

NSW GOVERNMENT
Planning

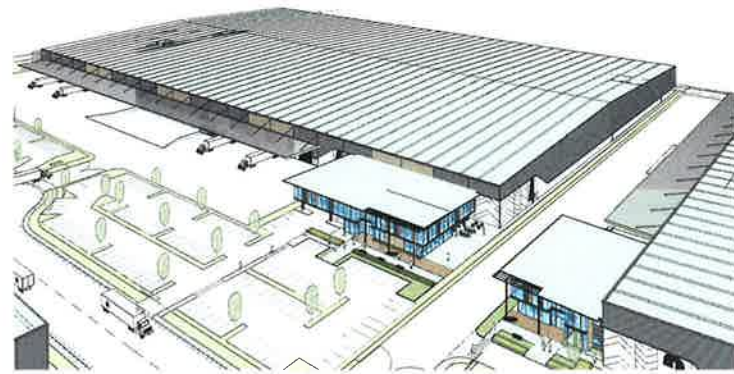
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Approved Application No S80 6962

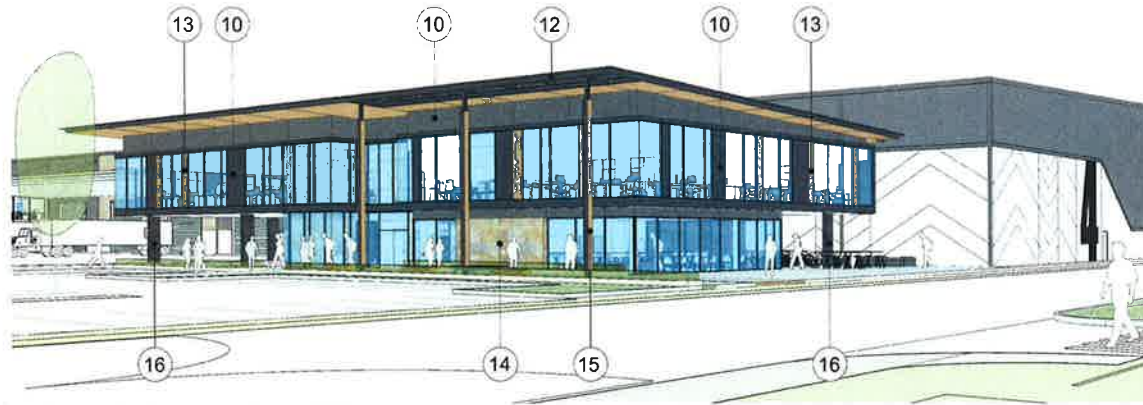
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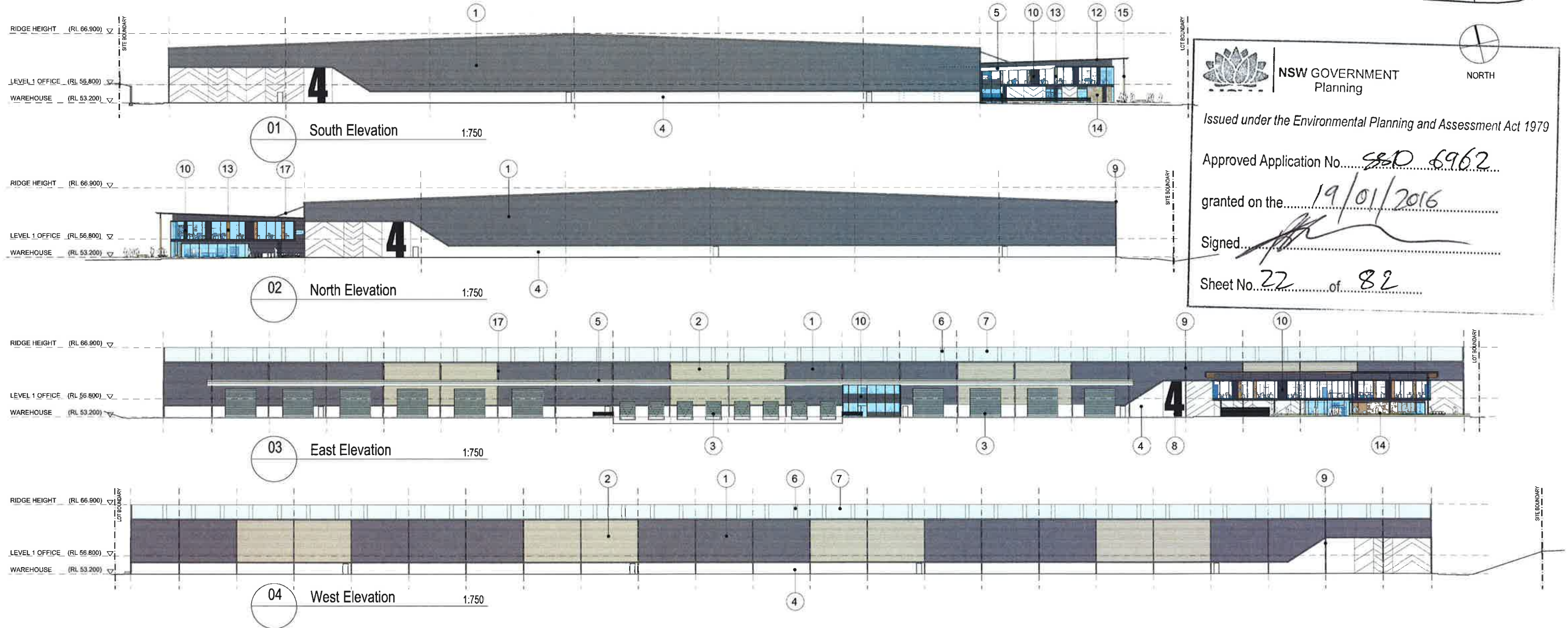
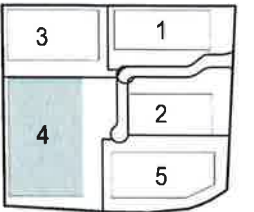
Sheet No. 21 of 82




Aerial view - Warehouse + Office



North east view + finishes - Office



 **NSW GOVERNMENT Planning**


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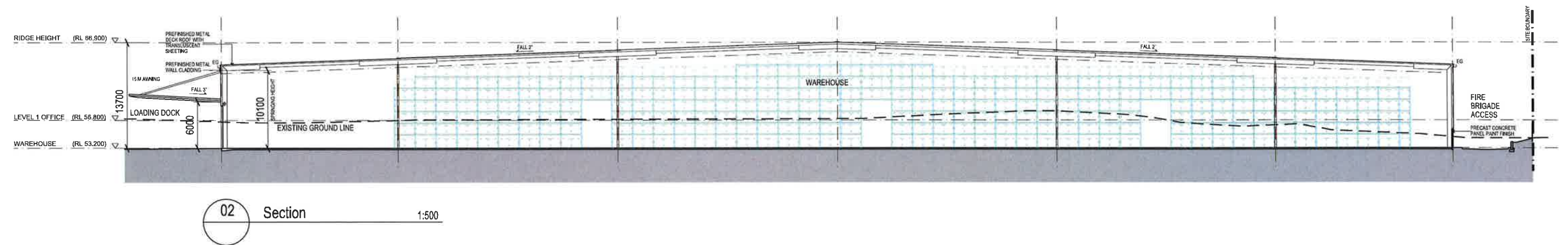
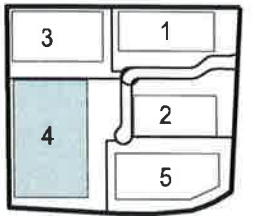
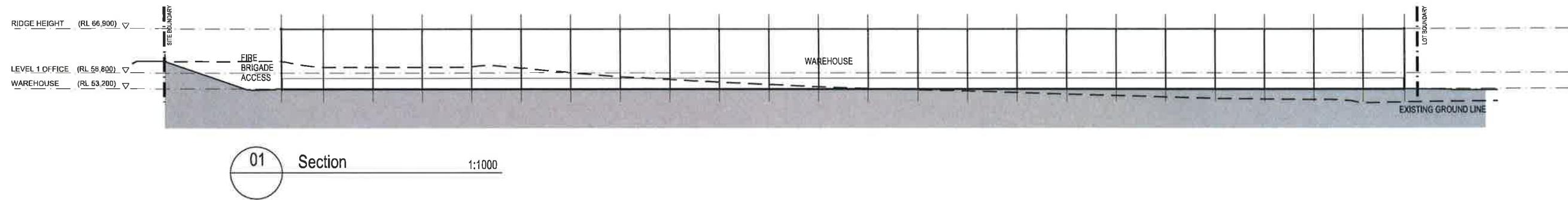
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Sheet No. 22 of 82

 NORTH

Indicative External Finishes Legend

① Profiled Metal Cladding "Basalt"	⑤ Metal awning facias "Evening Haze"	⑨ DP's, Gutters, & Trims "Monument"	⑬ Trespa Panel "NW08 Italian Walnut"	⑰ Metal awning struts "Basalt"
② Profiled Metal Cladding "Evening Haze"	⑥ Roof Lights Polycarbonate sheet	⑩ Alpolic Cladding "Charcoal" or Sim	⑭ Stone Finish to Selection	
③ Profiled Roller Shutters "Wind Spray"	⑦ Roof Sheet Metal Cladding "Wind Spray"	⑪ Roof Sheet Metal Cladding "Wind Spray"	⑮ Trespa or Timber finish to steel Columns	
④ Precast concrete natural "Off form"	⑧ Painted concrete number on precast	⑫ Fascia & Trims "Monument"	⑯ Painted concrete columns to match Alpolic	



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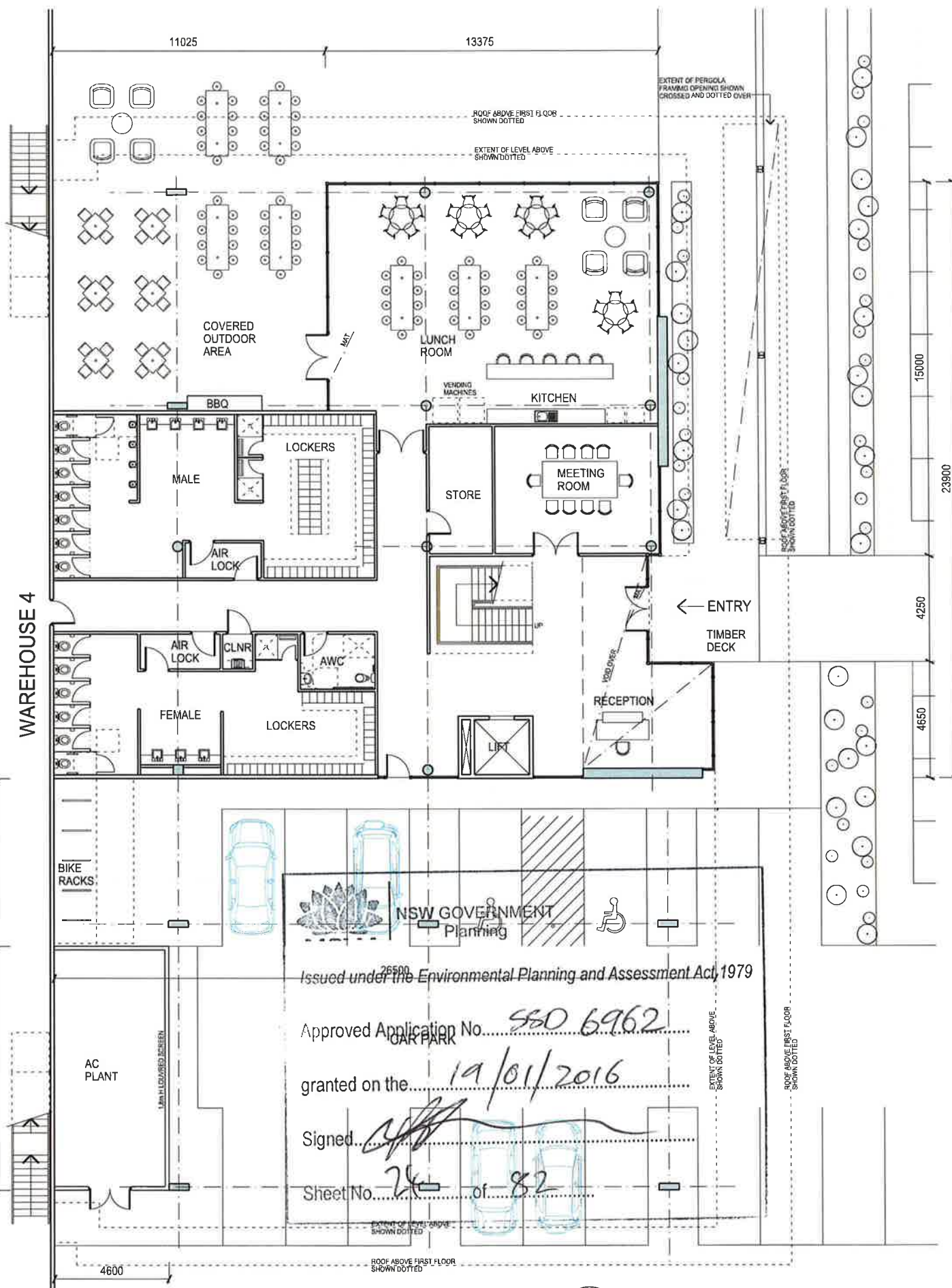
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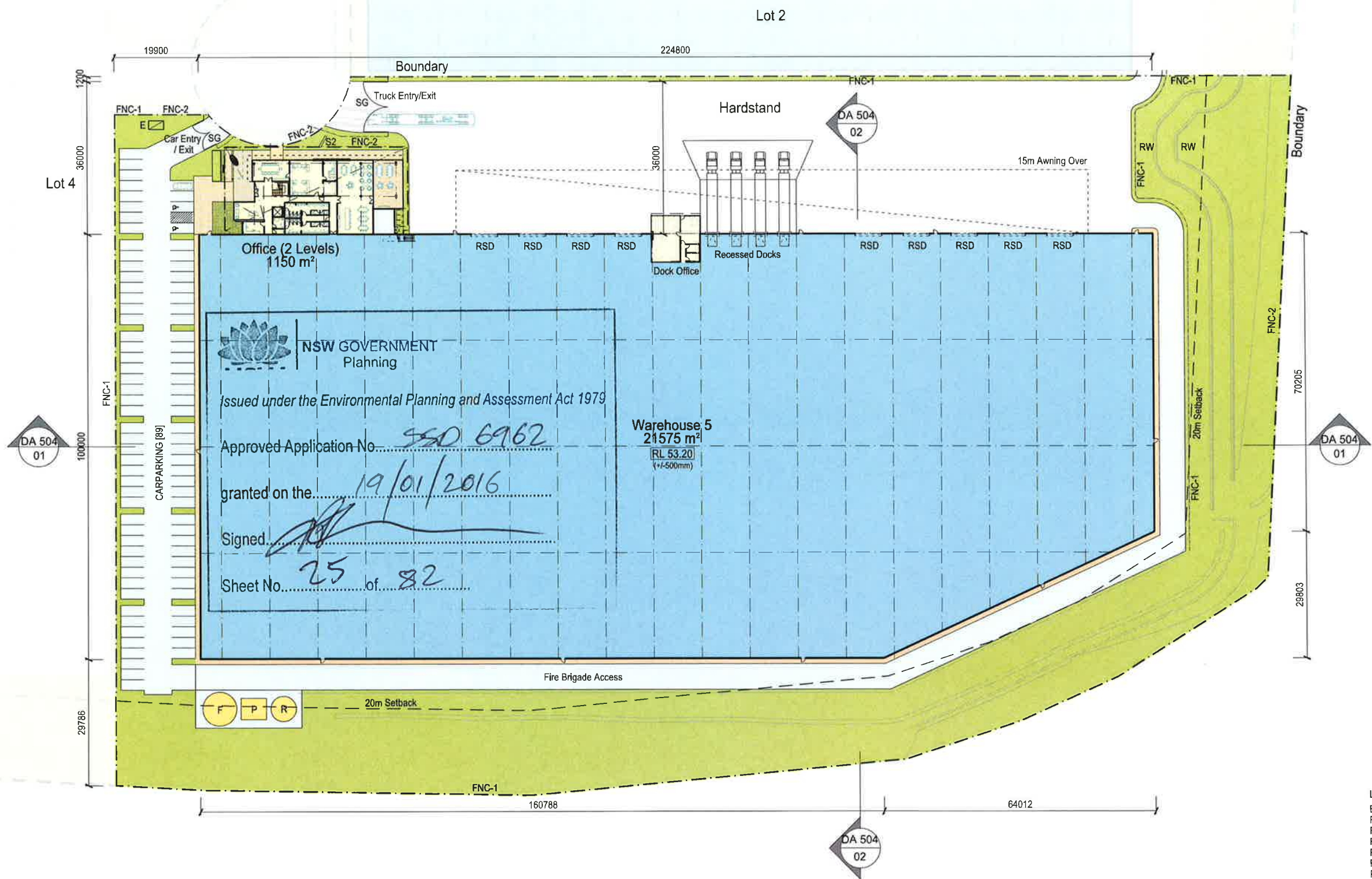
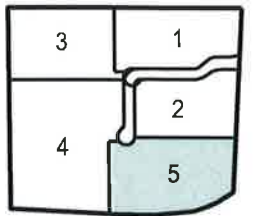
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Sheet No. 23 of 82

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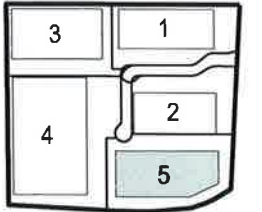
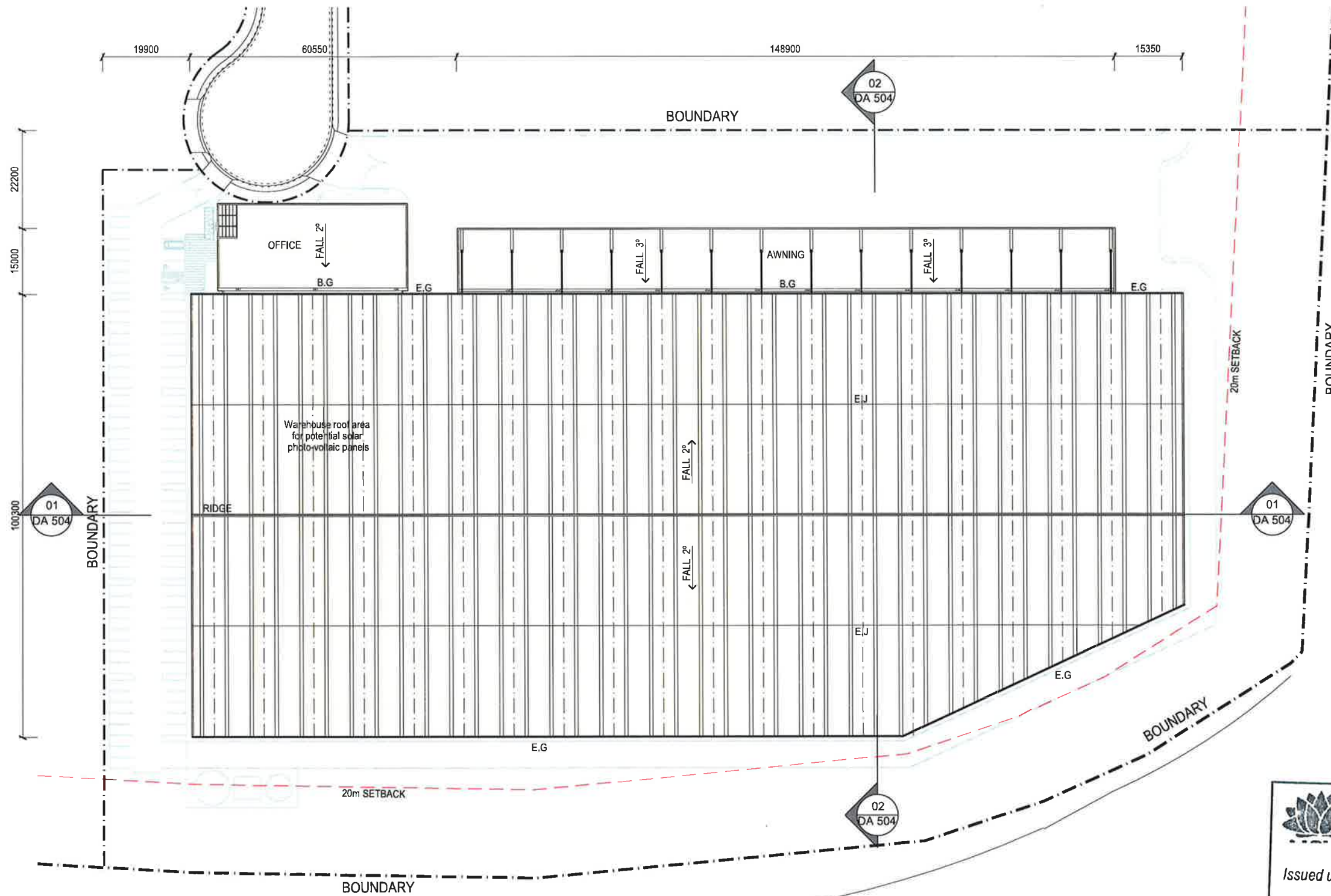


LEGEND

E	ELECTRICAL SUBSTATION
FNC-1	CHAINWIRE FENCE 2.1m H
FNC-2	PALISADE FENCING 2.1m H
F	FIRE TANK
P	PUMP ROOM
R	RAINWATER TANK
RSD	ROLLER SHUTTER DOOR
RW	RETAINING WALL
S1	ESTATE PYLON SIGN
S2	TENANT PYLON SIGN
S3	5x2 TENANT IDENTIFICATION SIGN
SG	SLIDING / SWING GATE

NOTE: REFER TO CIVIL DRAWINGS FOR PAVEMENT LEVELS





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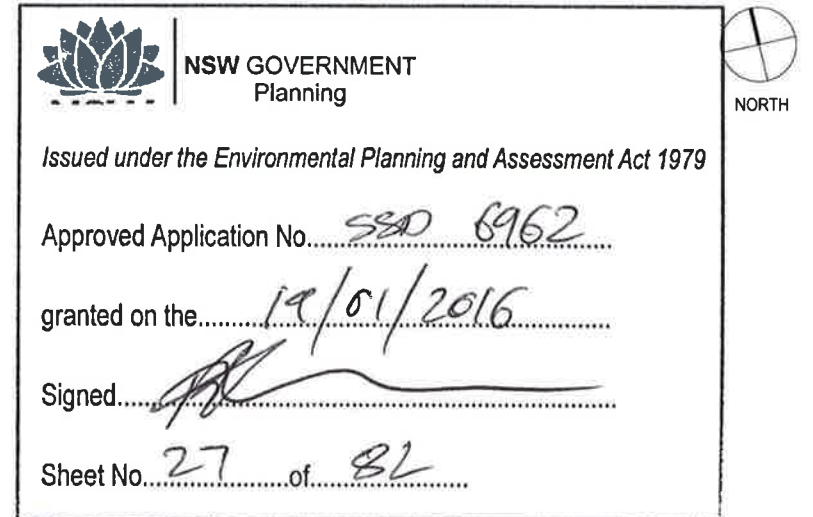
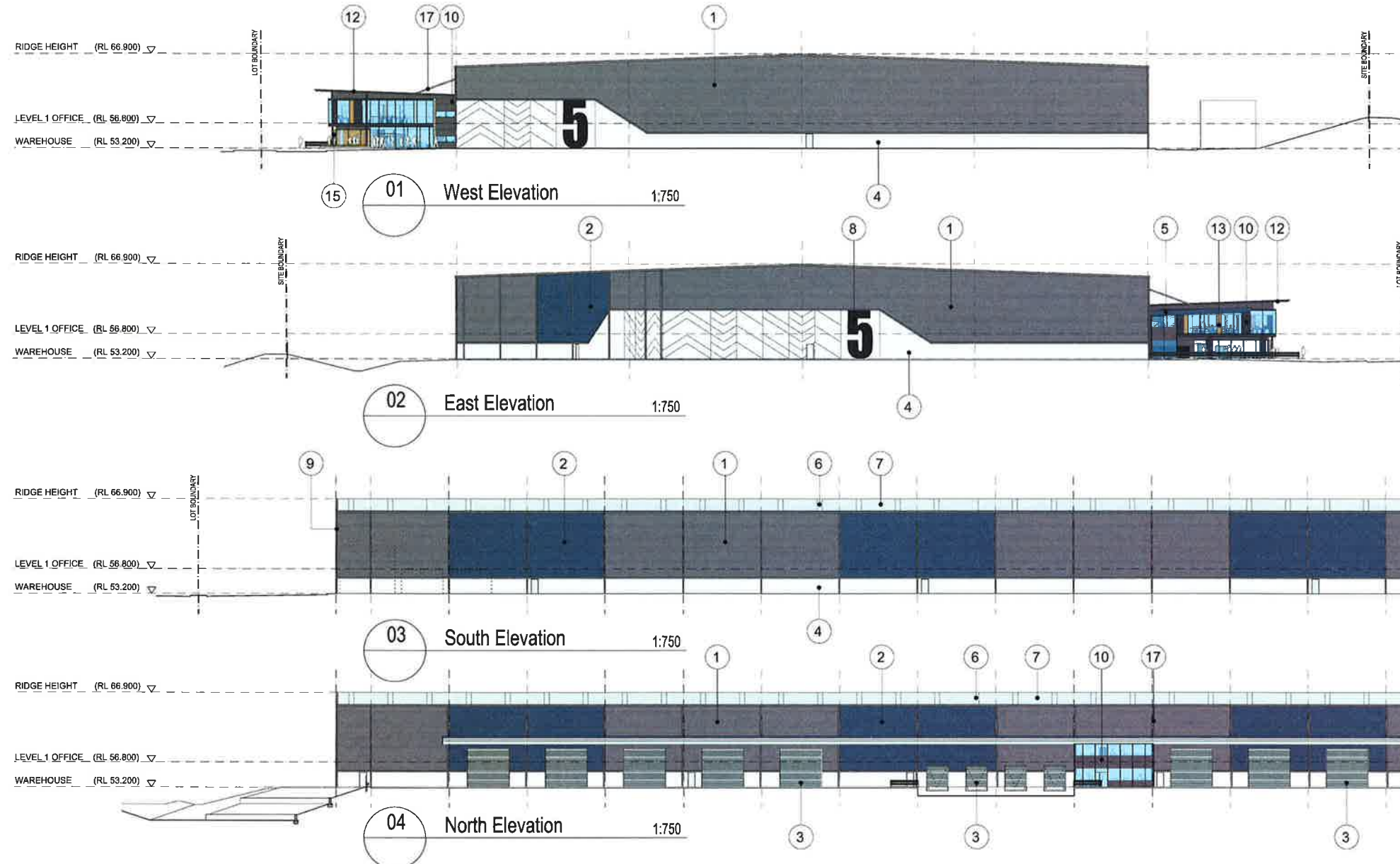
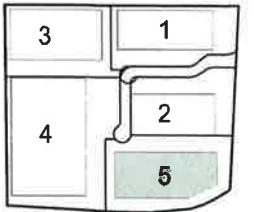
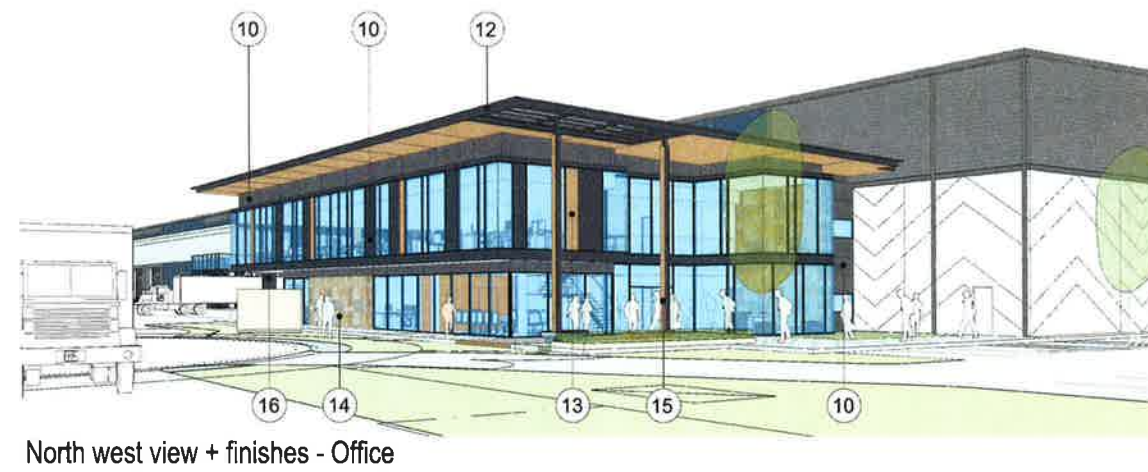
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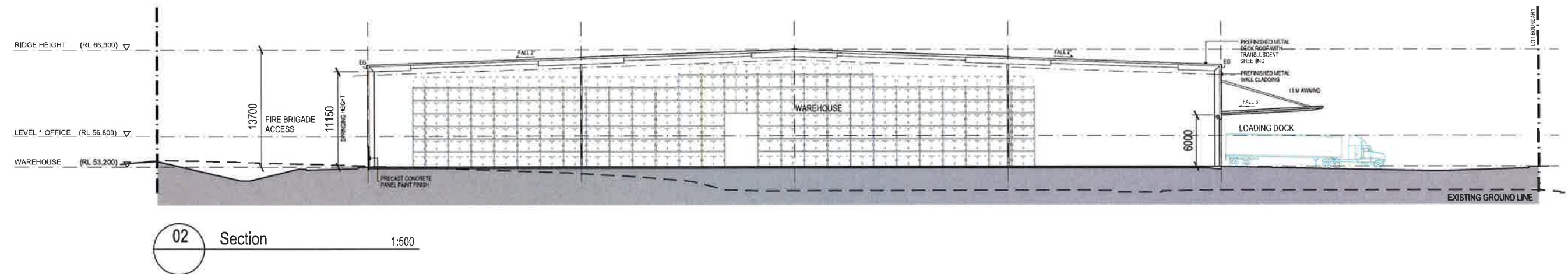
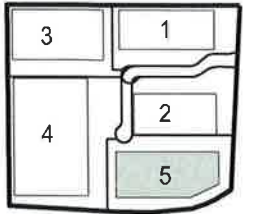
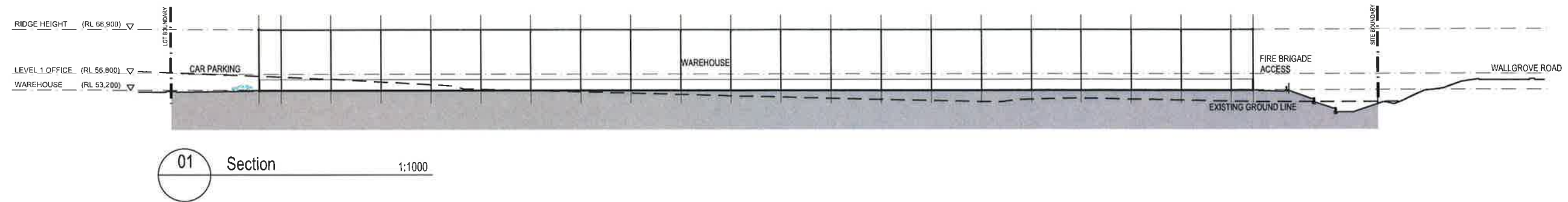
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Sheet No. 26 of 82



Indicative External Finishes Legend

① Profiled Metal Cladding "Basalt"	⑤ Metal awning facias "Deep Ocean"	⑨ DP's, Gutters, & Trims "Monument"	⑬ Trespa Panel "NW08 Italian Walnut"	⑰ Metal awning struts "Basalt"
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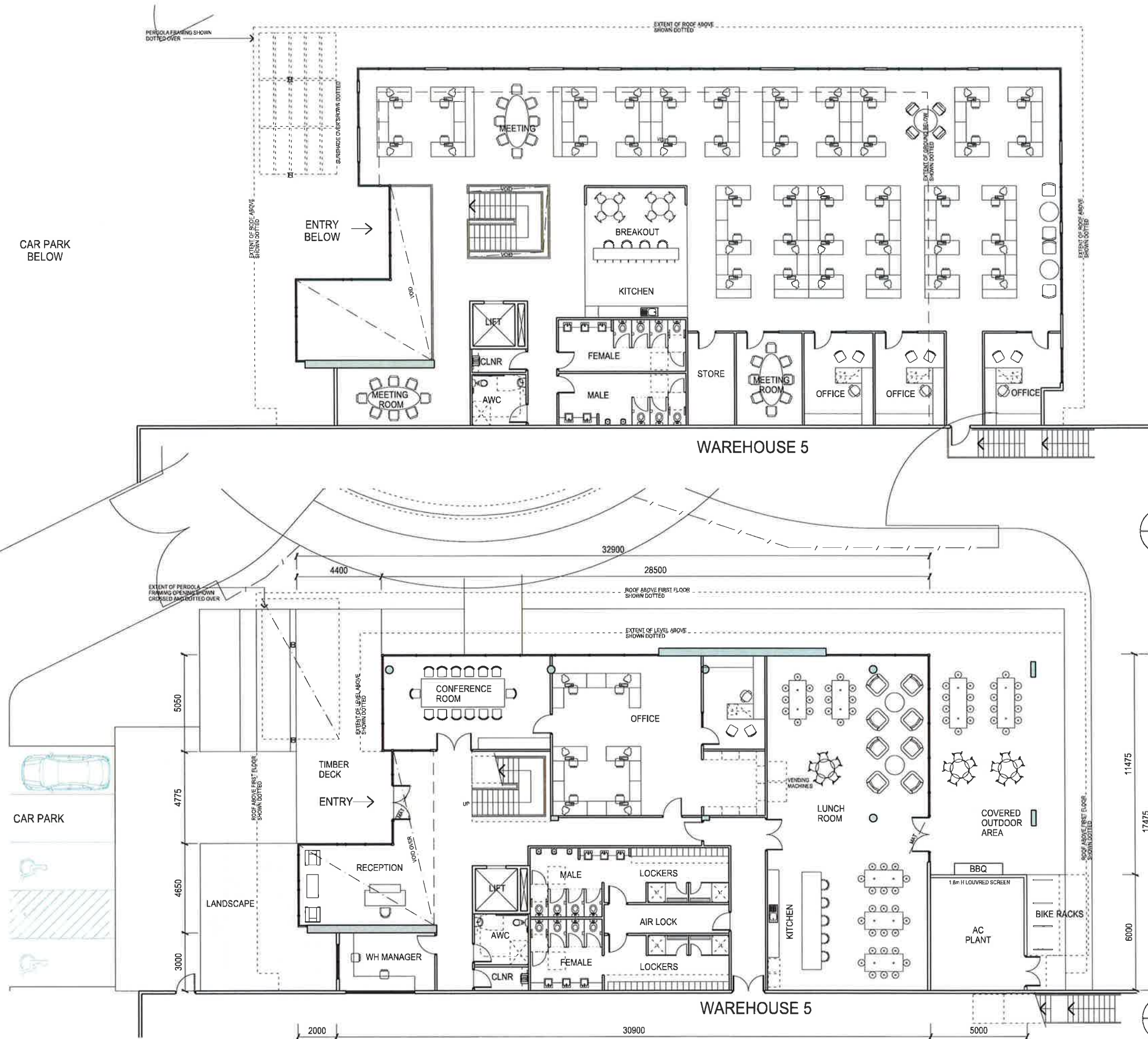
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Sheet No. 25 of 82

CAR PARK BELOW



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granted on the 14/04/2016

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Sheet No. 27 of 92




LANDSCAPE SSD DOCUMENTATION **FINAL**

WALLGROVE ROAD INDUSTRIAL
WALLGROVE ROAD, EASTERN CREEK, NSW

DWG NO.	CONTENT:
L000	TITLE PAGE
L001	LANDSCAPE CONCEPT MASTERPLAN
L002	LANDSCAPE ENTRY CONCEPT PLAN
L003	PLANT SCHEDULES
L004	LANDSCAPE SECTIONS - WALLGROVE RD
L005	LANDSCAPE SECTIONS - ACCESS ROAD
L006	LANDSCAPE SECTIONS - BOUNDARY
L007	LANDSCAPE ELEVATIONS - BOUNDARY
L008	PRECEDENT IMAGES

Project No: H8-15101
Project Name: Wallgrove Road Industrial
Date: 05.06.2015
Rev.: D
Drawn: HP




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Approved Application No. SSD 6962

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Signed:  20 of 82

Sheet No.



Screening hedge
Refer L06 for section and species

Car park shade trees

Refer L05 for access road typical
treatment and layout

Hedge screening to rear of
warehouse

Car park shade trees

Hydroseeded embankment with native
tree and shrub planting

Screening hedge
Refer L06 for section and species

Entry landscape - refer to L02

Car park shade trees

Detention basin
Refer engineer's drawings for details
Refer L03 for plant species

Site Boundary

Native tree planting to embankment

Vegetated swale
Refer engineer's drawings for details
Refer L03 for plant species

Hydroseeded embankment with native
tree and shrub planting

NSW GOVERNMENT
Planning
M4 WESTERN MOTORWAY
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Sheet No. 31 of 82

DATE	REVISION	PURPOSE
13.05.15	A	DRAFT
15.05.15	B	DRAFT
20.05.15	C	DRAFT
05.06.15	D	DA Submission

Project No.
H8-15101
Drawing No.
L001

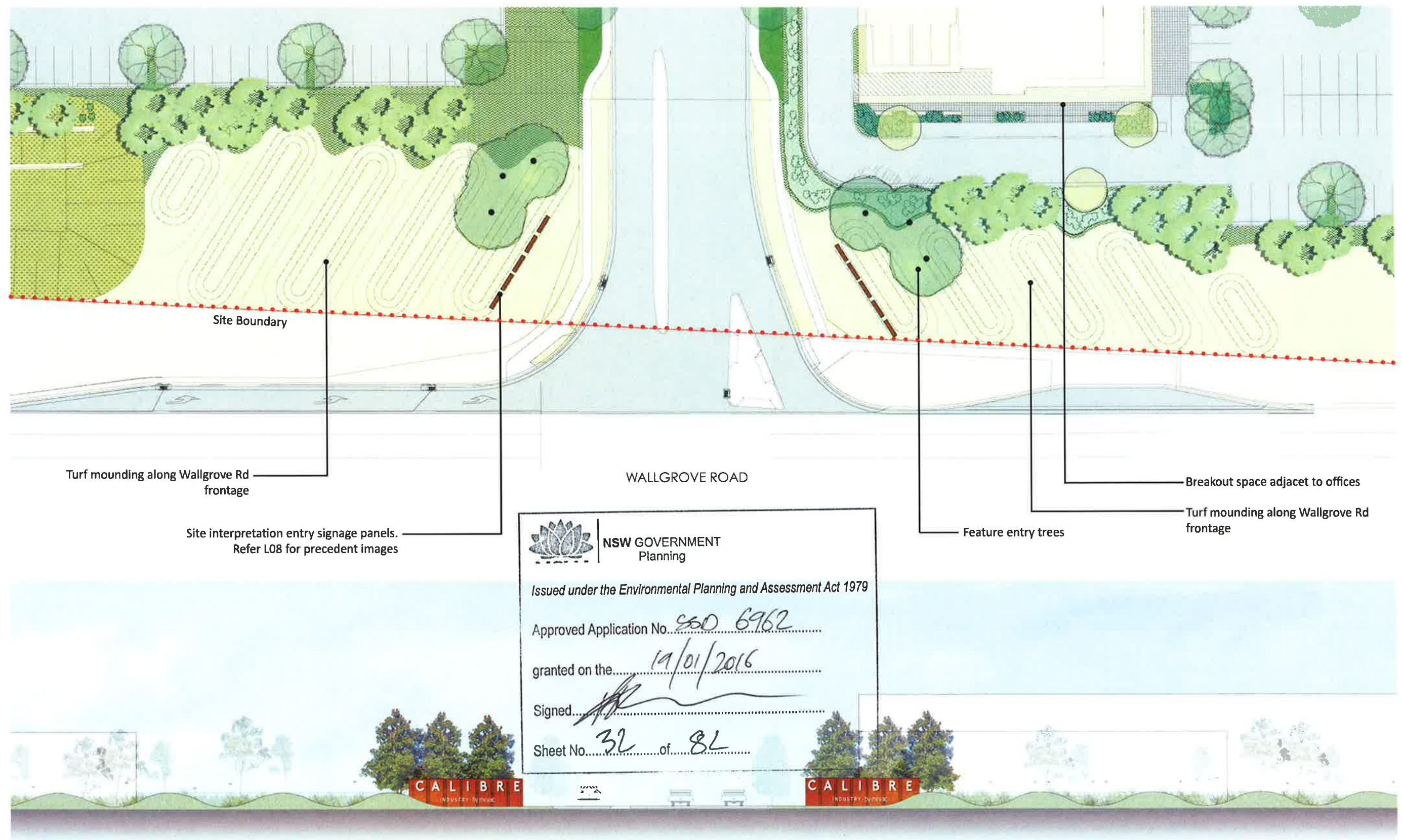
Project Name
Wallgrove Road Industrial
Drawing Title
Landscape Masterplan

Date
05.06.2015

Date
D

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DATE	REVISION	PURPOSE
13.05.15	A	DRAFT
15.05.15	B	DRAFT
20.05.15	C	DRAFT
05.06.15	D	DA Submission

Feature Entry Tree



Magnolia gradiflora 'St Mary'

Access Road Street Tree



Bennet's Ash, *Flindersia Bennettiana*

Screening Tree




Elaeocarpus eumundii, Smooth leaved Quandong

Native Grass / Groundcover Mix Images



INDICATIVE PLANTING SCHEDULE						
CODE	SPECIES	COMMON NAME	ORIGIN	HEIGHT	DENSITY	POT SIZE
GROUNDCOVERS						
Cgl	Carpobrotus glaucescens	Pigface or Noon Flower	Native	0.1m	5/m2	Virotube
Dco	Dianella congesta	Beach Flax Lily	Native	1m	5/m2	Virotube
ES	Evolvulus pilosa 'Sapphire'	Blue Evolvulus	Native	0.3m	3/m2	Virotube
Gri	Gazania rigens	Gazania	Native	0.3m	2/m2	Virotube
GBR	Grevillea 'Bronze Rambler'		Native	0.3m	3/m2	150mm
Hsc	Hibbertia scandens	Snake Vine	Native	0.3m	5/m2	200mm
Hvi	Hardenbergia violacea	False Sarsaparilla	Native	0.3m	3/m2	Virotube
Kru	Kennedia rubicunda	Dusky Coral Pea	Native	0.3m	4/m2	Virotube
LEG	Liriope muscari 'Evergreen'	Giant Giant Turf Lily	Exotic	0.6m	3/m2	150mm
LSW	Liriope muscari 'Stripy White'		Exotic	0.6m	4/m2	150mm
Mac	Myoporum acuminatum	Coastal Boobialla	Native	3m	3/m2	Virotube
Mel	Myoporum ellipticum	Myoporum	Native	1m	3/m2	Virotube
Mpa	Myoporum parvifolium	Creeping Boobialla	Native	0.15mm	3/m2	Virotube
GRASSES						
Bar	Baumea articulata	Jointed Twig Rush	Native	1m	3/m2	150mm
Dco	Dianella congesta	Coastal Flax Lily	Native	0.5	3/m2	150mm
Dbr	Dianella brevipedunculata	Blue Flax Lily	Native	0.8	3/m2	150mm
Dcb	Dianella caerulea 'Breeze'	Flax Lily	Native	0.8	3/m2	150mm
Dcl	Dianella caerulea 'Little Jess'	Dwarf Flax Lily	Native	0.3	5/m2	150mm
Dss	Dianella 'Silver Streak'	Stripy Flax Lily	Native	0.5	3/m2	150mm
Dre	Dianella revoluta	Flax Lily	Native	1m	4/m2	150mm
Ino	Isoplepis nodosa	Knobby Club Rush	Native	0.7m	5/m2	200mm
LT	Lomandra longifolia 'Tanika'	Mat Rush	Native	1m	5/m2	150mm
Pla	Poa labillardieri	Tussock Grass	Native	0.6m	5/m2	150mm
PC	Poa poiformis 'Courtney'	Tussock Grass	Native	0.6m	5/m2	150mm
Tau	Themeda australis	Kangaroo Grass	Native	0.75m	3/m2	200mm
DETENTION BASIN / SWALES						
Ac	Austromyrtus tenuifolia	Narrow Leaf Myrtle	Native	1.5m	3/m2	150mm
Ca	Carex appressa	Tall Sedge	Native	0.6m	4/m2	150mm
Ct	Cyperus trinervis	Sedge	Native	0.6m	4/m2	150mm
Dv	Dodonea viscosa	Hop Bush	Native	2m	2/m2	150mm
DI	Dianella longifolia	Flax Lily	Native	0.8	3/m2	150mm
Dr	Danthonia tenuis	Wallaby Grass	Native	0.6m	4/m2	150mm
LT	Lomandra longifolia 'Tanika'	Mat Rush	Native	1m	5/m2	150mm
Mli	Melaleuca linariifolia	Narrow-leaved Paperbark	Native	5-10m	-	Mature
Pla	Poa labillardieri	Tussock Grass	Native	0.6m	5/m2	150mm
SHRUBS						
Bsp	Banksia spinulosa	Hairpin Banksia	Native	6m	2/m2	200mm
Bsp	Bursaria spinulosa	Blackthorn	Native	1.5-2m	2/m2	300mm
Cre	Cycas revoluta	Cycad	Native	1m	2/m2	300mm
Cmi	Clivia miniata	Kaffir Lily	Exotic	0.5m	3/m2	300mm
Csp	Cordyline Sp.	Slender Palm Lily	Native	1.5m	2/m2	300mm
Dvi	Dodonea viscosa	Sticky Hop Bush	Native	1-3m	2/m2	300mm
Dex	Doryanthes excelsa	Gymea Lily	Native	1.5m	2/m2	300mm
Hli	Hymenocallis littoralis	Spider Lily	Exotic	0.6m	2/m2	300mm
Lpe	Leptospermum petersonii	Lemon-Scented Tea Tree	Native	3-4m	1/m2	300mm
Msp	Macrozamia spp.	Native Cycad	Native	2m	1/m2	300mm
Wtr	Westringia fruticosa	Coastal Rosemary	Native	1.5m	3/m2	300mm
TREES						
Asm	Acmena smithii	Lilly Pilly	Native	10-15m	-	2m Height
Aco	Angophora costata	Smooth-barked Apple	Native	20m	-	2m Height
Cac	Callistemon citrinus	Lemon-scented Bottlebrush	Native	5-8m	-	2m Height
Cco	Cyathea cooperii	Scaly Tree Fern	Native	4m	-	2m Height
Ee	Elaeocarpus eumundi	Eumundi Quandong	Native	10-12m	-	1.5m Height
Epi	Eucalyptus pilularis	Blackbutt	Native	20m	-	2m Height
Ema	Eucalyptus maculata	Spotted gum	Native	20m	-	2m Height
Fb	Flindersia Bennettiana	Bennett's Ash	Native	8-10m	-	2m Height
Lin	Lagerstroemia indica	Crape Myrtle	Exotic	6-8m	-	2m Height
Lco	Lophostemon confertus	Brush Box	Native	10-15	-	2m Height
Ms	Magnolia grandiflora 'St Marys'	St Marys Magnolia	Exotic	10-15m	-	2m Height
Mli	Melaleuca linariifolia	Narrow-leaved Paperbark	Native	5-10m	-	2m Height
Pce	Prunus cerasifera 'Nigra'	Purple flowering Cherry Plum	Exotic	4-5m	-	2m Height
Tla	Tristanopsis laurina	Water Gum	Native	15m	-	2m Height



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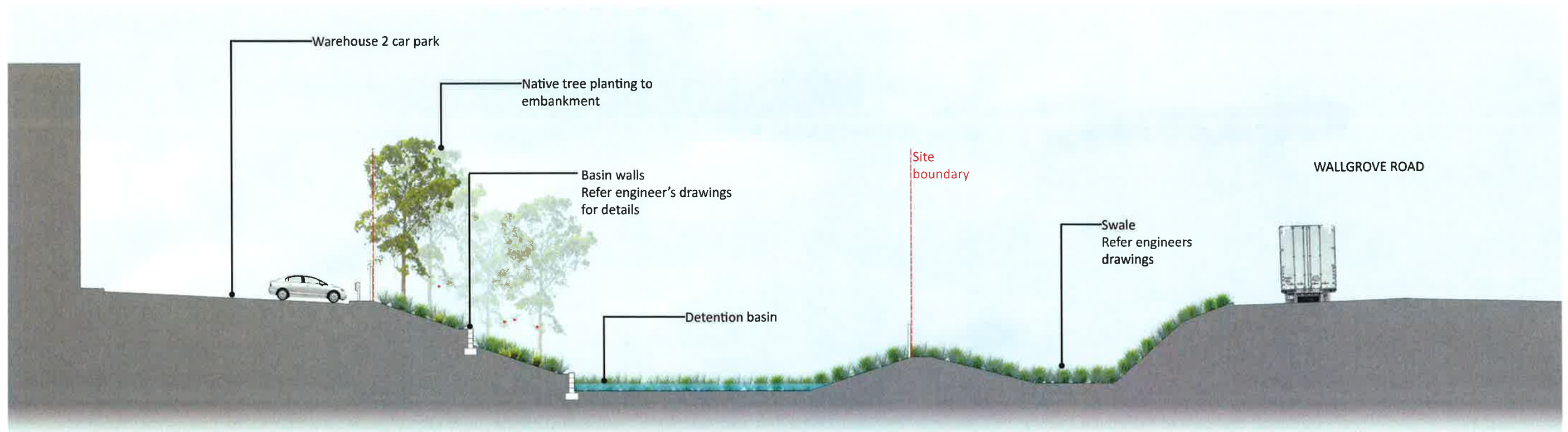
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granted on the.....19/01/2016.....

Signed.....[Signature].....

Sheet No.....33.....of.....82.....

DATE	REVISION	PURPOSE
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15.05.15	B	DRAFT
20.05.15	C	DRAFT
05.06.15	D	DA Submission




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 Planning

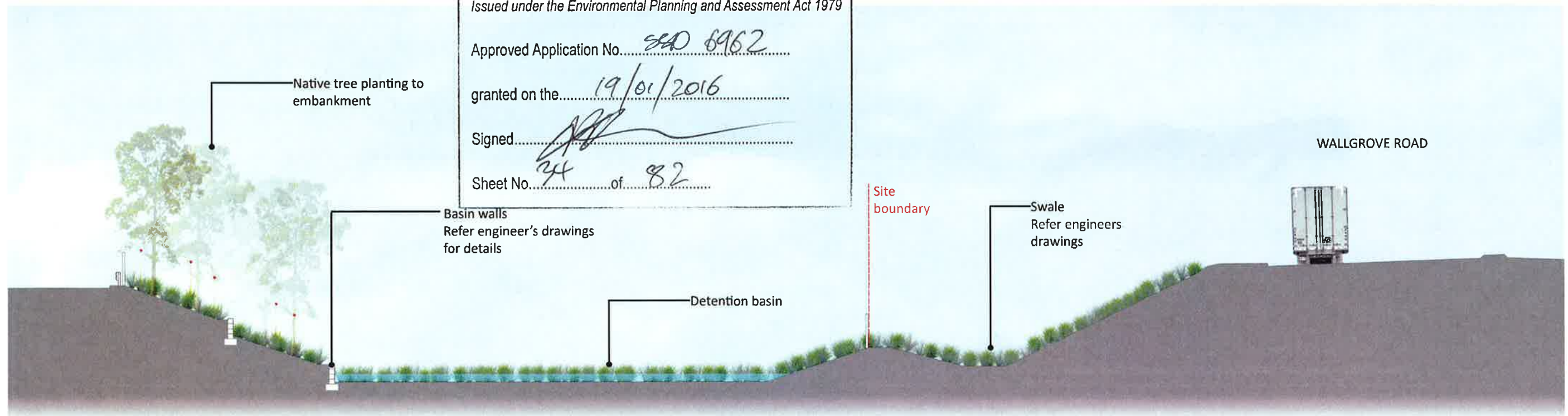
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DATE	REVISION	PURPOSE
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20.05.15	C	DRAFT
05.06.15	D	DA Submission

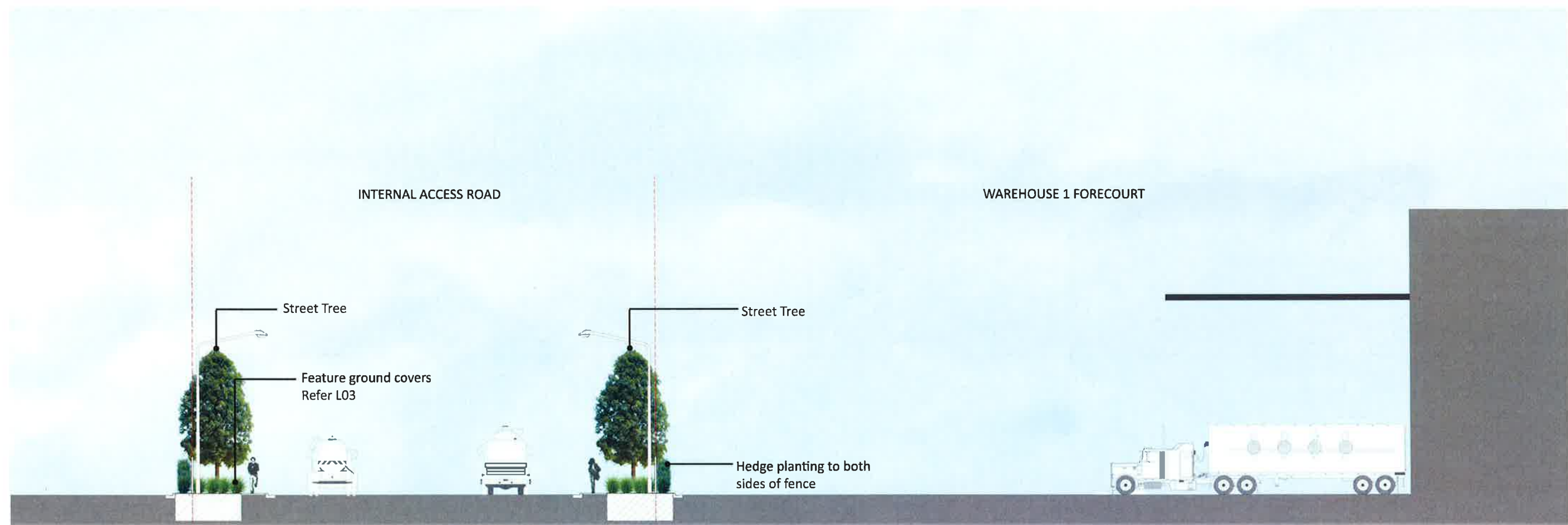
Project No.
H8-15101
 Drawing No.
L004


Project Name
 Wallgrove Road Industrial
 Drawing Title
Landscape Sections - Wallgrove Road

Date Date
 05.06.2015 D

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Sheet No. 35 of 82

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13.05.15	A	DRAFT
15.05.15	B	DRAFT
20.05.15	C	DRAFT
05.06.15	D	DA Submission

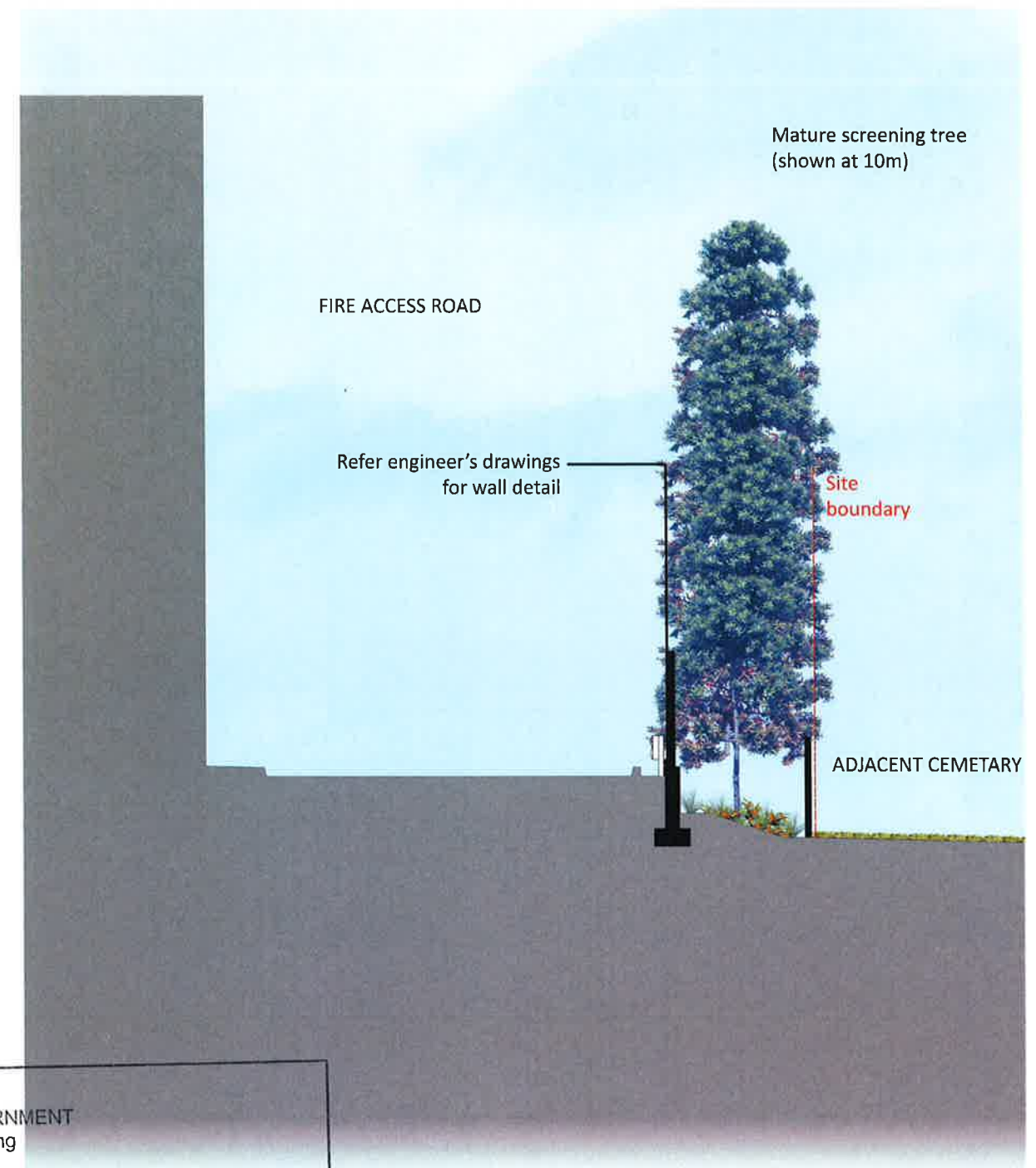
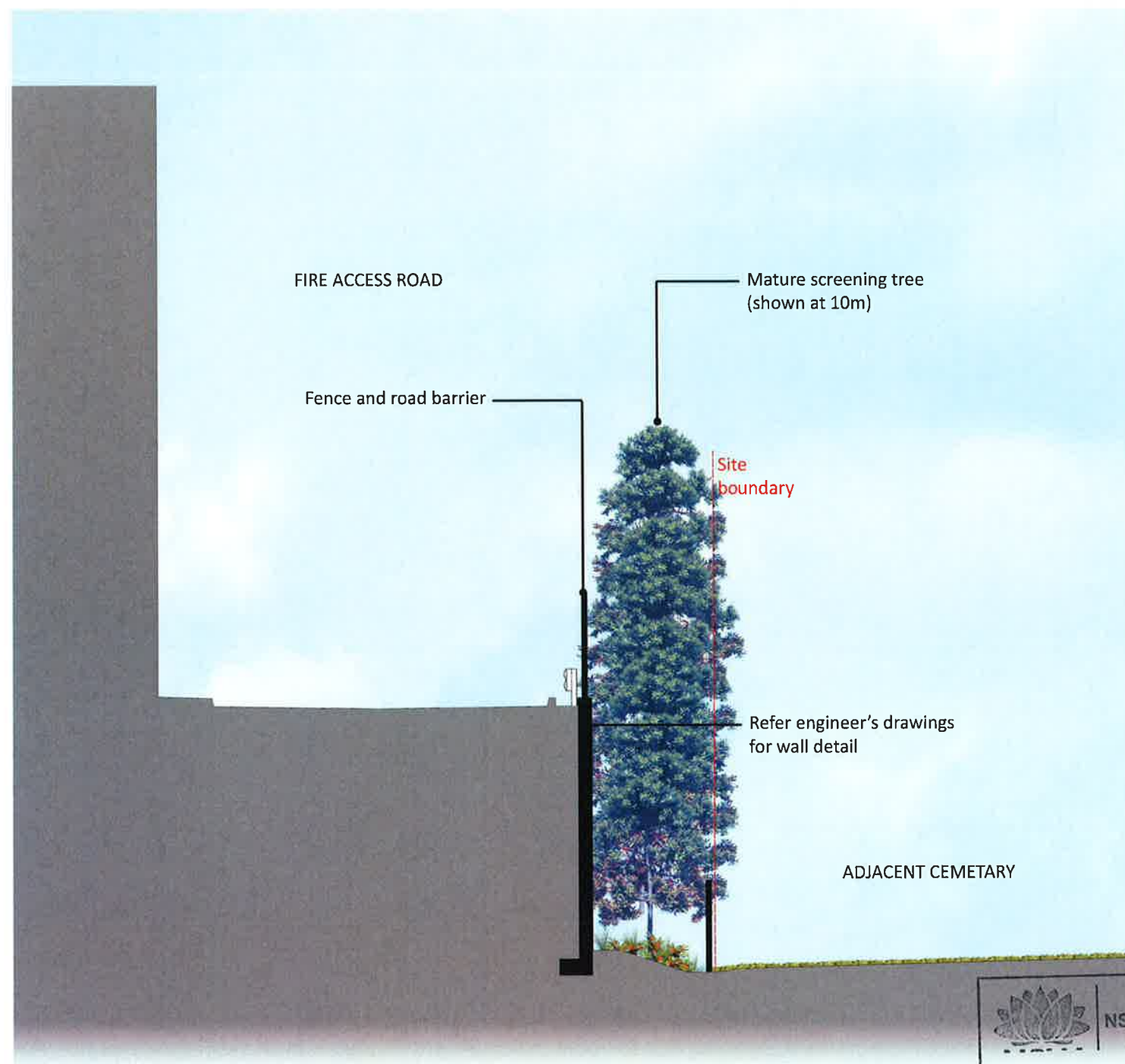
Project No.
H8-15101
 Drawing No.
L005

Project Name
 Wallgrove Road Industrial
 Drawing Title
Landscape Sections - Access Road

Date
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 Date
 D

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Sheet No. 26 of 82

DATE	REVISION	PURPOSE
13.05.15	A	DRAFT
15.05.15	B	DRAFT
20.05.15	C	DRAFT
05.06.15	D	DA Submission
03.07.15	E	DA Submission



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Sheet No. 37 of 82

DATE	REVISION	PURPOSE
13.05.15	A	DRAFT
15.05.15	B	DRAFT
20.05.15	C	DRAFT
05.06.15	D	DA Submission



Entry statement backing panels to reflect Heritage Interpretation Strategy



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Sheet No. 38 of 82

DATE	REVISION	PURPOSE
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15.05.15	B	DRAFT
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05.06.15	D	DA Submission

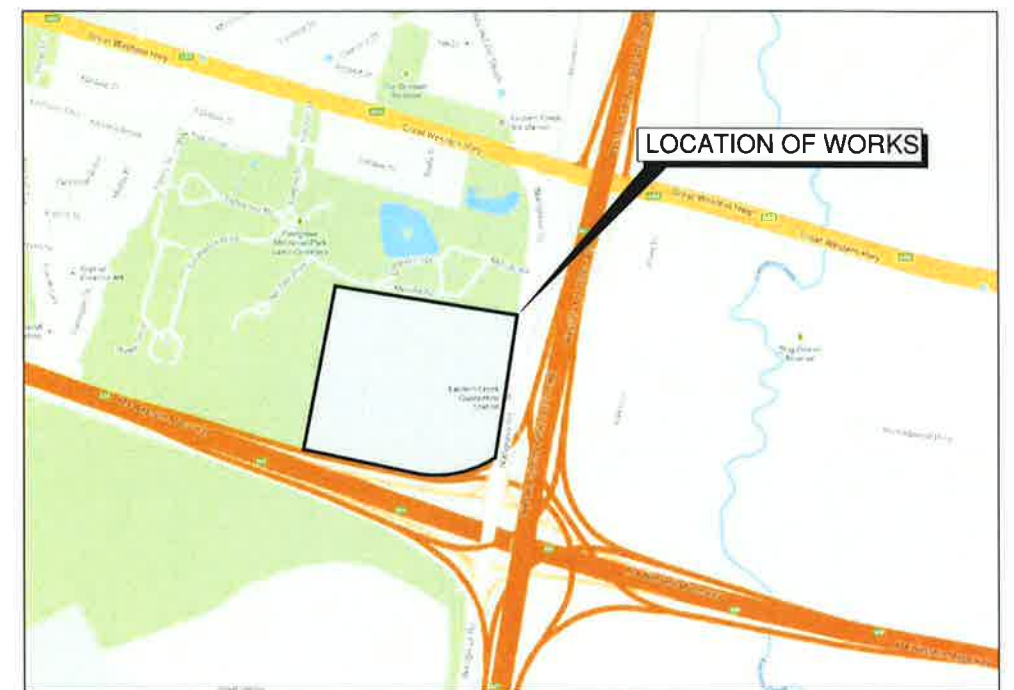
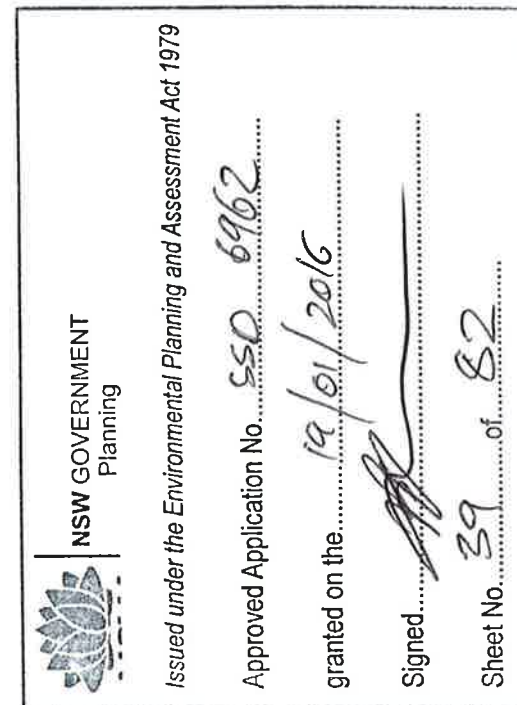
60 WALLGROVE ROAD, EASTERN CREEK

INTERNAL CIVIL WORKS PACKAGE

SSDA APPROVAL ISSUE

DRAWING LIST

DWG NO.	DRAWING TITLE
DAC001	COVER SHEET AND LOCALITY PLAN
DAC002	NOTES AND LEGENDS
DAC005	PROJECT STAGING PLAN
DAC010	GENERAL ARRANGEMENT PLAN
DAC011	TYPICAL SITE SECTIONS SHEET 1
DAC012	TYPICAL SITE SECTIONS SHEET 2
DAC013	TYPICAL SITE SECTIONS SHEET 3
DAC014	TYPICAL SITE SECTIONS SHEET 4
DAC015	TYPICAL SITE SECTIONS SHEET 5
DAC016	TYPICAL SITE SECTIONS SHEET 6
DAC017	TYPICAL SITE SECTIONS SHEET 7
DAC025	TYPICAL ROAD SECTIONS
DAC030	BULK EARTHWORKS CUT TO FILL PLAN
DAC031	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 1
DAC032	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 2
DAC033	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 3
DAC034	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 4
DAC035	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 5
DAC036	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 6
DAC037	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 7
DAC038	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 8
DAC039	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 9
DAC040	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 10
DAC041	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 11
DAC042	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 12
DAC050	ROAD MC03 LONGITUDINAL SECTION
DAC071	PAVEMENT PLAN SHEET 1
DAC072	PAVEMENT PLAN SHEET 2
DAC073	PAVEMENT PLAN SHEET 3
DAC074	PAVEMENT PLAN SHEET 4
DAC075	LINEMARKING AND SIGNAGE PLAN
DAC081	PRE/POST DEVELOPMENT CATCHMENT PLAN
DAC082	OVERALL CATCHMENT PLAN
DAC083	ONSITE DETENTION TANK PLAN AND DETAILS
DAC084	BIO-RETENTION BASIN PLAN AND DETAILS
DAC085	BIO-SWALE PLAN AND DETAILS
DAC091	SERVICES COORDINATION PLAN SHEET 1
DAC092	SERVICES COORDINATION PLAN SHEET 2
DAC093	SERVICES COORDINATION PLAN SHEET 3
DAC101	EROSION AND SEDIMENTATION CONTROL PLAN SHEET 1
DAC102	EROSION AND SEDIMENTATION CONTROL PLAN SHEET 2
DAC103	EROSION AND SEDIMENTATION CONTROL PLAN SHEET 3
DAC104	EROSION AND SEDIMENTATION CONTROL PLAN SHEET 4
DAC111	VEHICLE TURNING PATH PLAN



LOCALITY PLAN
NTS



			Bar Scales	THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L	Client 	Scales			Project			Civil Engineers and Project Managers  Suite 702, 154 Pacific Hwy St Leonards NSW 2065 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9460 8413 www.atl.net.au info@atl.net.au								
						Drawn		AH		60 WALLGROVE ROAD INTERNAL WORKS										
						Designed		AH												
						Grid		Checked		AMcL		Title COVER SHEET AND LOCALITY PLAN								
						Height Datum		Approved		MG										
B RE-ISSUED FOR APPROVAL 28-05-15												Status FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION			A1					
A ISSUED FOR APPROVAL 26-05-15												Drawing No. DAC001			Project No. 12-108			Issue B		
Issue Description Date																				

NSW GOVERNMENT

Planning

Issued under the Environmental Planning and Assessment Act 1979

Approved Application No.....*580 6962*.....

granted on the.....*19/01/2016*.....

Signed.....*[Signature]*.....

Sheet No.....*40* of *82*.....

KERBING NOTES

- ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa U.N.O.
- ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 100mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 95% MODIFIED DRY DENSITY (AS 1289 5.2.1).
- EXPANSION JOINTS (E.J.) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
- IN THE REPLACEMENT OF KERB AND GUTTER :- EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER NEW BASECOURSE AND SURFACE TO BE LAID 600mm WIDE U.N.O.

EXISTING ALLOTMENT DRAINAGE PIPES ARE TO BE BUILT INTO THE NEW KERB AND GUTTER WITH 100mm DIA HOLE.

EXISTING KERB AND GUTTER IS TO BE COMPLETELY REMOVED WHERE NEW KERB AND GUTTER IS SHOWN

SITWORKS NOTES

- ORIGIN OF LEVELS:- REFER SURVEY NOTES.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT & L.
- MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1 (OR A DENSITY INDEX OF NOT LESS THAN 75).
- PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- ASPHALTIC CONCRETE SHALL CONFORM TO R.T.A. SPECIFICATION R116.
- ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.T.A. FORM 3051, 3051.1 AND 3051.2 (3052 BOUND) COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1
FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m² OF BASECOURSE MATERIAL PLACED.
- ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.T.A. FORM 3051, 3051.1 AND 3051.2 (3052 BOUND) COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S. 1289 5.2.1
FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m² OF SUB-BASE COURSE MATERIAL PLACED.
- AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (V) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH R.T.A. FORM 3051 AND 3051.1 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT & L.
- SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THIS SHALL BE CLEARLY INDICATED IN THEIR TENDER AND THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
- WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (e.g. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.

BULK EARTHWORKS NOTES

- ORIGIN OF LEVELS:- REFER SURVEY NOTES
- STAMP ALL TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCK PILE AS DIRECTED BY SUPERINTENDENT.
- EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE MATERIAL IS +/- 2% OF THE OPTIMUM MOISTURE CONTENT.
- COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN:
LOCATION STANDARD DRY DENSITY (AS 1289 E 5.1.1)
UNDER BUILDING SLABS ON GROUND 98%
UNDER ROADS AND CARPARKS 98%
LANDSCAPED AREAS UNLESS NOTED OTHERWISE 98%
- FOR NON COHESIVE MATERIAL, COMPACT TO 75% DENSITY INDEX.
- BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH AN 8 TONNE (MIN) DEADWEIGHT SMOOTH DRUM VIBRATORY ROLLER TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER).
- FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN :-
(A) 1 TEST PER 200m² OF FILL PLACED PER 300 LAYER OF FILL.
(B) 3 TESTS PER VISIT
(C) 1 TEST PER 1000m² OF EXPOSED SUBGRADE
TESTING SHALL BE "LEVEL 1" TESTING IN ACCORDANCE WITH AS 3798 (1996).
- FILLING TO BE PLACED AND COMPACTED IN MAXIMUM 150mm LAYERS
- NO FILLING SHALL TAKE PLACE TO EXPOSE SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF AT & L AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.
- EARTHWORKS TO BE INERT TAKEN IN ACCORDANCE WITH THE RECOMMENDATIONS OF DOUGLAS & PARTNERS GEOTECHNICAL REPORTS REF. 71089.00 AND 84798.00
- SALINITY MANAGEMENT WILL BE REQUIRED ON SITE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE DOUGLAS & PARTNERS GEOTECHNICAL REPORT

STORMWATER DRAINAGE NOTES

- STORMWATER DESIGN CRITERIA:
(A) AVERAGE RECURRENCE INTERVAL:
1100 YEARS ROOFED AREAS TO SURCHARGE PIT
120 YEARS EXTERNAL PAVEMENTS
(B) RAINFALL INTENSITIES:
TIME OF CONCENTRATION: 5 MINUTES
1100 YEARS= 210 mm/hr
120 YEARS= 168 mm/hr
(C) RUNOFF COEFFICIENTS:
ROOF AREAS: C100 =1.0
EXTERNAL PAVEMENTS: C20 =1.0
- PIPES 750 DIA. AND LARGER TO UTILISE SULPHATE RESISTANT CEMENT
- PIPES 300 DIA. AND LARGER TO BE FIBRE REINFORCED CONCRETE CLASS '3' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS, U.N.O.
- PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS
- ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT
- PIPES TO BE INSTALLED TO TYPE HS2 SUPPORT IN ACCORDANCE WITH AS 3725 (1999) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1 (OR A DENSITY INDEX OF NOT LESS THAN 75)
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (1998) AND AS/NZS 3500 3.2 (1998).
- PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY AT & L.
- ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.
- CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- GRATES AND COVERS SHALL CONFORM TO AS 3996.
- AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

SERVICES LEGEND

EXISTING SERVICES

- ELECTRICITY
- ELECTRICITY OVERHEAD
- LIGHT POLE
- TELSTRA CONDUITS
- OPTUS CONDUITS
- SEWER SERVICE
- WATER SERVICE
- GAS SERVICE
- STORMWATER
- WATER HYDRANT
- WATER STOP VALVE

PROPOSED SERVICES

- WATER SERVICE
- POWER POLE
- PEDESTRIAN LIGHT POLE
- LIGHT POLE
- ELECTRICITY CONDUITS
- TELSTRA CONDUITS
- GAS (100mm SPARE CONDUIT)
- SEWER SERVICE
- SEWER MANHOLE
- STORMWATER

CONCRETE NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- CONCRETE QUALITY
ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

ELEMENT	AS 3600 F _{ck} MPa AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
KERBS, PATHS, AND PITS	25	80	20

- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379

- NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY AT & L.
- CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70mm FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.
- ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
- THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED AND CURED IN ACCORDANCE WITH R.T.A. SPECIFICATION R83.

REINFORCEMENT SYMBOLS:

- N DENOTES GRADE 450 N BARS TO AS 1302 GRADE N
- R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS 1302
- SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS 1304

NUMBER OF BARS IN GROUP BAR GRADE AND TYPE
17 N 20 250

NOMINAL BAR SIZE IN mm SPACING IN mm

THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC TO AS 1304

- FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL



SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAS BEEN COMPILED VIA WAE SURVEY
THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. AT & L DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT AT & L.

THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM THE ORIGINAL SURVEY DOCUMENTS.

IMPORTANT NOTE:
THIS PLAN IS PREPARED FROM A COMBINATION OF FIELD SURVEY AND EXISTING RECORDS FOR THE PURPOSE OF DESIGNING NEW CONSTRUCTIONS ON THE LAND AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE. THE TITLE BOUNDARIES SHOWN HEREON WERE NOT MARKED BY THE AUTHOR AT THE TIME OF SURVEY AND HAVE BEEN DETERMINED BY PLAN DIMENSIONS ONLY AND NOT BY FIELD MEASUREMENT.

A SERVICES SEARCH OF THE AREA SURVEYED ABOVE HAS NOT BEEN UNDERTAKEN. VISIBLE SERVICES SHOWN HEREON HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE, THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN.

ORIGIN OF LEVELS: SSM 3254.0
RL 524.87 AND
BEARINGS SHOWN ARE MGA

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- THE SITE SUPERINTENDENT/ENGINEER WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED.
- ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
a. LOCAL AUTHORITY REQUIREMENTS
b. EPA REQUIREMENTS
c. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4TH EDITION, MARCH 2004.
- MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
- WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
- CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

LAND DISTURBANCE

- WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
(A) INSTALL A WIND FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN, REFER DETAIL.
- (B) INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN, REFER DETAIL.
- (C) CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER DETAIL.
- (D) INSTALL SEDIMENT BASIN AS SHOWN ON PLAN.
- (E) INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
- (F) UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

EROSION CONTROL

- DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

SEDIMENT CONTROL

- STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
- ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
- TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

OTHER MATTERS

- ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
(A) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE.
(B) ENSURING THAT NOTHING IS NAILED TO THEM.
(C) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS:
(i) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 15 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICHEVER IS THE GREATER.
(ii) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH.
(iii) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

PROPOSED WORKS LEGEND

PROPOSED

- PROPOSED BOUNDARY
- EXISTING CONTOUR
- FINISHED SURFACE LEVEL
- PROPOSED CONTOUR
- KERB AND GUTTER
BCC - AIBS101M
- KERB ONLY
BCC - AIBS101M
- DISH DRAIN
BCC - AIBS101M
- INTEGRAL KERB
BCC - AIBS101M
- VEHICULAR CROSSING
BCC - AIBS103S
- PRAM RAMP
BCC - AIBS104M
- STORMWATER PIT, LINE & NUMBER
- STORMWATER DOWNPIPE AND TRUNK LINE
- STORMWATER JUNCTION PIT
BCC-AIBS107M
- STORMWATER SURFACE INLET PIT
BCC-AIBS109M
- STORMWATER HEADWALL
- GRATED DRAIN
- RETAINING WALL
- GUARD FENCE
- FENCE LINE
- STREET SIGN

CONTRACTOR SHALL CALL;
DIAL BEFORE
YOU DIG 1100
PRIOR TO COMMENCEMENT OF WORK
TO OBTAIN ALL CURRENT SERVICE
AUTHORITY PLANS



Issue	Description	Date
B	RE-ISSUED FOR APPROVAL	28-05-15
A	ISSUED FOR APPROVAL	26-05-15

Bar Scales

THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L

Client



Scales

Grid
Height
Datum

Drawn

Designed
Checked
Approved

AH
AH
AMcL
MG

Project

60 WALLGROVE ROAD
INTERNAL WORKS

Title

NOTES
AND LEGENDS

Civil Engineers and Project Managers



Status

FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Drawing No. DAC002
Project No. 12-108
Issue B

A1