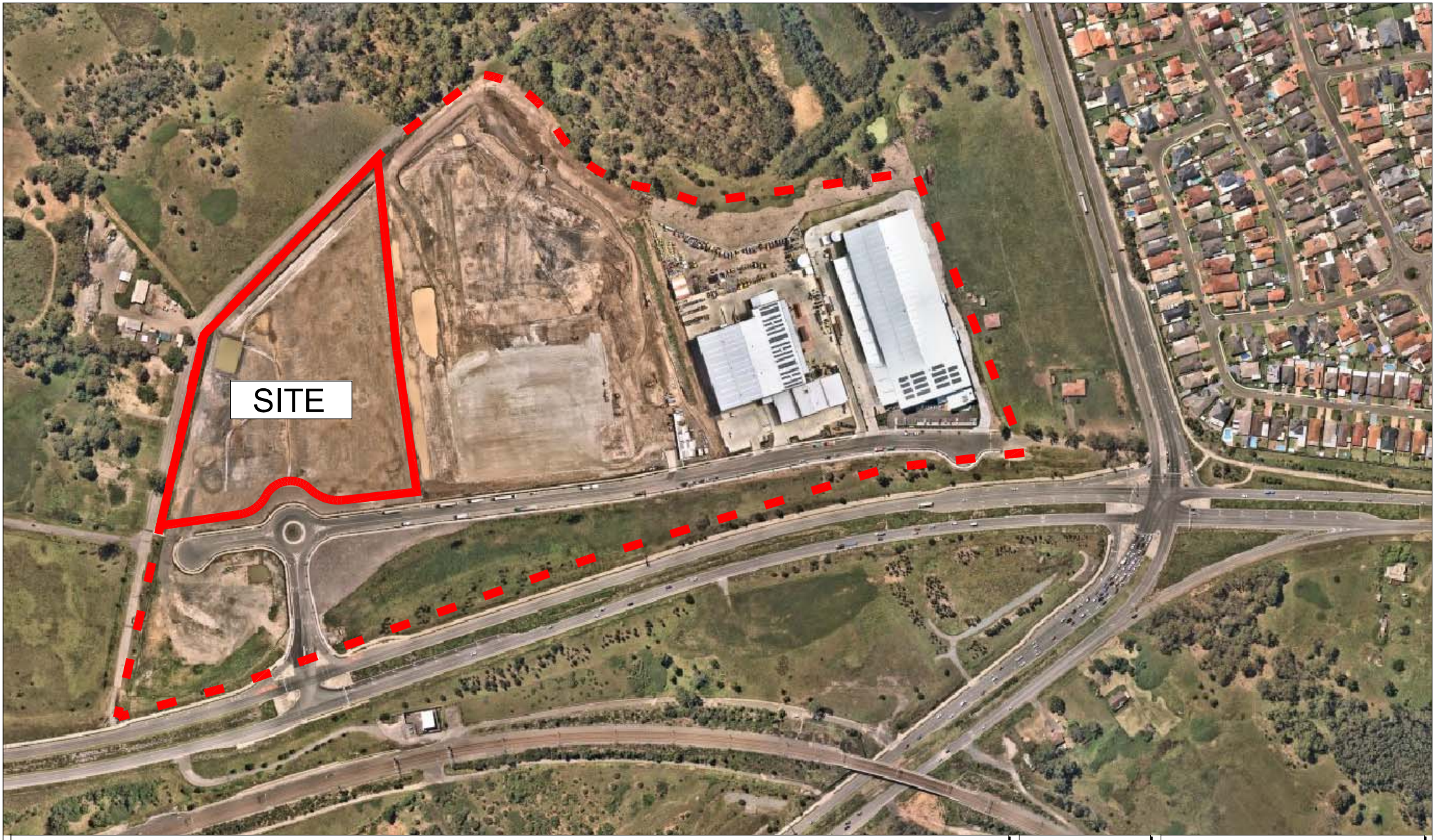
- the Western Sydney Parklands which extend to the north and west
- the rural residential properties which adjoin to the east and west
- the new Horningsea Park and West Hoxton residential precincts which extend to the east and north

The site, which is cleared and vacant, has been subject to earthworks (levelling/benching) as part of the preparatory works for the development of BRBH. Skyline Crescent has been constructed along the former section of Bringelly Road and the access intersection on Bringelly Road is controlled by traffic signals.

2.2 Proposed Development

The proposed Bunnings development involves construction of a single-level building comprising:

Warehouse	
Timber Trade / BM & LY	
Nursery and Bagged Goods	
Total:	**17,401m^2**



LEGEND

SITE

FIG 2

Parking for 366 cars is to be provided at-grade with vehicle accesses comprising:

- a combined ingress/egress for the carpark on Skyline Crescent connecting into the roundabout
- a combined ingress/egress for the carpark and ingress for delivery vehicles on Skyline Crescent at the western site boundary
- an egress for delivery vehicle egress on Skyline Crescent at the eastern site boundary

Details of the proposed development are provided on the plans prepared by Michael Carr Architect which accompany the Development Application and are reproduced in part in Appendix A.

2.3 Construction Program

A process has been established for completion of the various work processes as follows:

Earthworks	8 weeks
Construction	34 weeks
Fitout	6 weeks
Total:	**48 weeks**

2.4 Construction Process

Earthworks

This work will be proceeded by the erection of A Class perimeter fencing with gates provided at the south-western corner where a “cattle grid” for wheel cleaning will also be located (see details overleaf). This process will take some 8 weeks to complete using “Truck&Dog” units with an average of 4 – 6 visitations per day and there will be quite ample room on the large site for trucks and workers vehicles (20) to park during this process.

Turning paths diagrams for the truck access and circulation movements are provided in Appendix C.

Construction

The construction phase will be the process of longest duration (approximately 34 weeks) and peak activity will involve in the order of 60 – 80 people on the site any one time.

Whilst the activity on the site will be more intense during this period and the movement of heavy vehicles will be an average of around 10 – 20 visitations per day with more during concrete pours. Parking will be available for trucks and all workers on the site. Notwithstanding, this provision for workers will be encouraged at all times to utilise the highly accessible public transport system which exists in the vicinity of the site and alternatively to car pool wherever possible.

The provision for loading/unloading for this process will involve trucks standing within the site with all materials be unloaded and stored within the site.

Fitout

The fitout process will take some 6 weeks to complete and there will be some 40 workers involved. There will be some 10-20 truck movements (HRV and semi-trailer) per day. The trucks will unload in the constructed loading dock area while workers will be able to park in the completed car park area.

LEGEND:

PROVIDE 1m RETURNS TO SILT FENCE AT 30m MAX. INTERVALS.
TYPICAL (N.S.O.P.)

- SILT FENCE ONLY
- SILT FENCE WITH CATCH DRAIN
- DIVERSION DRAIN
- OVERLAND FLOW PATH

SEDIMENTATION BASIN NOTE:

FOR SEDIMENT & EROSION CONTROL DETAILS REFER TO DRAWING C011994.06-C25.
SEDIMENTATION BASIN SIZING BASED ON RECOMMENDATIONS OF 'SOILS AND CONSTRUCTION, MANAGING URBAN STORMWATER-THE BLUE BOOK'.
CAPACITY BASED UPON 5 DAY RAINFALL DEPTH AT 85th PERCENTILE INTENSITY (24.4mm).

APPROXIMATE AREA OF DISTURBED SITE = 4.ha

SEDIMENT BASIN 1:

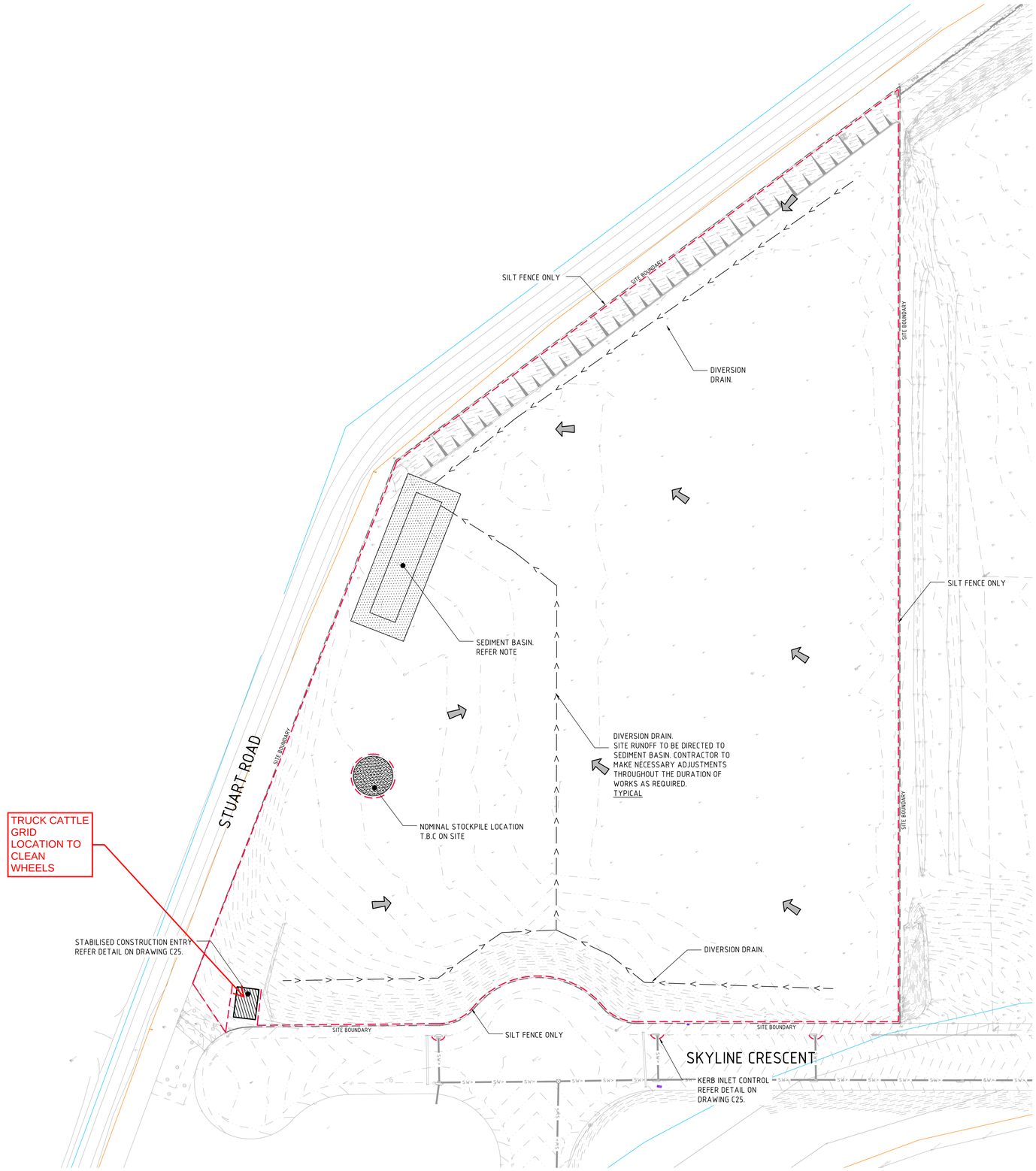
CATCHMENT AREA	= 4.097ha
REQUIRED BASIN VOLUME	= 750m^3
BASE DIMENSIONS (L X W)	= 7.5m x 39.0m
TOP DIMENSIONS (L X W)	= 16.5m x 48.0m
MAX SIDE SLOPE	= 1V:3H
DEPTH	= 1.5m
PROVIDED BASIN VOLUME	= 783m^3

SEDIMENTATION BASINS TO COLLECT RUN-OFF IN EXTREME RAINFALL EVENTS. COLLECTED RUN-OFF TO BE ASSESSED BY A QUALIFIED LABORATORY FOR DOUSING RATES OF ALUM OR GYPSUM TO ENSURE COAGULATION OF SEDIMENTS PRIOR TO WATER BEING DISCHARGED TO COUNCIL STORMWATER SYSTEM.

EACH BASIN IS TO HAVE A MARKER PLACED AS PER THE DETAIL TO INDICATE WHEN SEDIMENT IS TO BE REMOVED. REMOVED SEDIMENT IS TO BE CLASSED AND DEWATERED PRIOR TO REMOVAL FROM SITE.

ALLOWANCE TO BE MADE DURING BENCHING OF SITE TO ENSURE RUN-OFF IS DIRECTED TO SEDIMENTATION BASINS.

NOTES:
1. ASSUME TYPE D SOIL (CLAY/SILTY CLAY)
2. ASSUME GROUP D SOIL (HIGH PLASTICITY AND SHRINK/SWELL PROPERTIES)



MAINBRACE CONSTRUCTIONS MARKED UP TRUCK WHEEL CLEANING LOCATION

EROSION & SEDIMENT CONTROL PLAN
SCALE 1:500

5m 0 10 20 30 40 50m
SCALE 1:500 AT A0 SIZE SHEET

FOR INFORMATION

ISSUED FOR INFORMATION	05.02.21	A
AMENDMENTS	DATE	ISSUE

AMENDMENTS	DATE	ISSUE

ARCHITECT
JOHN R. BROGAN & ASSOCIATES
37 PITT STREET
SYDNEY NSW 2000
PH: (02) 9221 2833

CLIENT
MAINBRACE CONSTRUCTIONS
BUNNINGS warehouse

PROJECT
BUNNINGS WAREHOUSE
LOT 3, BRINGELLY ROAD
HORNINGSEA PARK, NSW

DESIGNED	DRAWN	DATE	CHECKED	SIZE	SCALE	CAD REF:
M.W.	I.O		M.W	A0	AS SHOWN	C011994.06-C 20

Costin Roe Consulting Pty Ltd.
Consulting Engineers ACN 003 696 448
Level 1, 8 Windmill Street
Walsh Bay, Sydney NSW 2000
Tel: (02) 9251-7699 Fax: (02) 9241-3721
email: mail@costinroe.com.au ©

Costin Roe Consulting
PRECISION | COMMUNICATION | ACCOUNTABILITY

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN

DRAWING No. C011994.06-C20 ISSUE A

3.0 Road Network and Traffic Conditions

3.1 Road Network

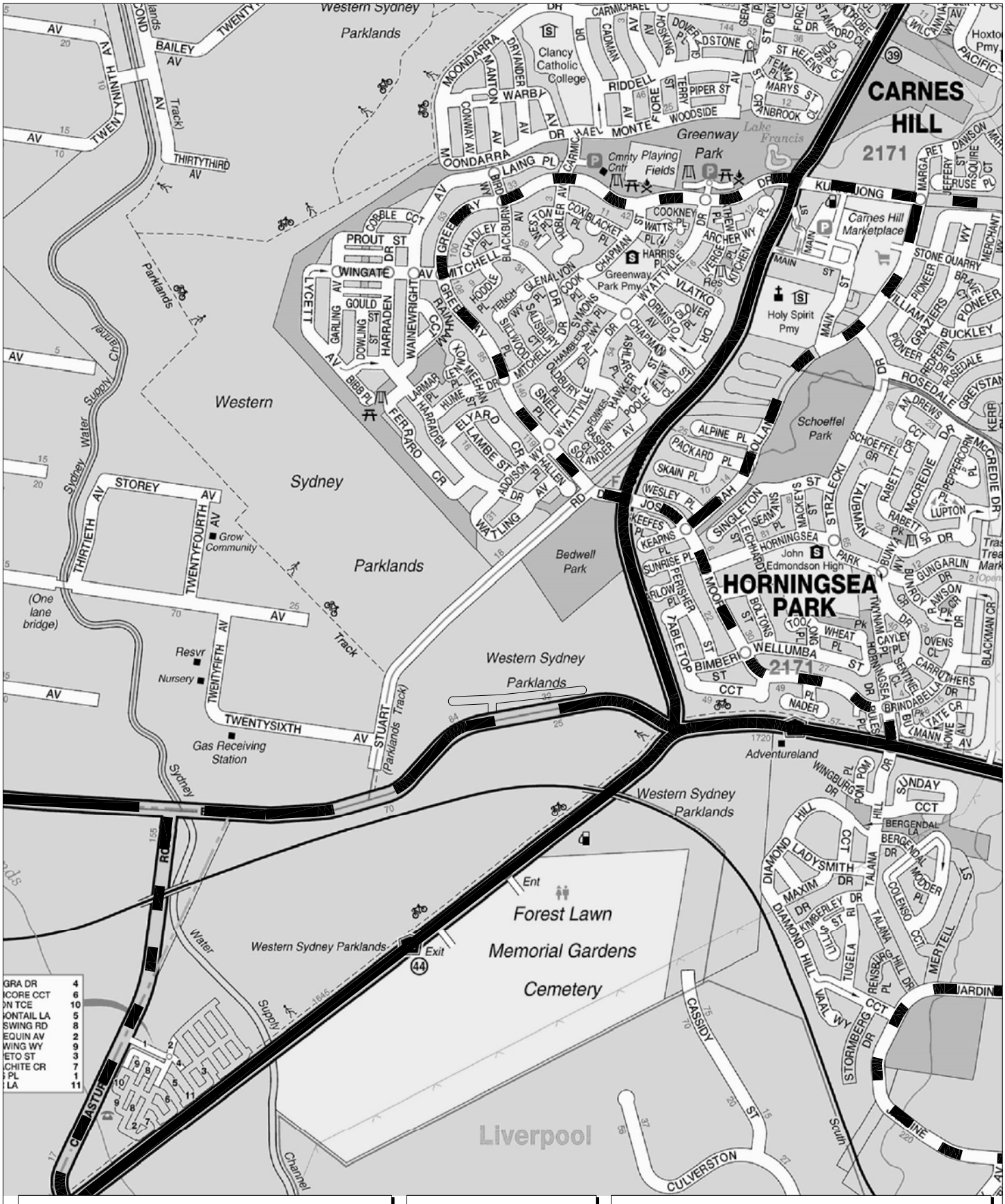
The existing road network serving the site (Figure 3) comprises:

- *Camden Valley Way* – a State Road and arterial route which connects between the Hume Highway at Casula and Camden
- *Cowpasture Road* – a State Road and arterial route which connects between the Horsley Drive at Bossley Park and Camden Valley Way at Horningsea Park
- *Bringelly Road* – a State Road and sub-arterial route which connects between Cowpasture Road/Camden Valley Way at Horningsea Park and The Northern Road at Bringelly
- *Cowpasture Road (South)* – a State Road and Collector route which connects between Camden Valley Way and Bringelly Road
- The collector road systems serving Horningsea Park, Carnes Hill and Edmondson Park
- *Stuart Road* – a local access road, connecting to Greenway Drive
- *Skyline Crescent* – a local access cul-de-sac serving the Bringelly Road Business Hub

3.2 Traffic Controls

The existing traffic controls on the road network (Figure 4) comprise:

- the 70 kmph speed restriction on Bringelly Road
- the traffic signals at the Bringelly Road, Cowpasture Road and Camden Valley Way intersection
- the traffic signals at the Bringelly Road and Skyline Crescent intersection.



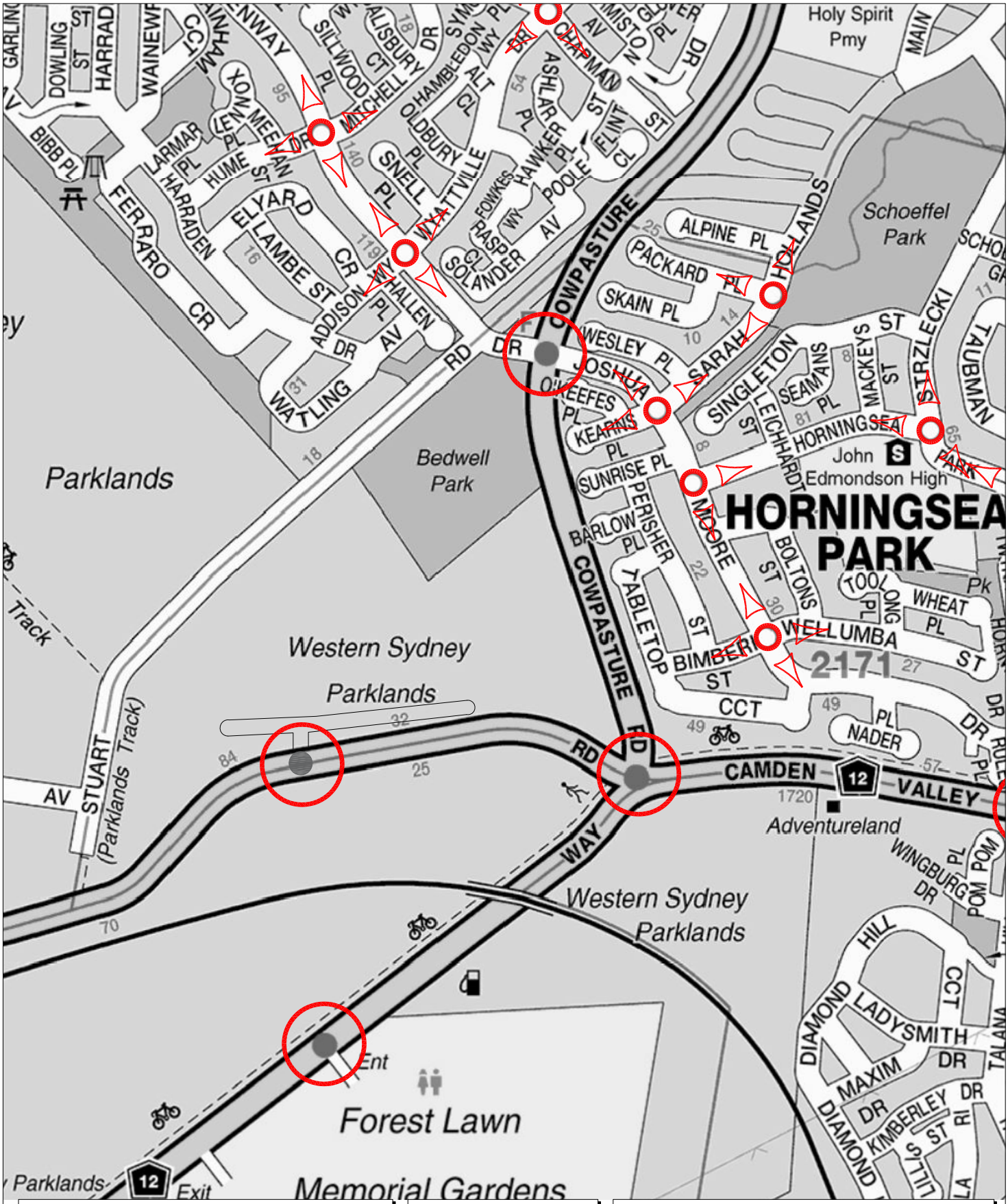
LEGEND

- ARTERIAL
- SUB-ARTERIAL
- COLLECTOR

N

ROAD NETWORK

FIG 3



LEGEND

- TRAFFIC SIGNAL CONTROL
- ROUNDABOUT
- RESTRICTED TURNING MOVEMENT

TRAFFIC CONTROLS

FIG 4

Details of the current arrangements at the Bringelly Road and Skyline Crescent intersection are provided on the image and design plan overleaf indicating the provision to enable a 2nd lane for the right turn into Skyline Crescent in the future. It is proposed to provide a roundabout at the "3 leg" intersection of Skyline Crescent.

3.3 Traffic Conditions

The existing peak traffic volumes on Bringelly Road are subject to ongoing change as development occurs in the area. The Traffic Assessment for the Bringelly Road Upgrade Project[1] identified the following AM and PM peak traffic flows on Bringelly Road west of Camden Valley Way.

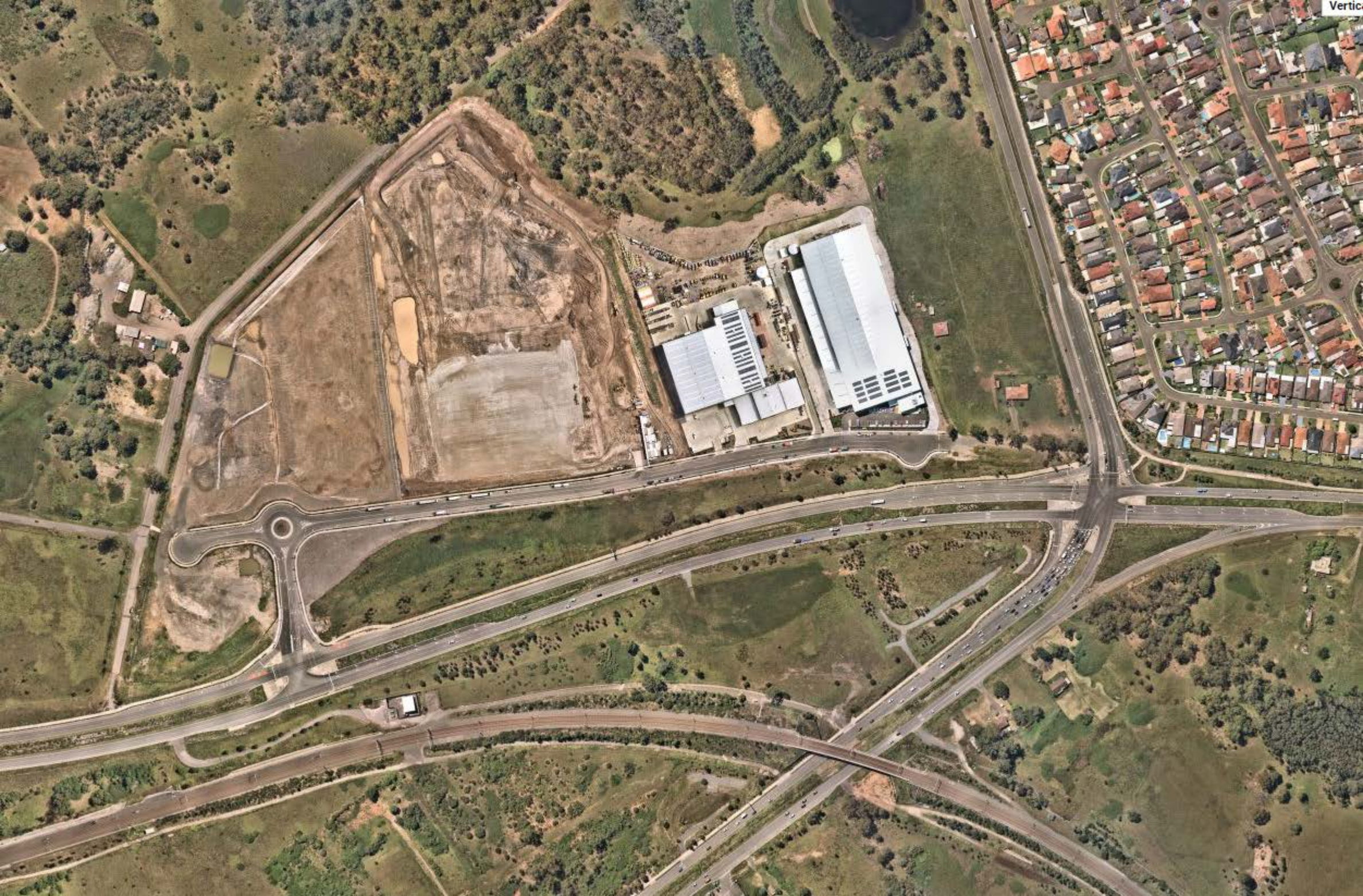
	AM		PM	
	EB	**WB**	**EB**	**WB**
2021	1,752	945	1,039	1,728
2026	2,148	1,211	1,257	2,320
2031	2,855	1,323	1,296	2,958
2036	3,719	1,274	1,408	3,889

The upgrade works (i.e. 2 lanes divided each way with turning lanes) have incorporated a wide median island which will provide for future road widening to enable 3 lanes each way with turning movements at some intersections increased to 2 lanes. The operation of the Skyline Crescent intersection is completely satisfactory at the present time and its geometry readily accommodates trucks including B Doubles.

3.4 Transport Services

The Leppington Railway Station, located some 2.7km to the southwest, provides 20-30 minutes frequency train services while 30-minute to hourly Interline bus services operate along Camden Valley Way (routes 851, 855, 856 and 857) and Horningsea Park Drive (routes 852, 854 and 864) within 600m from the site.

1 *Bringelly Road Upgrade REF AECOM 2011*

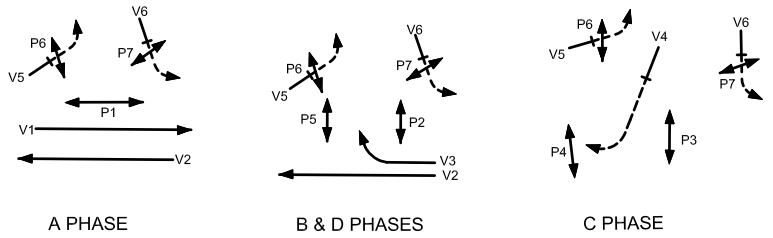


TCS 4589

DRAWN BY CADD
DO NOT AMEND MANUALLY

DATE IN SERVICE : 00/00/00

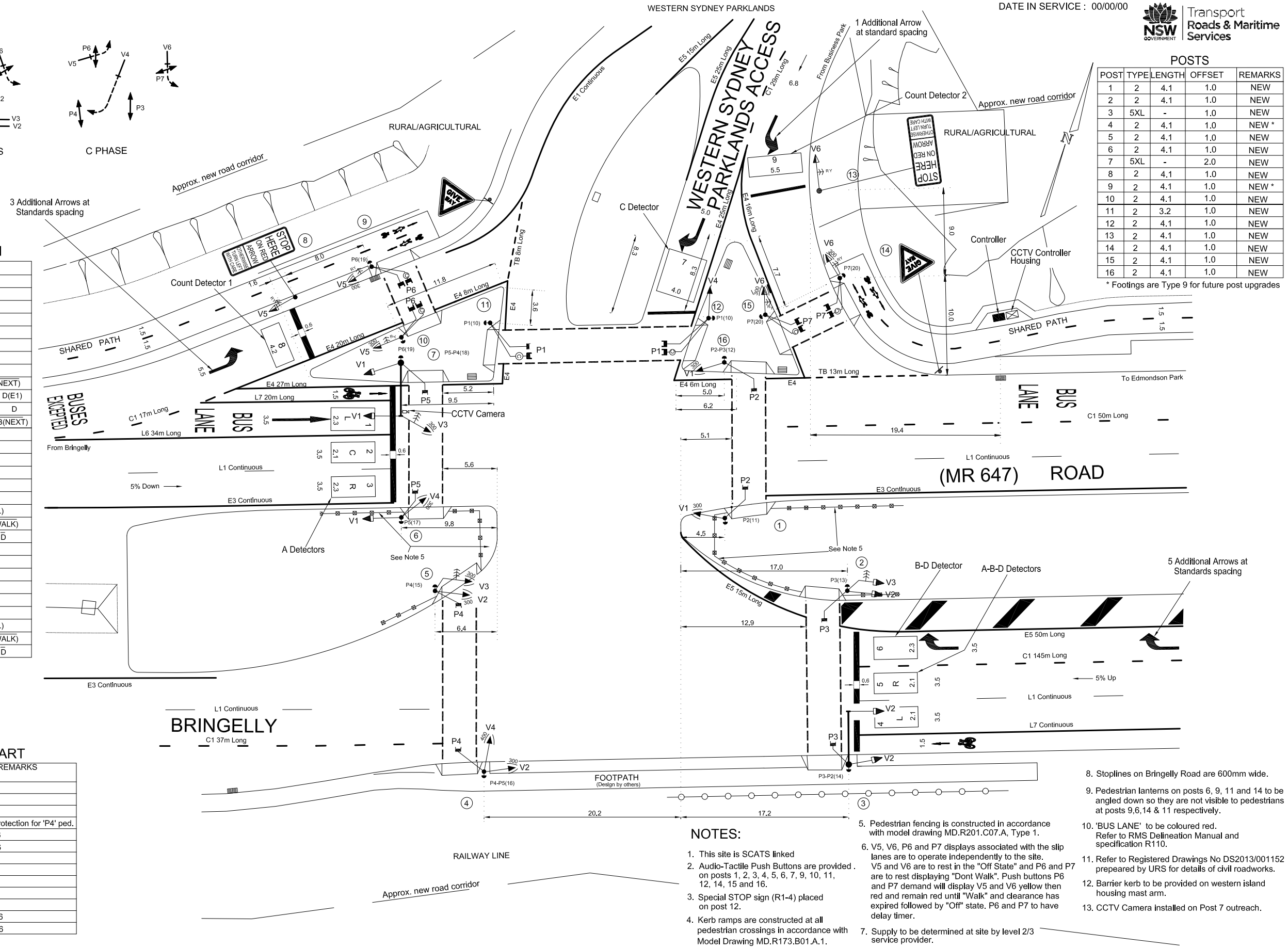
NSW GOVERNMENT Transport Roads & Maritime Services



MOVEMENTS

DETECTOR SPECIFICATION

Detector	Specifications				
A	FN	A(L)	A(E1)		
	SG/PS	$\overline{A}$	A		
	DS				
A-B-D	FN	A(L)	A(E2)		
	SG/PS	$\overline{V2}$	A		
	DS	$\overline{B.D}$	$\overline{B(NEXT).D(NEXT)}$		
contd. A-B-D	FN	B(E2)		D(E2)	
	SG/PS	B		D	
	DS	$\overline{A(NEXT).D(NEXT)}$		$\overline{A(NEXT).B(NEXT)}$	
B-D	FN	B(L)	D(L)	B(E1)	D(E1)
	SG/PS	$\overline{V3}$	$\overline{V3}$	B	D
	DS	-	Z+	$\overline{D(NEXT)}$	$\overline{B(NEXT)}$
C	FN	C(L)	C(E1)		
	SG/PS	$\overline{C}$	C		
		-	-		
P1 P.B.	FN	A(PB)	Re-introduce Wak		
	SG/PS	$\overline{P1(WALK)}$	$A.\overline{P1(WALK)}$		
	DS	-	$B.\overline{C.D}$		
P2 P.B.	FN	B(PB)	D(PB)	A(L)	
	SG/PS	$\overline{P2(WALK)}$	$\overline{P2(WALK)}$	$B.\overline{P2(WALK)}$	
	DS	-	Z+	$\overline{A.C.D}$	
P3 P.B.	FN	C(PB)	A(L)		
	SG/PS	$\overline{P3(WALK)}$	$C.\overline{P3(WALK)}$		
	DS	-	$\overline{A.B.D}$		
P4 P.B.	FN	C(PB)	A(L)		
	SG/PS	$\overline{P4(WALK)}$	$C.\overline{P4(WALK)}$		
	DS	-	$\overline{A.B.D}$		
P5 P.B.	FN	B(PB)	D(PB)	A(L)	
	SG/PS	$\overline{P5(WALK)}$	$\overline{P5(WALK)}$	$B.\overline{P5(WALK)}$	
	DS	-	Z+	$\overline{A.C.D}$	



POSTS

POST	TYPE	LENGTH	OFFSET	REMARKS
1	2	4.1	1.0	NEW
2	2	4.1	1.0	NEW
3	5XL	-	1.0	NEW
4	2	4.1	1.0	NEW *
5	2	4.1	1.0	NEW
6	2	4.1	1.0	NEW
7	5XL	-	2.0	NEW
8	2	4.1	1.0	NEW
9	2	4.1	1.0	NEW *
10	2	4.1	1.0	NEW
11	2	3.2	1.0	NEW
12	2	4.1	1.0	NEW
13	2	4.1	1.0	NEW
14	2	4.1	1.0	NEW
15	2	4.1	1.0	NEW
16	2	4.1	1.0	NEW

* Footings are Type 9 for future post upgrades

SIGNAL GROUP/PHASE CHART

SIGNAL GROUP	PHASES WHEN GREEN A	B	C	D	STANDARD TABLE	REMARKS
V1	X				1	
V2	X	X		X	3	
V3		X		X	34	
V4			C		72	Full Red protection for 'P4' ped.
V5					-	See note 6
V6					-	See note 6
P1	X				3	
P2		X		X	31	
P3			X		1	
P4			X		1	
P5		X		X	31	
P6	X	X	X	X	-	See note 6
P7	X	X	X	X	-	See note 6

NOTES:

1. This site is SCATS linked
2. Audio-Tactile Push Buttons are provided . on posts 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15 and 16.
3. Special STOP sign (R1-4) placed on post 12.
4. Kerb ramps are constructed at all pedestrian crossings in accordance with Model Drawing MD.R173.B01.A.1.
5. Pedestrian fencing is constructed in accordance with model drawing MD.R201.C07.A, Type 1.
6. V5, V6, P6 and P7 displays associated with the slip lanes are to operate independently to the site. V5 and V6 are to rest in the "Off State" and P6 and P7 are to rest displaying "Dont Walk". Push buttons P6 and P7 demand will display V5 and V6 yellow then red and remain red until "Walk" and clearance has expired followed by "Off" state. P6 and P7 to have delay timer.
7. Supply to be determined at site by level 2/3 service provider.
8. Stoplines on Bringelly Road are 600mm wide.
9. Pedestrian lanterns on posts 6, 9, 11 and 14 to be angled down so they are not visible to pedestrians at posts 9,6,14 & 11 respectively.
10. 'BUS LANE' to be coloured red. Refer to RMS Delineation Manual and specification R110.
11. Refer to Registered Drawings No DS2013/001152 prepeared by URS for details of civil roadworks.
12. Barrier kerb to be provided on western island housing mast arm.
13. CCTV Camera installed on Post 7 outreach.

A ORIGINAL ISSUE

PUBLIC UTILITY LEGEND		REFERENCE PLANS	
HYDRANT	□	SYMBOLS/ABBS.	VD003-6
STOP VALVE	▲	STD POSIT	VD001-5
GAS VALVE	#	PRES. DETECT	VC005-17
SEWER MANHOLE	Ⓢ	VEH. GROUP OP	TS-TN-019
TELECOM PIT	◪	DET. LOGIC OP	TS-TN-020
ELECT LIGHT POLE	☌	PED. MOVEMNT OP	TS-TN-021
POWER POLE	○		
STAY POLE	⊘		
TELEPHONE BOX	⚿	SURVEYOR : T. Van Kouterik	
TELECOM PILLAR	◕	DATE : 14/6/2013	

U.B.D. Ref, Map 267 A16
I.S.G. CO-ORDS N: E: 284 273 1 241 764
DESIGNED J. SINGH
CHECKED C. TOMA
C. TOMA
SITE CHECKED
B. LO
RECOMMENDED

DESIGN APPROVAL
APPROVED
R.NETTLE
POSITION DIRECTOR
DATE 30.10.2015
DESIGN PREPARED BY
TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

RMS ACCEPTANCE
RECOMMENDED
POSITION
DATE
ACCEPTED
POSITION
DATE

ROADS AND MARITIME SERVICES

LIVERPOOL COUNCIL AREA
TRAFFIC SIGNALS AT
BRINGELLY ROAD (MR647) AND
WESTERN SYDNEY PARKLANDS ACCESS
LEPPINGTON

DESIGN LAYOUT TCS No 4589

EXISTING ☐ PROPOSED ☒
CADD FILE: VV4589_1A.dgn
SCALE 5 0 (1:200) 5 10
ISSUE A
FILE SF2014/014824
SUPERSEDES SHEET/ISSUE -/-
REG No. DS2014/004956
TCS No. 4589
SHEET 1

Revision 1 - August 2014

It is inevitable that development occurs in the Precinct that improved bus services will be provided along Bringelly Road taking advantage of the bus stop and priority provisions incorporated into the Bringelly Road upgrade works.

4.0 Proposed Construction Traffic Management Plan

4.1 Construction Vehicle Route

Truck movements associated with the earthworks, construction and fitout processes will approach and depart the site along Bringelly Road as indicated in Figure 5.

4.2 Truck Movements

The envisaged truck arrivals will be:

Earthworks	5 – 10 per day (Bogie and Truck&Dog)
Construction	10 – 20 per day (HRV, semi-trailers and concrete)
Fitout	10 – 20 per day with more during concrete pours (semi-trailer and HRV)

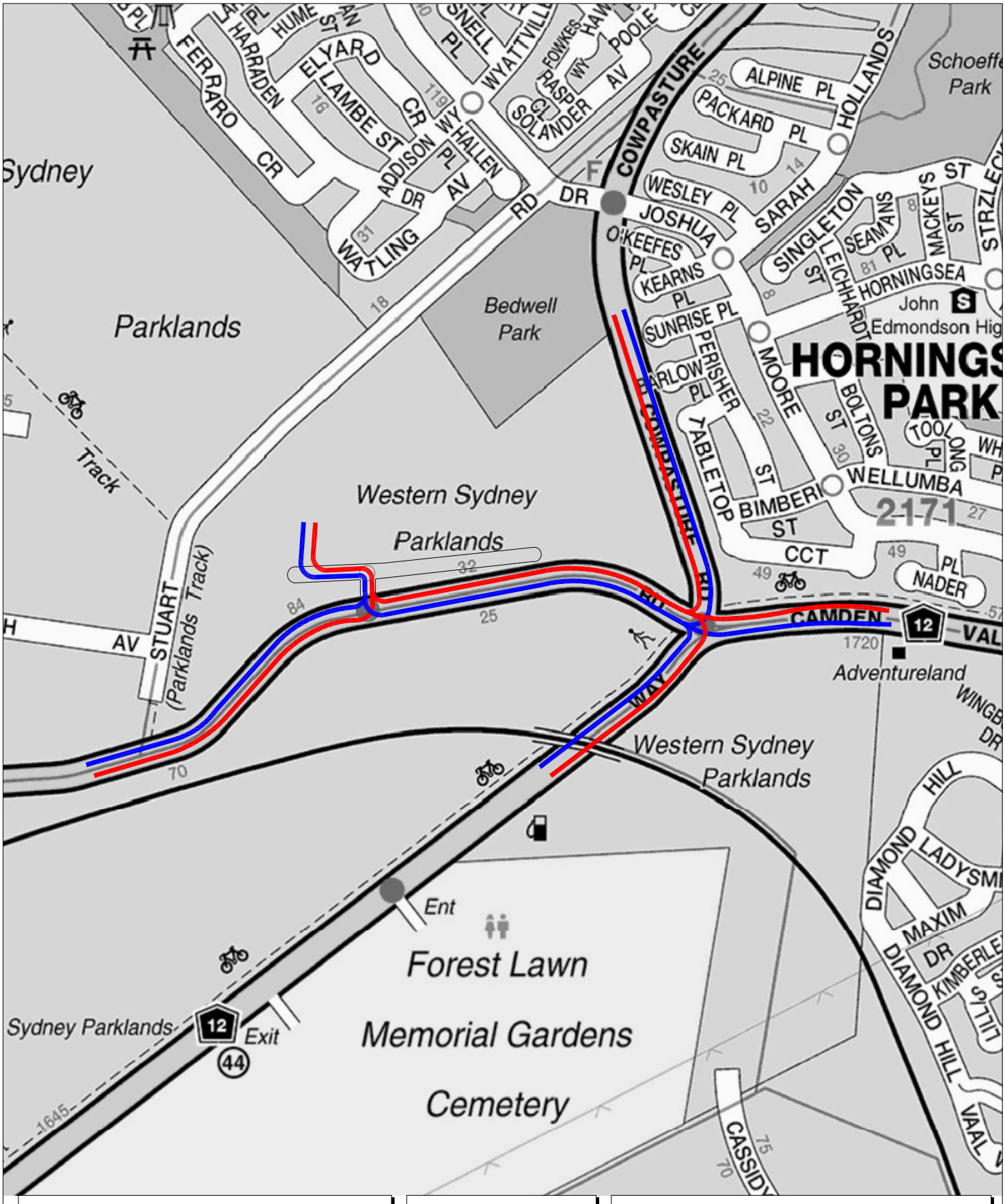
All trucks entering or leaving the site are to have their loads covered while all trucks leaving the site from unsealed areas are to use the cattle grid wheel cleaner.

4.3 Construction Hours

The approved hours of construction activity will be:

7.00am – 5.00pm	Monday to Friday
8.00am – 1.00pm	Saturday
No work	Sunday and public holidays

** Work outside these hours may be permitted under conditions specified in the Consent.*



LEGEND

ARRIVAL

DEPARTURE

N

TRUCK ROUTES

FIG 5

4.4 Cranage and Materials Handling

Trucks will be unloaded standing within the site using manitou (or similar) while mobile cranes may be used for construction lifting. All materials will be stored within the site.

4.5 Site Induction

All workers and visitors on the site will be subject to a formal 'site induction' process and all the inductions will be performed specific to each trade according to Workcover OH & S requirements and will include instruction in regard to the requirements of the CTMP, specified construction vehicle routes and Driver Code of Conduct (to be signed by all persons driving trucks to/from the site).

4.6 Traffic Control Plans

A Traffic Control plan prepared by a Safe Work NSW accredited person is provided in Appendix B.

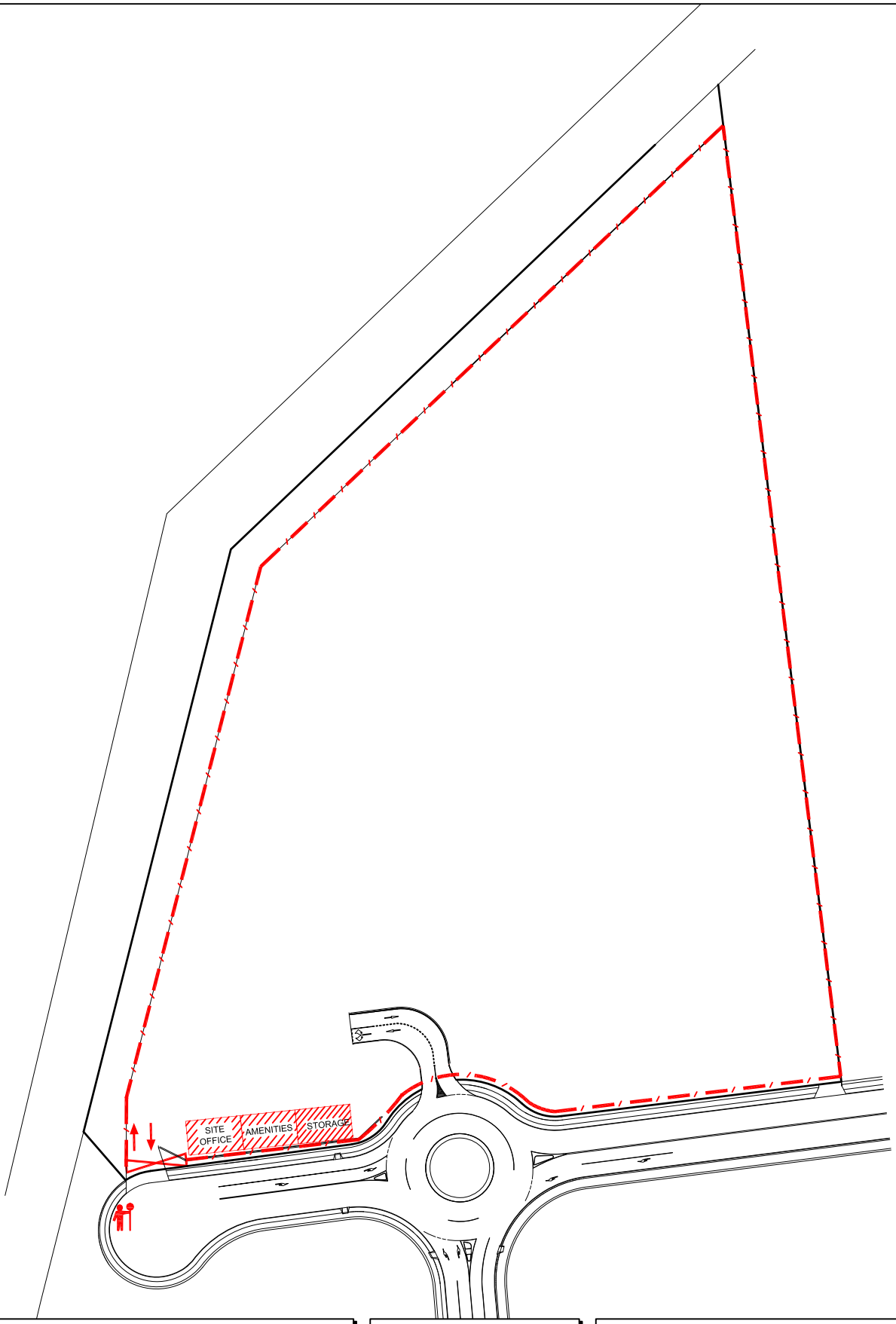
A Traffic controller will be in placed at the site entry/exit point to control heavy vehicle movements in order to maintain the safety of pedestrians and other road users.

4.7 Traffic Management Plan

The principal elements of the traffic action plan (Figure 6) are:

- vehicle access point
- storage areas
- A Class fencing
- traffic controller

These elements are indicated on Figure 6 while details of on-site turning for trucks is provided in Appendix C.



LEGEND

N

TRAFFIC MANAGEMENT PLAN

FIG 6

4.8 Driver Code of Conduct

General

- Truck drivers who require to access the site will be required to read and sign a copy of the Driver Code of Conduct as part of the Induction process. The Induction process will include site specific health and safety advice and in relation to truck movements will include:
    - The restricted times for access
    - Speed limits
    - Parking and manoeuvring
    - Idling of trucks
    - Unnecessary movements
- Drivers are required to hold a current valid drivers license appropriate to the Class of Vehicle they operate
- Drivers are required to report any instances they observe of the drivers of other trucks related to the operation of the site not complying with the Drivers Code of Conduct
- An Incident Register is to be maintained by the Site Manager detailing:
    - Date of Incident
    - Nature of Incident
    - Driver and Truck details
    - Contact details of person reporting the incident
    - Action taken in regard to the incident.

On the Site

- Drivers about to enter or leave the site may only proceed with the approval of the access control personnel
- Drivers are to strictly adhere to the sign-posted speed limit on the site
- Drivers must comply with directions/instructions given by authorised site personnel including where to stand, manoeuvre and to load/unload and permitted times for ingress and egress
- Wheels are cleaned when departing the site

- Drivers are not permitted to “tailgate” when passing through the access point
- Drivers are required to operate their vehicle in a safe and courteous manner at all times

The Driver Code of Conduct is to be displayed at the access control point.

On the Public Road

- Drivers are required to hold a valid drivers license appropriate to the class of vehicle they operate
- Drivers must comply with the signposted speed limits
- Drivers should adopt “defensive driving” practices at all times particularly at times of poor driving conditions
- Drivers must be aware of the “Three Strikes Scheme” operated by TfNSW for drivers of vehicles over 4.5 tonnes
- Drivers must be aware and familiar with Driver Fatigue Law which applies to truck/combinations over 12 tonne and the 3 available fatigue management schemes:
    - Standard hours of operation
    - Basic Fatigue Management (BFM)
    - Advanced Fatigue Management (AFM)
- Drivers must be aware of their responsibilities and requirements in relation to unnecessary compression braking and the impacts that it has on residents at night
- Drivers must report any breakdown or incidents that may present a hazard and protect the vehicle in accordance with the Heavy Vehicle Drivers Handbook. Incidents are to be reported to the TfNSW Transport Management Centre on 131 700.

Compliance Measures

The Mainbrace Site Manager (Frank Cipri) will be responsible for ensuring compliance with the Driver Code of Conduct by:

- Undertaking random surveillance of driver activity on the site and on the public road at a minimum of 3 week frequency
- Reviewing the Incident Register at a minimum of 3 week frequency
- Interviewing the access control staff at a minimum of 3 week frequency

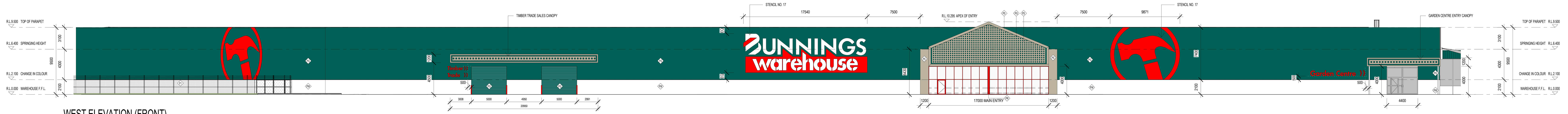
Failure to comply with the Driver Code of Conduct will result in a “Warning Notice” being issued by the Site Manager as disciplinary action if the offender is a Mainbrace employee. If the offending driver is engaged/employed by another company then suspension of cancellation of service could be pursued.

Procedure for Notifying Residents/Community

Because the only access for the site is directly on Bringelly Road (a State Road) and truck movements will not occur on any local roads, there will be no necessity for any notifications.

Appendix A

Development Plans



WEST ELEVATION (FRONT)
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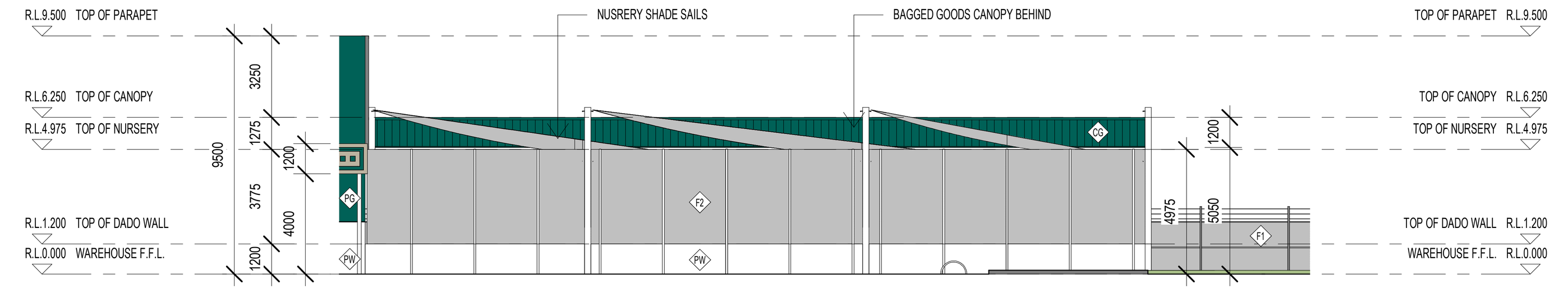

CONT. WEST ELEVATION (FRONT)
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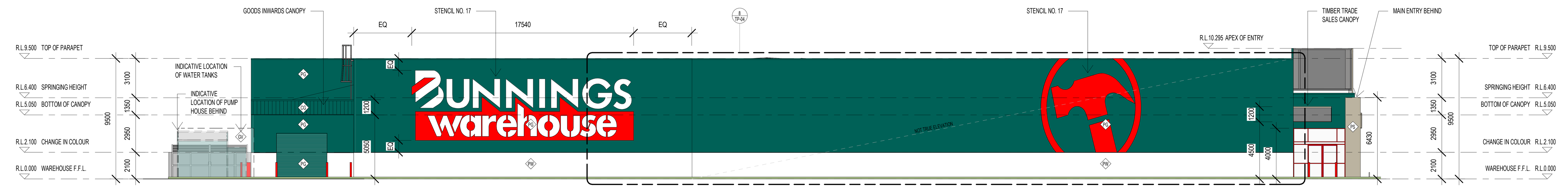

NORTH ELEVATION (BMLY)
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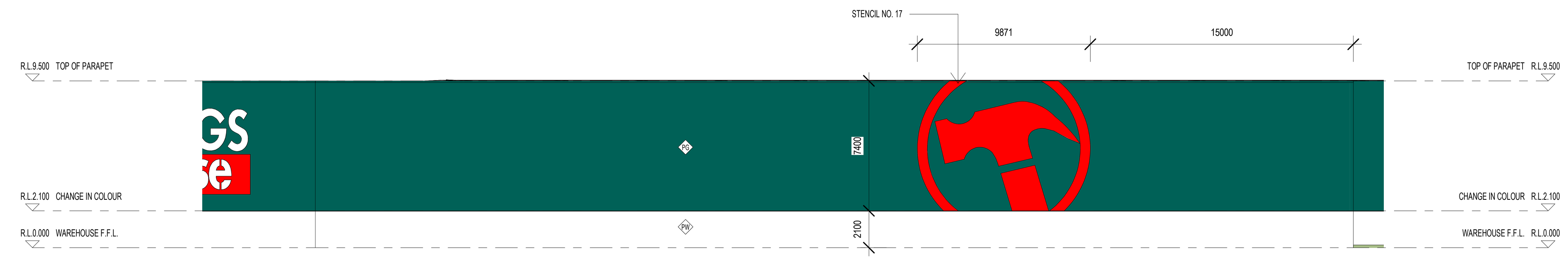

NORTH PART ELEVATION
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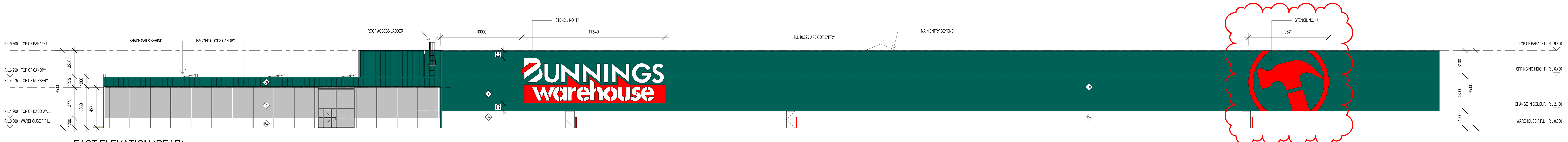

EAST ELEVATION (REAR)
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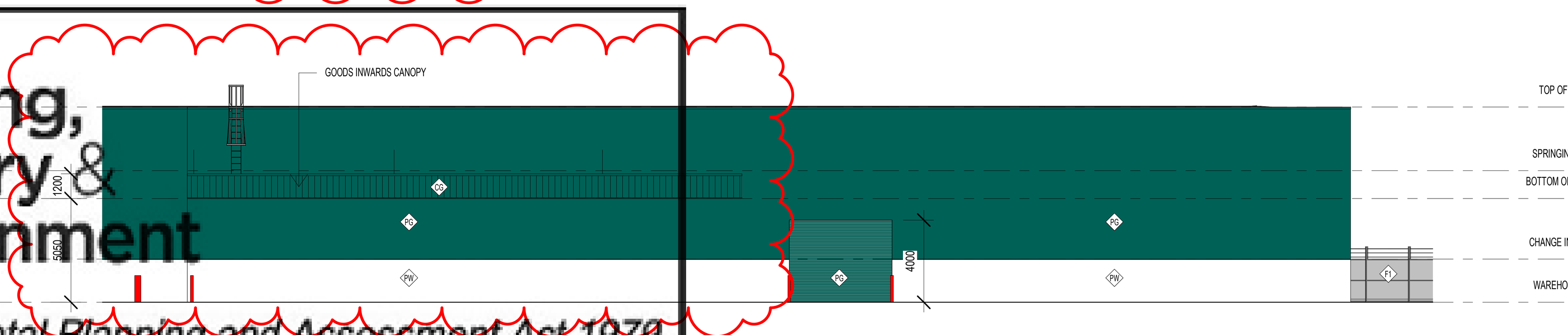

CONT. EAST ELEVATION (REAR)
1 : 200@ A0

NSW GOVERNMENT | Planning, Industry & Environment

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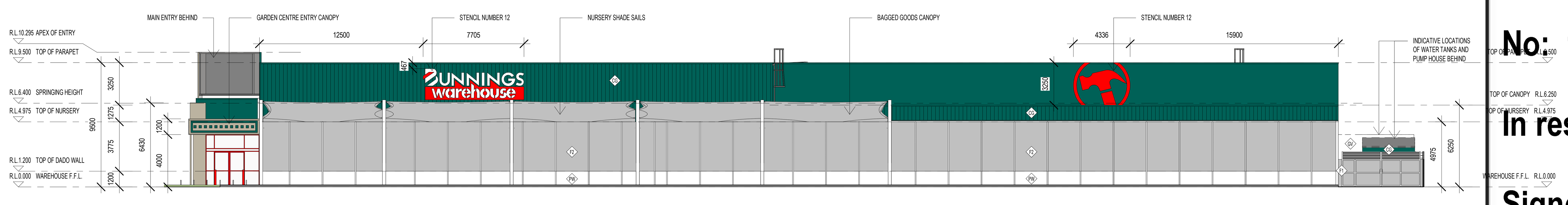
Approved Section 4.55 (1A) Modification Application

No: 1 Granted on: 28 August 2020

In respect to: SSD-10366

Signed: JF Sheet No: 5 of 5



SOUTH ELEVATION (OUTDOOR NURSERY)
1 : 200@ A0

SOUTH ELEVATION (INTERNAL)
1 : 200@ A0

ELEVATION & SECTIONS FINISHES SCHEDULE

PR	FINISH: PAINT COLOUR: DULUX SHADE REF: 87742 - 'BUNNINGS BUILDING RED'
PS	FINISH: PAINT - TEXTURED COATING COLOUR: DULUX SHADE REF: 87744 - 'BUNNINGS STUCCO'
PG	FINISH: PAINT - (*TEXTURED COATING TO EXTERNAL FRONT WALLS AND T.T.S. SIDE WALL ONLY TEXTURED COATING NOT REQUIRED TO TTS/BMLY DIVIDING WALLS*). COLOUR: DULUX SHADE REF: 87745 - 'BUNNINGS BUILDING GREEN'
PW	FINISH: PAINT - (TEXTURED COATING TO EXTERNAL FRONT WALLS AND T.T.S. SIDE WALL ONLY. TEXTURED COATING NOT REQUIRED TO TTS/BMLY DIVIDING WALLS). COLOUR: DULUX SHADE REF: 87746 - 'BUNNINGS BUILDING WHITE'
GV	FINISH: GALVANISED COLOUR: NATURAL
CG	FINISH: COLORBOND COLOUR: BHP - 'CATTAI GREEN'
CW	FINISH: COLORBOND COLOUR: 'THREDBO WHITE'

FENCE SCHEDULE

F1	PERIMETER FENCE MATERIAL: 2700mm HIGH CHAIN WIRE MESH FENCE 2100mm HIGH HEAVY DUTY 3.15mm GAUGE CHAIN WIRE MESH (50X50mm APERTURE). 3 No. ROWS OF BARBED WIRE ABOVE - DOUBLE STRANDS TWISTED TOGETHER IN 'IOWA' PATTERN @ 200 CTS. FINISH: GALVANISED (UN-PAINTED). NOTES: SPACING BETWEEN FENCE FRAME AND ADJACENT STRUCTURE MUST NOT EXCEED 15mm
F2	OUTDOOR NURSERY FINGERPROOF FENCE MATERIAL: 4975mm HIGH 'FINGERPROOF' MESH FENCE. 3775mm HIGH HARDENED / HIGH TENSILE WELD MESH PANELS WITH 70mm x 8mm x 4mm APERTURE. MAX PANEL WIDTH AT 2400mm. RECTANGULAR HOLLOW SECTION FIXED UPRIGHT WITH PRECAST DADO PANEL BETWEEN. 40mm x 40mm GALVANISED CONTINUOUS ANGLE BOTTOM RAIL AND METAL CASING BEAD TO TOP WITH SHEER FIXING. PANELS TO BE OVERLAPPED ON POST AND EXCESS MESH CUT BACK TO EDGE OF POST. 50mm MS FLAT COVERPLATE FIXED TO POST OVER JOINTS. PANELS TO BE SECURED USING GALVANISED SHEAR BOLT FASTENERS. RAKING PANEL TO SECURE JOINS. TENSILE STRENGTH IS 540-695 N/mm2. GALVANISED (UN-PAINTED). EXTEND FENCE POSTS TO 6000mm ABOVE FFL WHERE REQUIRED FOR FLOODLIGHTS. NOTES: SPACING BETWEEN FENCE FRAME AND ADJACENT STRUCTURE MUST NOT EXCEED 20mm.

WALL SCHEDULE

W1	EXTERNAL CONCRETE WALLS MATERIAL: MIN. 150mm THICK REINFORCED VERTICAL PRECAST CONCRETE PANELS TO STRUCTURAL ENGINEER'S DESIGN WITH 'V' GROOVE AT 2100MM ABOVE FFL. WALL TO BE 9500mm HIGH ABOVE WAREHOUSE FINISHED FLOOR LEVEL. STANDARD TREATMENT TO EXTERNAL FACE *(EXCL. AREAS BELOW)* FINISH: PAINT (TEXTURED COATING TO FRONT WALL AND T.T.S. SIDE WALL ONLY) COLOUR: GROUND TO 2100mm A.F.F.L. = 'BUNNINGS BUILDING WHITE' 2100mm TO 9500mm A.F.F.L = 'BUNNINGS BUILDING GREEN' ALTERNATIVE TREATMENT TO THE FOLLOWING AREAS: FINISH: '*OUTDOOR NURSERY', 'BAGGED GOODS' & 'BUILDING MATERIALS YARD*' COLOUR: PAINT GROUND TO UNDERSIDE OF ROOF = 'BUNNINGS BUILDING WHITE' INTERNAL FACE - FULL HEIGHT FINISH: PAINT COLOUR: 'BUNNINGS BUILDING WHITE' - REFER TO FINISHES CHART NOTES: REFER TO 'FINSHES CHART' AND ELEVATIONS FOR FURTHER DETAILS
W2	OUTDOOR NURSERY CONCRETE DADO WALLS MATERIAL: MIN. 125mm THICK REINFORCED VERTICAL PRECAST CONCRETE PANELS TO STRUCTURAL ENGINEER'S DESIGN. PANEL TO 4975MM HIGH ABOVE WAREHOUSE FINISHED FLOOR LEVEL FINISH: PAINT ALL FACES OF PANEL COLOUR: 'BUNNINGS BUILDING WHITE' - REFER TO FINISHES CHART
W3	METAL CLAD WALLS MATERIAL: 0.42mm BMT CORRUGATED PROFILE WALL CLADDING ON STEEL FRAME. REFER STRUCTURAL ENGINEER'S DRAWINGS FOR FRAMING DETAILS. FINISH: EXTERNAL FACE ***COLOUR:*** CORRUGATED METAL SHEET WALL CLADDING ***COLOUR OF CLADDING SUBJECT TO LOCATION - REFER TO ARCHITECTURAL DRAWINGS FOR EXTENTS:*** - COLORBOND - 'THREDBO WHITE' - COLORBOND BHP - 'CATTAI GREEN' INTERNAL FACE - OFFICES, AMENITIES, CAFE & PLAYGROUND FINISH: 1 No. LAYER 10mm PLASTERBOARD (MR PLASTERBOARD IN WET AREAS) WITH PAINT FINISH. COLOUR: 'BUNNINGS BUILDING WHITE' - REFER TO FINISHES CHART NOTES: IN ADDITION TO STANDARD SCREWS, USE TAMPER RESISTANT SCREWS TO 3000mm A.F.F.L. AT 600mm MAX. CENTRES ON EACH GIRT, IN COLORBOND COLOR TO MATCH WALL CLADDING. USE 2 DIFFERENT ALTERNATING HEAD PROFILES. AVAILABLE FROM 'KEABLES PTY. LTD.' FLASHINGS, CAPPING AND TRIM GENERALLY MATERIAL: MILD (FLASHING FEED) IN 0.55mm BMT (BHP PRODUCT) FINISH: COLORBOND COLOUR: BHP - 'CATTAI GREEN' INSULATION AND SARKING MATERIAL: COMPOSITE SARKING / INSULATION BLANKET CSR BRADFORD 'ANTICON 75' BLANKET + 'THERMOPLAST 980' DECORATIVE FOIL FINISH: PRE-FINISHED COLOUR: WHITE NOTES: INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO ACHIEVE SPECIFIED 'R' RATINGS.

DATE	REV	AMENDMENT	BY
07.07.2020	P4	PARKING & TTS AMENDMENTS	RL
16.09.2019	P3	ISSUED FOR DEVELOPMENT APPLICATION	CY
16.07.2019	P2	REVISED TO RACKPLAN	CY
02.07.2019	P1	PRELIMINARY ISSUE	CY

PRELIMINARY

ARCHITECT:
Michael Carr Architect Pty. Ltd.
ACN 005 121 219
88 Tope Street, South Melbourne 3205
Ph 03 9645 5635 Fax 03 9686 4084
Email admin@mcarchitect.com.au

CLIENT: BUNNINGS warehouse

ARCHITECTURAL

PROJECT:
BUNNINGS WAREHOUSE
LOT 3 (BRINGELLY ROAD BUSINESS HUB), SKYLINE DRIVE
HORNINGSEA PARK NSW 2171

DRAWING TITLE: ELEVATIONS

SCALE: 1 : 200@ A0
DATE: JUNE 2019
FILE:
DESIGNED: -
DRAWN: CY
CHECKED: AZ

PROJECT No. 18139

VERIFICATION:
THIS DRAWING HAS BEEN REVIEWED & VERIFIED BY:

DRAWING No. TP-04

REVISION: P4

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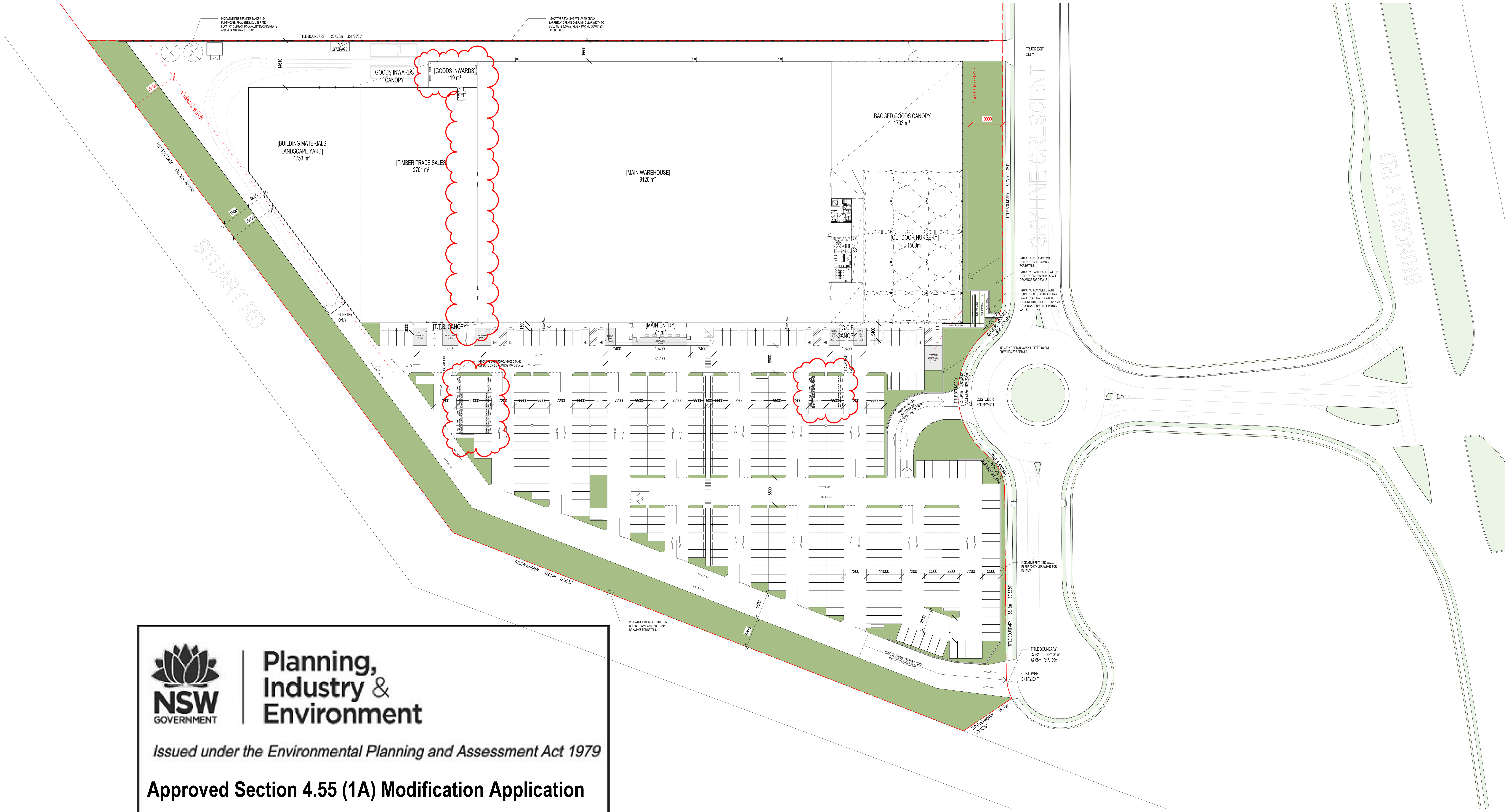

SITE PLAN
1 : 500@ A0

Planning, Industry & Environment
NSW GOVERNMENT

Issued under the Environmental Planning and Assessment Act 1979

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Signed: JF Sheet No: 2 of 5

AREA SCHEDULE	
MAIN WAREHOUSE	9,126m²
GOODS INWARDS	119m²
AMENITIES	169m²
MAIN ENTRY	77m²
TOTAL WAREHOUSE AREA	**9,491m²**
MEZZANINE OFFICES	**253m²**
TIMBER TRADE SALES	2,701m²
BMLY	1,753m²
TOTAL TIMBER TRADE AREA	**4,454m²**
GFA	**14,198m²**
OUTDOOR NURSERY	1,500m²
BAGGED GOODS CANOPY	1,703m²
TOTAL NURSERY AREA	**3,203m²**
TOTAL RETAIL AREA	**17,401m²**
TOTAL LAND AREA	**40,968m²**
SITE COVERAGE AREA	**17,596m²**
SITE COVERAGE %	**42.95%**

CARPARK SCHEDULE	
STANDARD CARPARKS (INCL. STAFF)	348
DISABLED CARPARKS	7
TRAILER BAYS	11
TOTAL SITE CARPARKS	**366**
TROLLEY BAYS	6
BICYCLE PARKS	12

DATE	REV	AMENDMENT	BY
07.07.2020	P6	PARKING & TTS AMENDMENTS	RL
19.09.2019	P5	AREA SCHEDULE FORMATTED	AZ
19.07.2019	P4	UPDATED ROAD DETAILS AND BIKE PARKING ADDED	CY
16.07.2019	P3	TITLE BOUNDARY ADJUSTED, REVISED TO TRAFFIC AND RACKPLAN	CY
02.07.2019	P2	GENERAL AMENDMENTS	CY
28.06.2019	P1	PRELIMINARY ISSUE	CY

CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE BEFORE COMMENDING ANY WORK OR PREPARING ANY SHOP DRAWINGS

PRELIMINARY

ARCHITECT:
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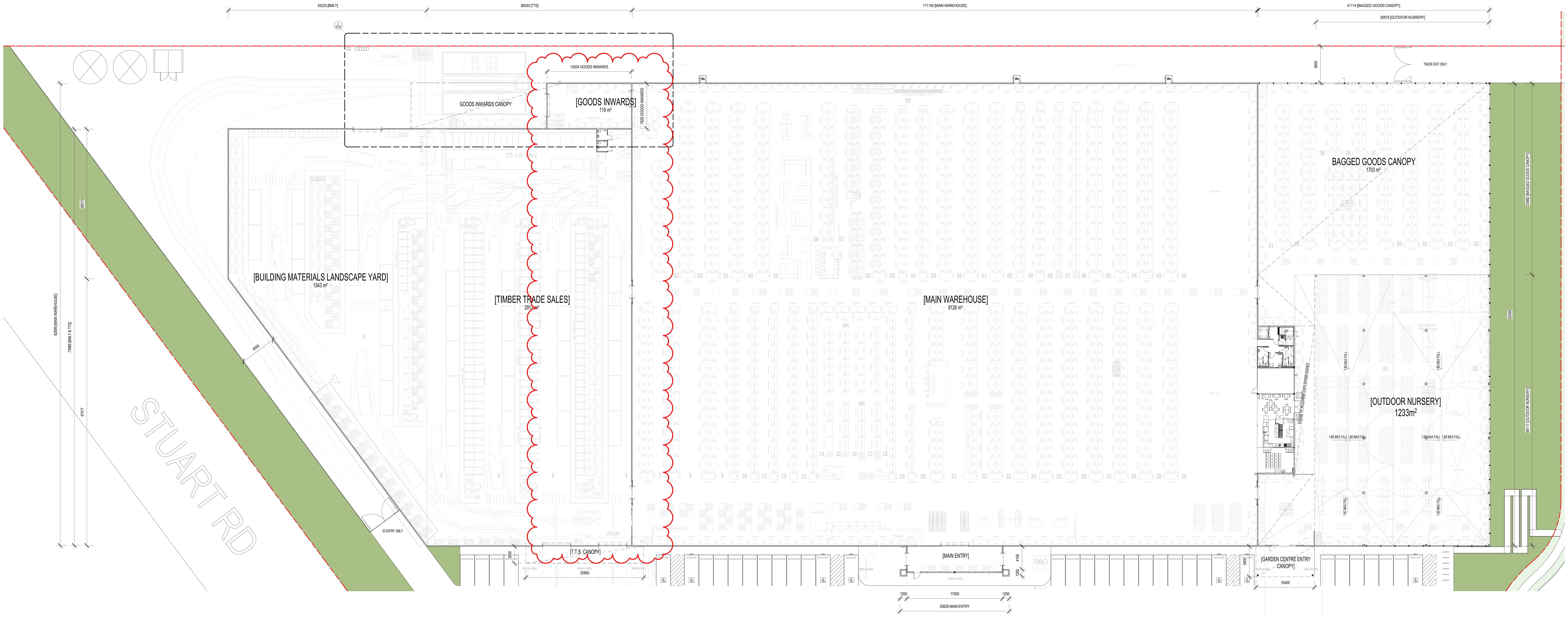
CLIENT: BUNNINGS warehouse

ARCHITECTURAL

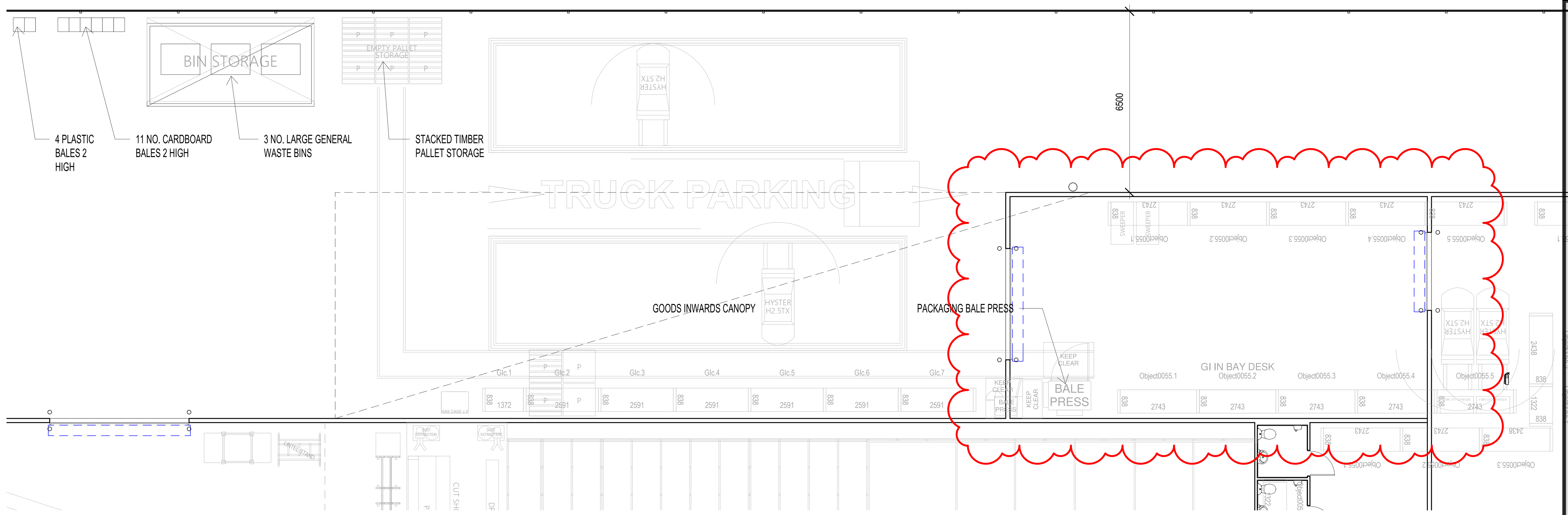
PROJECT: BUNNINGS WAREHOUSE
LOT 3 (BRINGELLY ROAD BUSINESS HUB), SKYLINE DRIVE
HORNINGSEA PARK NSW 2171

DRAWING TITLE: SITE PLAN

SCALE: As indicated@ A0
DATE: JUNE 2019
FILE:
DESIGNED: -
DRAWN: CY
CHECKED: AZ
PROJECT No. 18139
VERIFICATION: THIS DRAWING HAS BEEN REVIEWED & VERIFIED BY: ....
DRAWING No. TP-01
REVISION: P6



OVERALL FLOOR PLAN
1 : 250@ A0



WASTE MANAGEMENT PLAN
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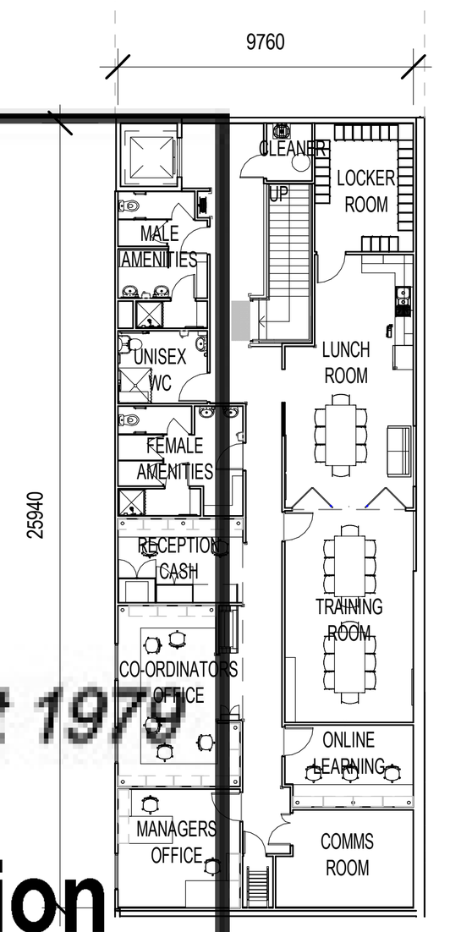

MEZZANINE LEVEL
1 : 250@ A0

NSW GOVERNMENT | Planning, Industry & Environment

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Approved Section 4.55 (1A) Modification Application

No: 1 Granted on: 28 August 2020

In respect to: SSD-10366

Signed: JF Sheet No: 3 of 5

DATE	REV	AMENDMENT	BY
07.07.2020	P5	PARKING & TTS AMENDMENTS	RL
16.09.2019	P4	ISSUED FOR DEVELOPMENT APPLICATION	CY
19.07.2019	P3	UPDATED ROAD DETAILS AND BIKE PARKING ADDED	CY
16.07.2019	P2	REVISED TO RACKPLAN	CY
02.07.2019	P1	PRELIMINARY ISSUE	CY

CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE BEFORE COMMENDING ANY WORK OR PREPARING ANY SHOP DRAWINGS

PRELIMINARY

ARCHITECT:
Michael Carr Architect Pty. Ltd.
ACN 005 121 219
88 Tope Street, South Melbourne 3205
Ph 03 9645 5635 Fax 03 9686 4084
Email admin@mcarchitect.com.au

CLIENT: BUNNINGS warehouse

ARCHITECTURAL

PROJECT: BUNNINGS WAREHOUSE LOT 3 (BRINGELLY ROAD BUSINESS HUB), SKYLINE DRIVE HORNINGSEA PARK NSW 2171

DRAWING TITLE: OVERALL FLOOR PLAN

SCALE: As indicated@ A0
DATE: JUNE 2019
FILE:
DESIGNED: -
DRAWN: CY
CHECKED: AZ
PROJECT No. 18139
VERIFICATION: THIS DRAWING HAS BEEN REVIEWED & VERIFIED BY: ....
DRAWING No. TP-02
REVISION: P5

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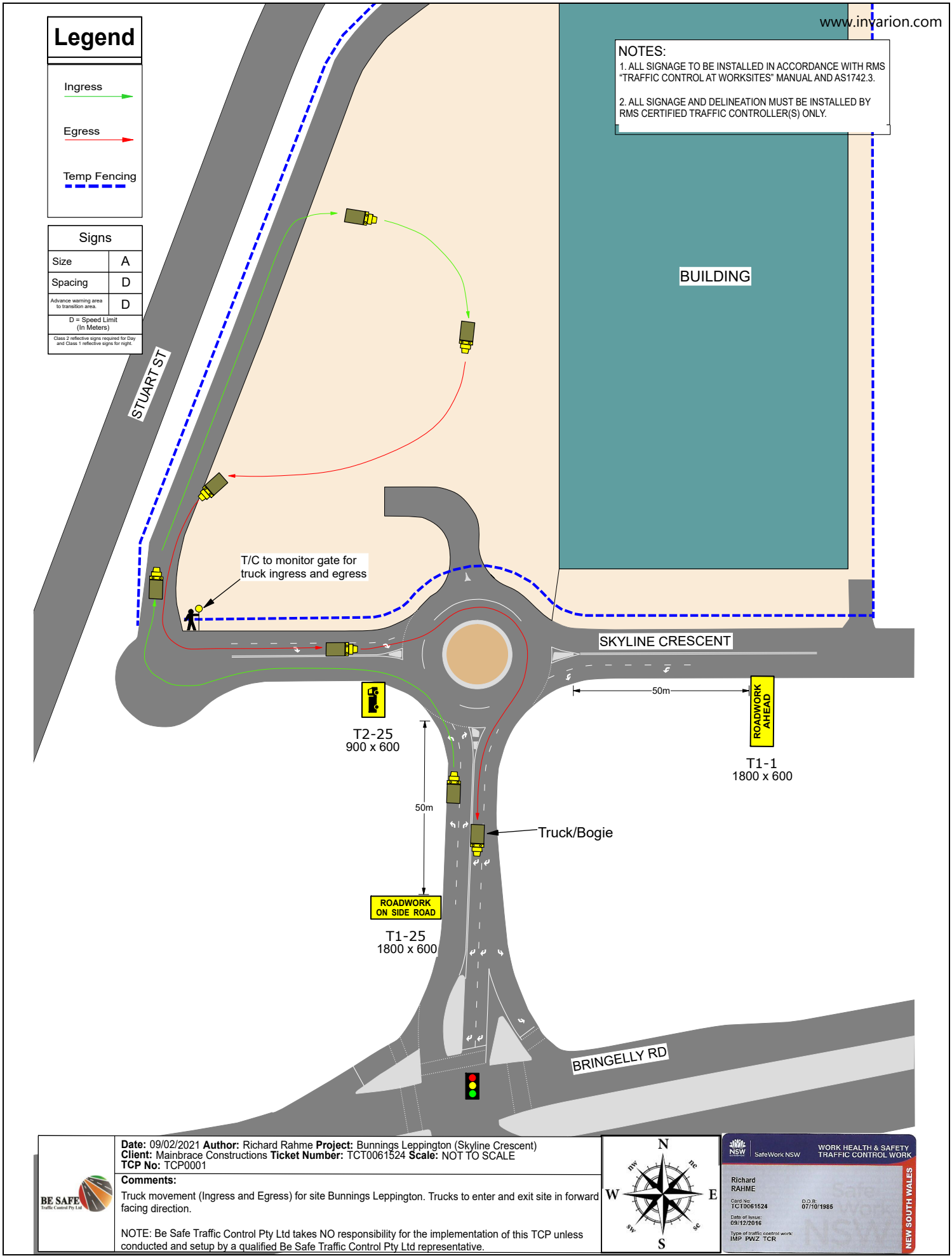
Appendix B

Traffic Control Plans



Date: 09/02/2021 **Author:** Richard Rahme **Project:** Bunnings Leppington (Skyline Crescent)
Client: Mainbrace Constructions **Ticket Number:** TCT0061524 **Scale:** NOT TO SCALE
TCP No: TCP0001

Comments:

Truck movement (Ingress and Egress) for site Bunnings Leppington. Trucks to enter and exit site in forward facing direction.

NOTE: Be Safe Traffic Control Pty Ltd takes NO responsibility for the implementation of this TCP unless conducted and setup by a qualified Be Safe Traffic Control Pty Ltd representative.

BE SAFE Traffic Control Pty Ltd

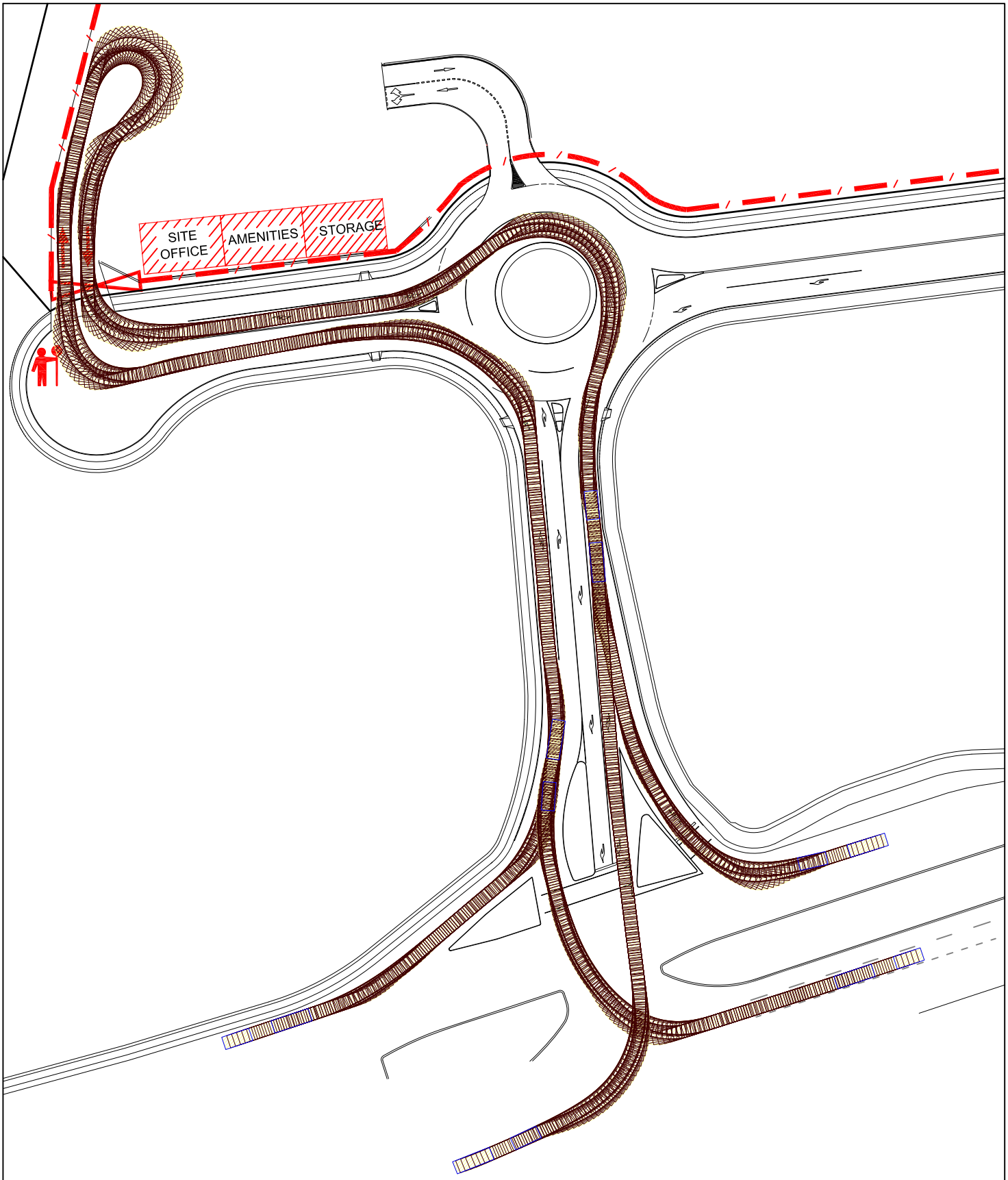
N NE E SE S SW W NW

NSW SafeWork NSW — WORK HEALTH & SAFETY TRAFFIC CONTROL WORK

Richard RAHME
Card No: TCT0061524
D.O.B: 07/10/1985
Date of Issue: 09/12/2016
Type of traffic control work: IMP PWZ TCR
NEW SOUTH WALES

Appendix C

Turning Path Assessment



NOTE

This drawing has been prepared using vehicle modelling computer software AutoTrack V5.00a in conjunction with AutoCAD 2013. The vehicle used is based upon vehicle data provided by Austroads and incorporates a reasonable degree of tolerance. However, it is not possible to account for all vehicle types/characteristics and/or driver ability.

N

SWEPT PATH ANALYSIS OF A 17.6m TRUCK AND DOG TRAILER ENTERING AND EXITING THE SITE

SP 1