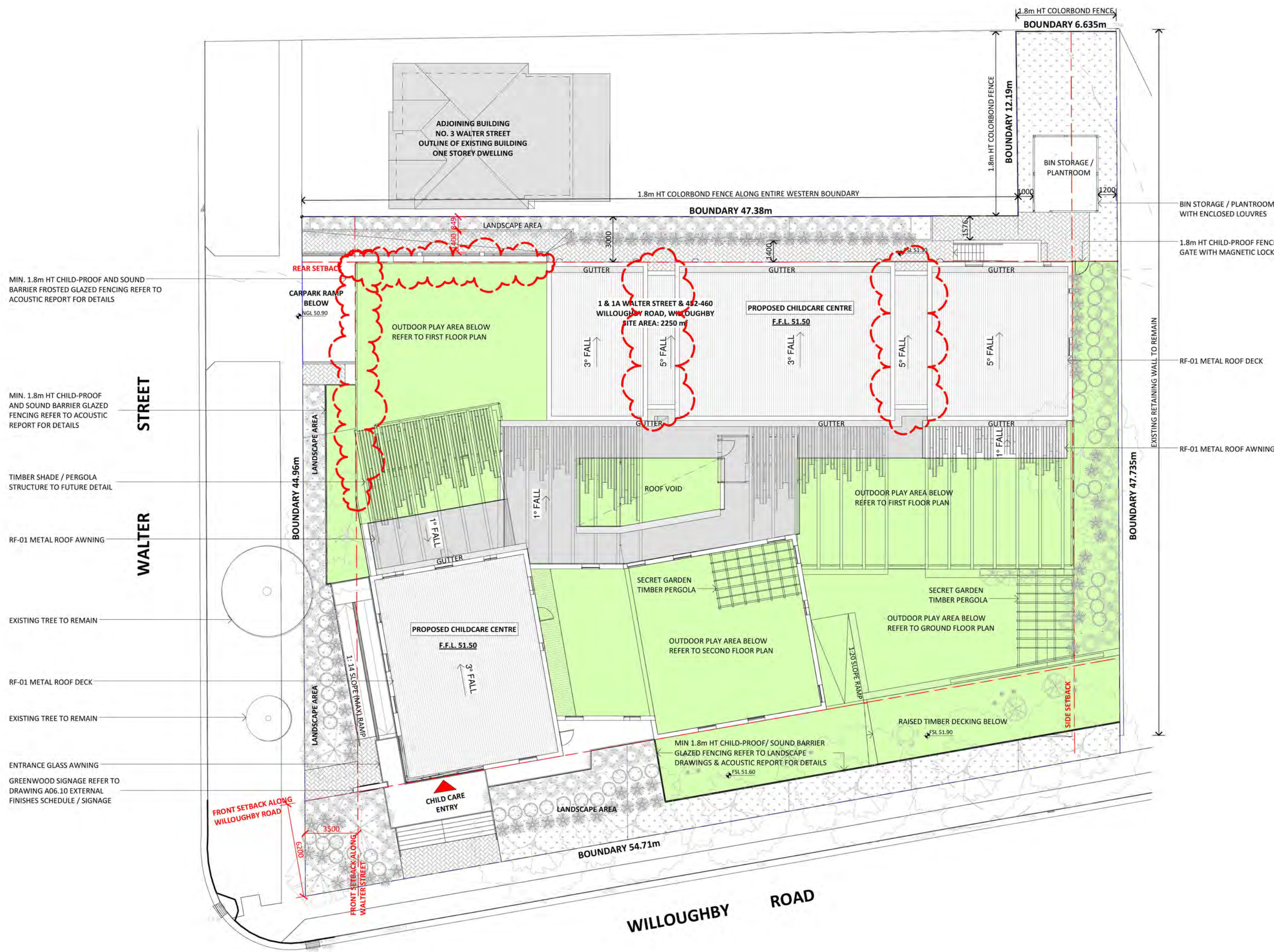
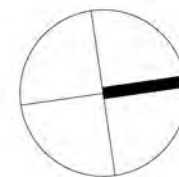




1 SITE / ROOF PLAN
1 : 200

SUMMARY CALCULATION

TOTAL SITE AREA	= 2250 sqm
PERMITTED FLOOR SPACE RATIO	= 0.9 : 1
PROPOSED FLOOR SPACE RATIO	= 0.6 : 1
PERMITTED TOTAL FLOOR SPACE	= 2025 sqm
PROPOSED TOTAL FLOOR SPACE	= 1374.5 sqm

CHILDREN & STAFF NUMBERS:

CHILDREN	NUMBER	STAFF
0-2 YRS	40	10
2-3 YRS	65	13
3-5 YRS	117	12
TOTAL	222	35

CAR PARKING:

41 CAR SPACES ONSITE PARKING
PLUS x1 FOR DELIVERY CARSPACE
TOTAL OF 42 CARSPACES (INCL. ACCESSIBLE PARKING)
2 x RAILS BICYCLE PARKING, 4 LOCKERS BICYCLES
2 MOTORCYCLE

INDOOR PLAY AREA CALCULATION:

GROUND FLOOR
PLAY AREA FOR AGE 0-2 (40 CHILDREN) = 136.0 sqm
PLAY AREA FOR AGE 2-3 (50 CHILDREN) = 177.0 sqm
FIRST FLOOR
PLAY AREA FOR AGE 2-3 (15 CHILDREN) = 56.0 sqm
PLAY AREA FOR AGE 3-5 (97 CHILDREN) = 352.0 sqm
ART/ MUSIC ROOM = 32.0 sqm
SECOND FLOOR
PLAY AREA FOR AGE 3-5 (20 CHILDREN) = 70.0 sqm
TOTAL INDOOR PLAY AREA (APPROX.) = 823.0 sqm

OUTDOOR PLAY AREA CALCULATION:

REQUIRED OUTDOOR PLAY AREA FOR AGE 0-2 = 280.0 sqm
PROPOSED OUTDOOR PLAY AREA FOR AGE 0-2 = 290.0 sqm
REQUIRED OUTDOOR PLAY AREA FOR AGE 2-3 = 455.0 sqm
PROPOSED OUTDOOR PLAY AREA FOR AGE 2-3 = 460.0 sqm
REQUIRED OUTDOOR PLAY AREA FOR AGE 3-5 = 826.0 sqm
PROPOSED OUTDOOR PLAY AREA FOR AGE 3-5 = 830.0 sqm
TOTAL UNENCUMBERED OUTDOOR AREA (APPROX.) = 1580.0 sqm

GENERAL LANDSCAPE LEGEND

	OUTDOOR PLAY AREA
	LANDSCAPE AREA

*DETAILS REFER TO LANDSCAPE DRAWINGS

ISSUE	DATE	DESCRIPTION
E	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
D	07.02.2017	AMENDED PLAN FOR REVIEW/COORDINATION
C	30.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
B	24.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
A	15.07.2016	ISSUE FOR DEVELOPMENT APPLICATION

ASSOCIATED CONSULTANTS

ACCESS

ACQUATIC

CIVIL

ELECTRICAL

FIRE

GEOTECH

HYDRAULIC

LANDSCAPE

MECH

SEC J

STRUCTURE

SURVEY

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GREENWOOD

ARCHITECT

[ArtMade Architects]

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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460

WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

SITE / ROOF PLAN

ISSUED FOR DEVELOPMENT APPLICATION

Project number	Sheet No.	Issue	Phase
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48016	A02.01	E	DA
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Sheet Size	Scale	L.G.A.
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A1	As indicated	WILLOUGHBY
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Drawn By	Checked By	Date
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KZ	YN	03.03.2017
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NOT FOR CONSTRUCTION



SUMMARY CALCULATION

TOTAL SITE AREA	= 2250 sqm
PERMITTED FLOOR SPACE RATIO	= 0.9 : 1
PROPOSED FLOOR SPACE RATIO	= 0.6 : 1
PERMITTED TOTAL FLOOR SPACE	= 2025 sqm
PROPOSED TOTAL FLOOR SPACE	= 1374.5 sqm

CHILDREN & STAFF NUMBERS:

CHILDREN	NUMBER	STAFF
0-2 YRS	40	10
2-3 YRS	65	13
3-5 YRS	117	12
TOTAL	222	35

CAR PARKING:

41 CAR SPACES ONSITE PARKING
PLUS x1 FOR DELIVERY CARSPACE
TOTAL OF 42 CARSPACES (INCL. ACCESSIBLE PARKING)
2 x RAILS BICYCLE PARKING, 4 LOCKERS BICYCLES
2 MOTORCYCLE

INDOOR PLAY AREA CALCULATION:

GROUND FLOOR
PLAY AREA FOR AGE 0-2 (40 CHILDREN) = 136.0 sqm
PLAY AREA FOR AGE 2-3 (50 CHILDREN) = 177.0 sqm
FIRST FLOOR
PLAY AREA FOR AGE 2-3 (15 CHILDREN) = 56.0 sqm
PLAY AREA FOR AGE 3-5 (97 CHILDREN) = 352.0 sqm
ART/ MUSIC ROOM = 32.0 sqm
SECOND FLOOR
PLAY AREA FOR AGE 3-5 (20 CHILDREN) = 70.0 sqm
TOTAL INDOOR PLAY AREA (APPROX.) = 823.0 sqm

OUTDOOR PLAY AREA CALCULATION:

REQUIRED OUTDOOR PLAY AREA FOR AGE 0-2 = 280.0 sqm
PROPOSED OUTDOOR PLAY AREA FOR AGE 0-2 = 290.0 sqm
REQUIRED OUTDOOR PLAY AREA FOR AGE 2-3 = 455.0 sqm
PROPOSED OUTDOOR PLAY AREA FOR AGE 2-3 = 460.0 sqm
REQUIRED OUTDOOR PLAY AREA FOR AGE 3-5 = 826.0 sqm
PROPOSED OUTDOOR PLAY AREA FOR AGE 3-5 = 830.0 sqm
TOTAL UNENCUMBERED OUTDOOR AREA (APPROX.) = 1580.0 sqm

B	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
A	15.07.2016	ISSUE FOR DEVELOPMENT APPLICATION
ISSUE	DATE	DESCRIPTION
ASSOCIATED CONSULTANTS		
ACCESS		
ACOUSTIC		
BCA		
CIVIL		
ELECTRICAL		
FIRE		
GEOTECH		
HYDRAULIC		
LANDSCAPE		
MECH		
SEC J		
STRUCTURE		
SURVEY		

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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

BASEMENT B3 FLOOR PLAN

ISSUED FOR DEVELOPMENT APPLICATION

Project number	Sheet No.	Issue	Phase
48016	A03.01	B	DA

Sheet Size	Scale	L.G.A.
A1	As indicated	WILLOUGHBY

Drawn By	Checked By	Date
FR	YN	03.03.2017

NOT FOR CONSTRUCTION



SUMMARY CALCULATION

TOTAL SITE AREA	= 2250 sqm
PERMITTED FLOOR SPACE RATIO	= 0.9 : 1
PROPOSED FLOOR SPACE RATIO	= 0.6 : 1
PERMITTED TOTAL FLOOR SPACE	= 2025 sqm
PROPOSED TOTAL FLOOR SPACE	= 1374.5 sqm

CHILDREN & STAFF NUMBERS:

CHILDREN	NUMBER	STAFF
0-2 YRS	40	10
2-3 YRS	65	13
3-5 YRS	117	12
TOTAL	222	35

CAR PARKING:

41 CAR SPACES ONSITE PARKING
PLUS x1 FOR DELIVERY CARSPACE
TOTAL OF 42 CARSPACES (INCL. ACCESSIBLE PARKING)
2 x RAILS BICYCLE PARKING, 4 LOCKERS BICYCLES
2 MOTORCYCLE

INDOOR PLAY AREA CALCULATION:

GROUND FLOOR
PLAY AREA FOR AGE 0-2 (40 CHILDREN) = 136.0 sqm
PLAY AREA FOR AGE 2-3 (50 CHILDREN) = 177.0 sqm
FIRST FLOOR
PLAY AREA FOR AGE 2-3 (15 CHILDREN) = 56.0 sqm
PLAY AREA FOR AGE 3-5 (97 CHILDREN) = 352.0 sqm
ART/ MUSIC ROOM = 32.0 sqm
SECOND FLOOR
PLAY AREA FOR AGE 3-5 (20 CHILDREN) = 70.0 sqm
TOTAL INDOOR PLAY AREA (APPROX.) = 823.0 sqm

OUTDOOR PLAY AREA CALCULATION:

REQUIRED OUTDOOR PLAY AREA FOR AGE 0-2 = 280.0 sqm
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PROPOSED OUTDOOR PLAY AREA FOR AGE 2-3 = 460.0 sqm
REQUIRED OUTDOOR PLAY AREA FOR AGE 3-5 = 826.0 sqm
PROPOSED OUTDOOR PLAY AREA FOR AGE 3-5 = 830.0 sqm
TOTAL UNENCUMBERED OUTDOOR AREA (APPROX.) = 1580.0 sqm

B	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
A	15.07.2016	ISSUE FOR DEVELOPMENT APPLICATION
ISSUE	DATE	DESCRIPTION
ASSOCIATED CONSULTANTS		
ACCESS		
ACOUSTIC		
BCA		
CIVIL		
ELECTRICAL		
FIRE		
GEOTECH		
HYDRAULIC		
LANDSCAPE		
MECH		
SEC J		
STRUCTURE		
SURVEY		

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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

BASEMENT B1 & B2 FLOOR PLAN

ISSUED FOR DEVELOPMENT APPLICATION

Project number	Sheet No.	Issue	Phase
48016	A03.02	B	DA

Sheet Size	Scale	L.G.A.
A1	As indicated	WILLOUGHBY

Drawn By	Checked By	Date
FR	YN	03.03.2017

NOT FOR CONSTRUCTION

SUMMARY CALCULATION

TOTAL SITE AREA	= 2250 sqm
PERMITTED FLOOR SPACE RATIO	= 0.9 : 1
PROPOSED FLOOR SPACE RATIO	= 0.6 : 1
PERMITTED TOTAL FLOOR SPACE	= 2025 sqm
PROPOSED TOTAL FLOOR SPACE	= 1374.5 sqm

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CHILDREN	NUMBER	STAFF
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2-3 YRS	65	13
3-5 YRS	117	12
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2 MOTORCYCLE

INDOOR PLAY AREA CALCULATION:

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TOTAL INDOOR PLAY AREA (APPROX.) = 823.0 sqm

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PROPOSED OUTDOOR PLAY AREA FOR AGE 3-5 = 830.0 sqm
TOTAL UNENCUMBERED OUTDOOR AREA (APPROX.) = 1580.0 sqm

D	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
C	30.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
B	24.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
A	15.07.2016	ISSUE FOR DEVELOPMENT APPLICATION
ISSUE	DATE	DESCRIPTION
<u>ASSOCIATED CONSULTANTS</u>		
ACCESS		
ACOUSTIC		
BCA		
CIVIL		
ELECTRICAL		
FIRE		
GEOTECH		
HYDRAULIC		
LANDSCAPE		
MECH		
SEC J		
STRUCTURE		
SURVEY		

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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

GROUND FLOOR PLAN

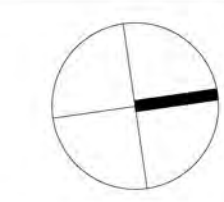
ISSUED FOR DEVELOPMENT APPLICATION

Project number	Sheet No.	Issue	Phase
48016	A03.03	D	DA

Sheet Size	Scale	L.G.A.
A1	As indicated	WILLOUGHBY

Drawn By	Checked By	Date
KZ	YN	03.03.2017

NOT FOR CONSTRUCTION



SUMMARY CALCULATION

TOTAL SITE AREA	= 2250 sqm
PERMITTED FLOOR SPACE RATIO	= 0.9 : 1
PROPOSED FLOOR SPACE RATIO	= 0.6 : 1
PERMITTED TOTAL FLOOR SPACE	= 2025 sqm
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CHILDREN & STAFF NUMBERS:

CHILDREN	NUMBER	STAFF
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PLUS x1 FOR DELIVERY CARSPACE
TOTAL OF 42 CARSPACES (INCL. ACCESSIBLE PARKING)
2 x RAILS BICYCLE PARKING, 4 LOCKERS BICYCLES
2 MOTORCYCLE

INDOOR PLAY AREA CALCULATION:

GROUND FLOOR

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FIRST FLOOR
PLAY AREA FOR AGE 2-3 (15 CHILDREN) = 56.0 sqm
PLAY AREA FOR AGE 3-5 (97 CHILDREN) = 352.0 sqm
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SECOND FLOOR
PLAY AREA FOR AGE 3-5 (20 CHILDREN) = 70.0 sqm
TOTAL INDOOR PLAY AREA (APPROX.) = 823.0 sqm

OUTDOOR PLAY AREA CALCULATION:

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PROPOSED OUTDOOR PLAY AREA FOR AGE 0-2 = 290.0 sqm
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PROPOSED OUTDOOR PLAY AREA FOR AGE 2-3 = 460.0 sqm
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PROPOSED OUTDOOR PLAY AREA FOR AGE 3-5 = 830.0 sqm
TOTAL UNENCUMBERED OUTDOOR AREA (APPROX.) = 1580.0 sqm

E	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
D	07.02.2017	AMENDED PLAN FOR REVIEW/COORDINATION
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B	24.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
A	15.07.2016	ISSUE FOR DEVELOPMENT APPLICATION
ISSUE	DATE	DESCRIPTION
<u>ASSOCIATED CONSULTANTS</u>		
ACCESS		
ACOUSTIC		
BCA		
CIVIL		
ELECTRICAL		
FIRE		
GEOTECH		
HYDRAULIC		
LANDSCAPE		
MECH		
SEC J		
STRUCTURE		

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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

FIRST FLOOR PLAN

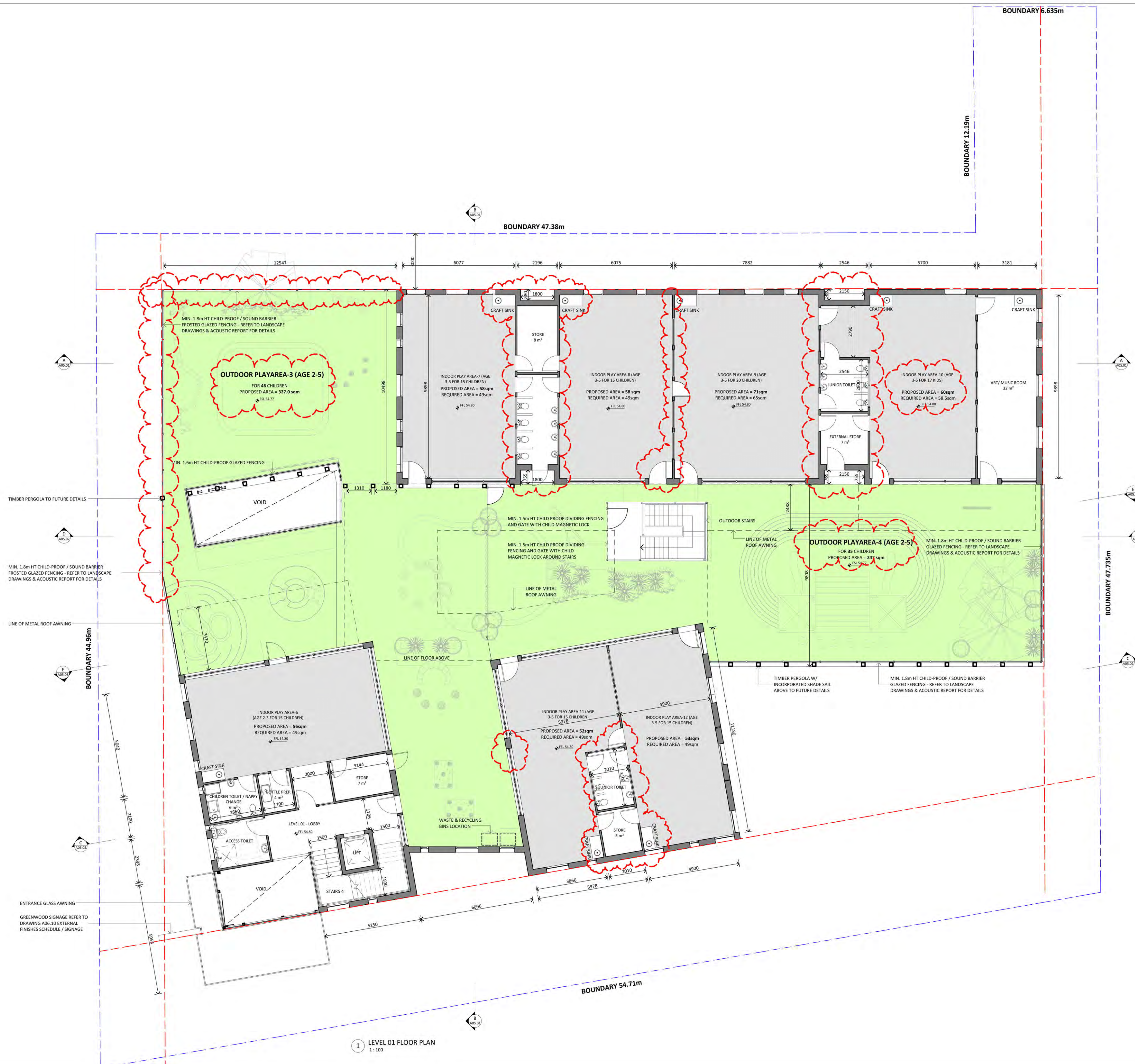
ISSUED FOR DEVELOPMENT APPLICATION

Project number	Sheet No.	Issue	Phase
48016	A03.04	E	DA

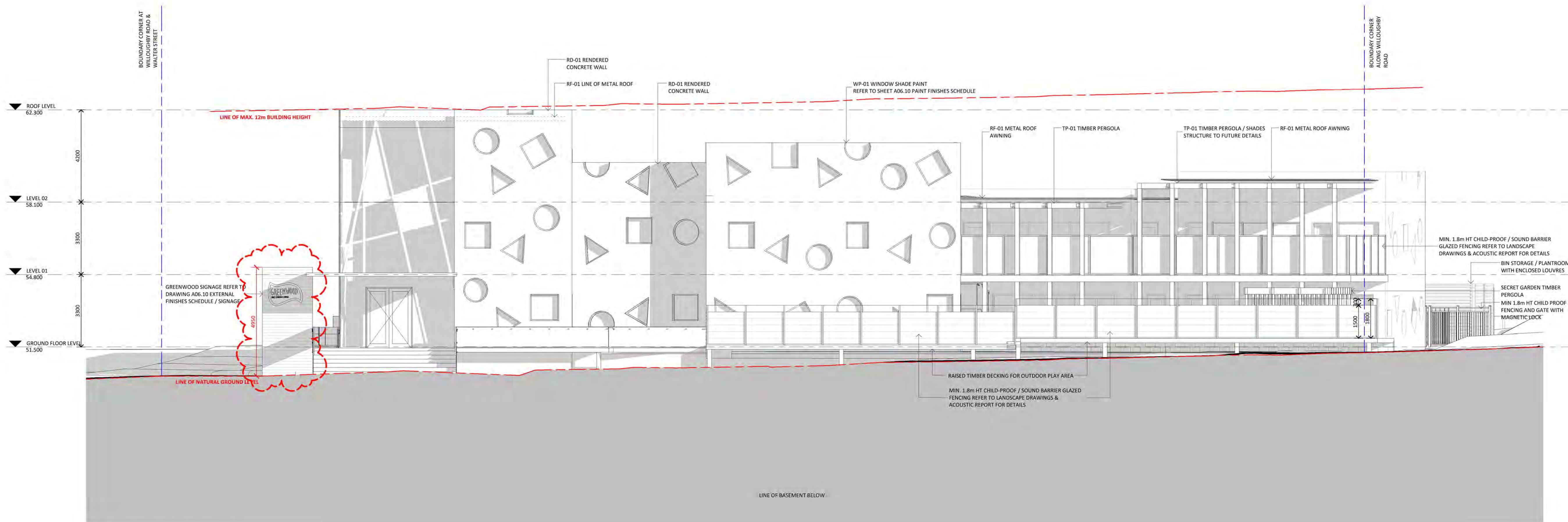
Sheet Size	Scale	L.G.A.
A1	As indicated	WILLOUGHBY

Drawn By	Checked By	Date
KZ	YN	03.03.2017

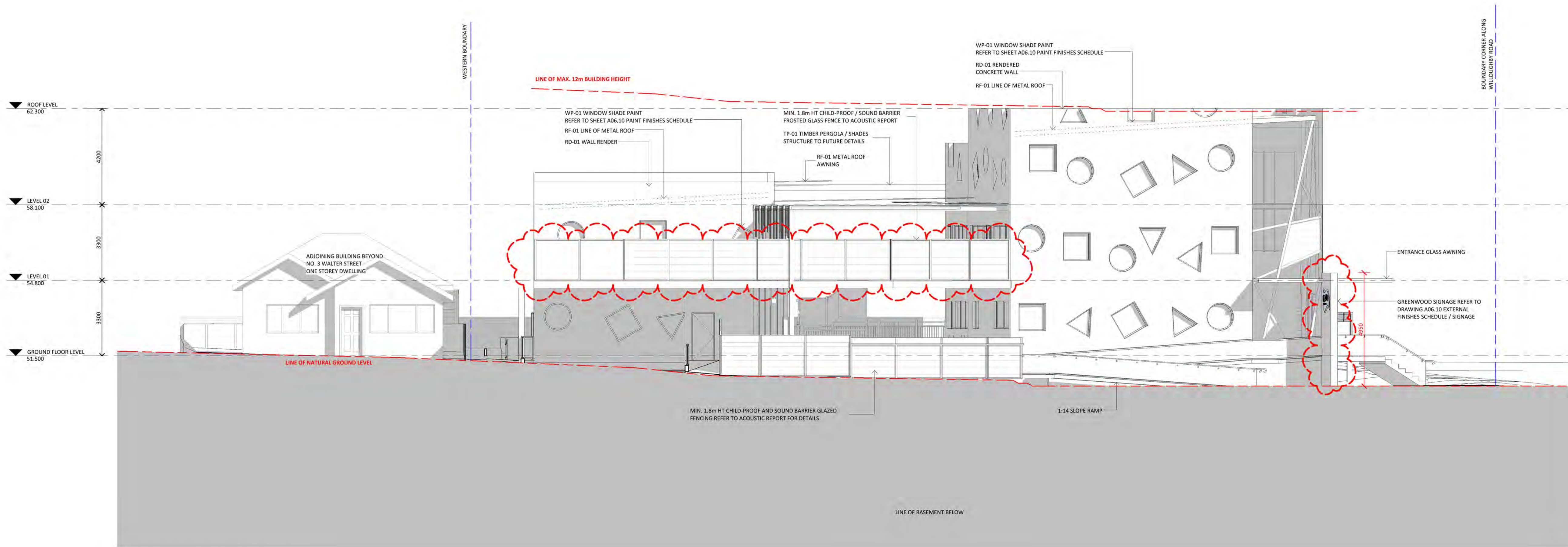
NOT FOR CONSTRUCTION



1 LEVEL 01 FLOOR PLAN
1 : 100



1 EAST ELEVATION (WILLOUGHBY ROAD)
1:100



2 SOUTH ELEVATION (WALTER STREET)
1:100

ISSUE	DATE	DESCRIPTION
E	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
D	07.02.2017	AMENDED PLAN FOR REVIEW/COORDINATION
C	30.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
B	24.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
A	15.07.2016	ISSUE FOR DEVELOPMENT APPLICATION

ASSOCIATED CONSULTANTS

ACCESS	ACQUSTIC
BCA	CIVIL
ELECTRICAL	FIRE
GEOTECH	HYDRAULIC
LANDSCAPE	MECH
SEC J	STRUCTURE
SURVEY	

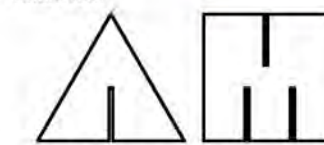
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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

EXTERNAL ELEVATIONS 1

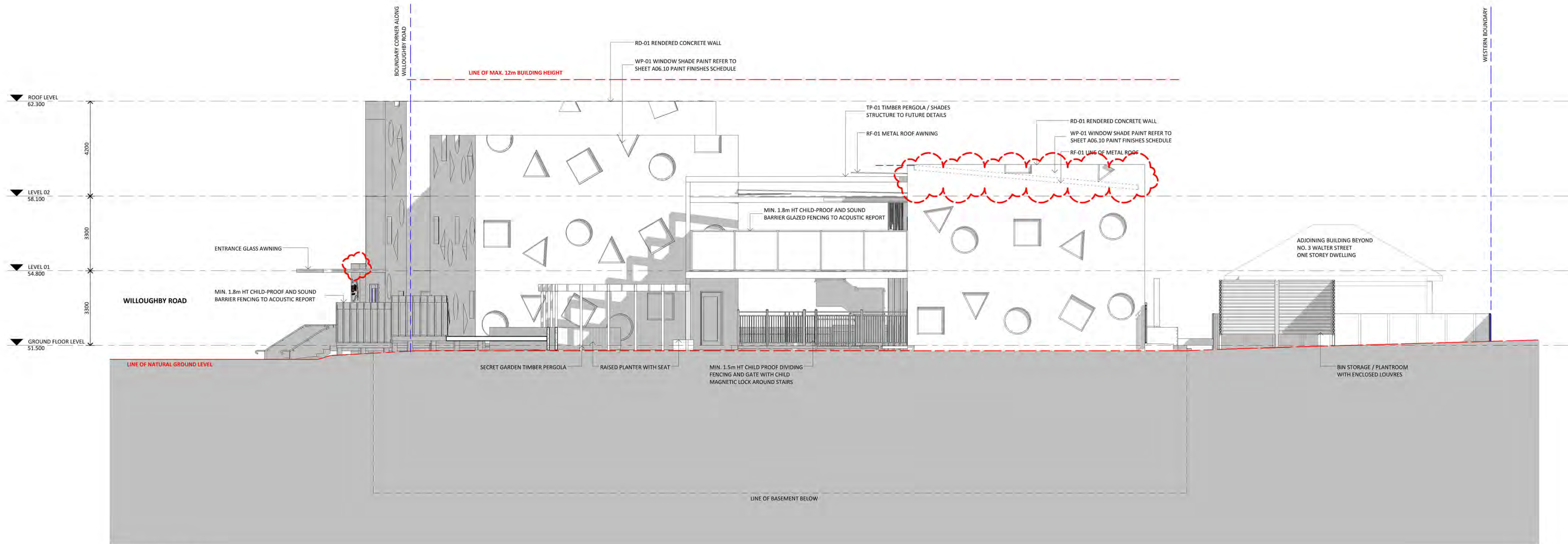
ISSUED FOR DEVELOPMENT APPLICATION

Project number	Sheet No.	Issue	Phase
48016	A04.01	E	DA

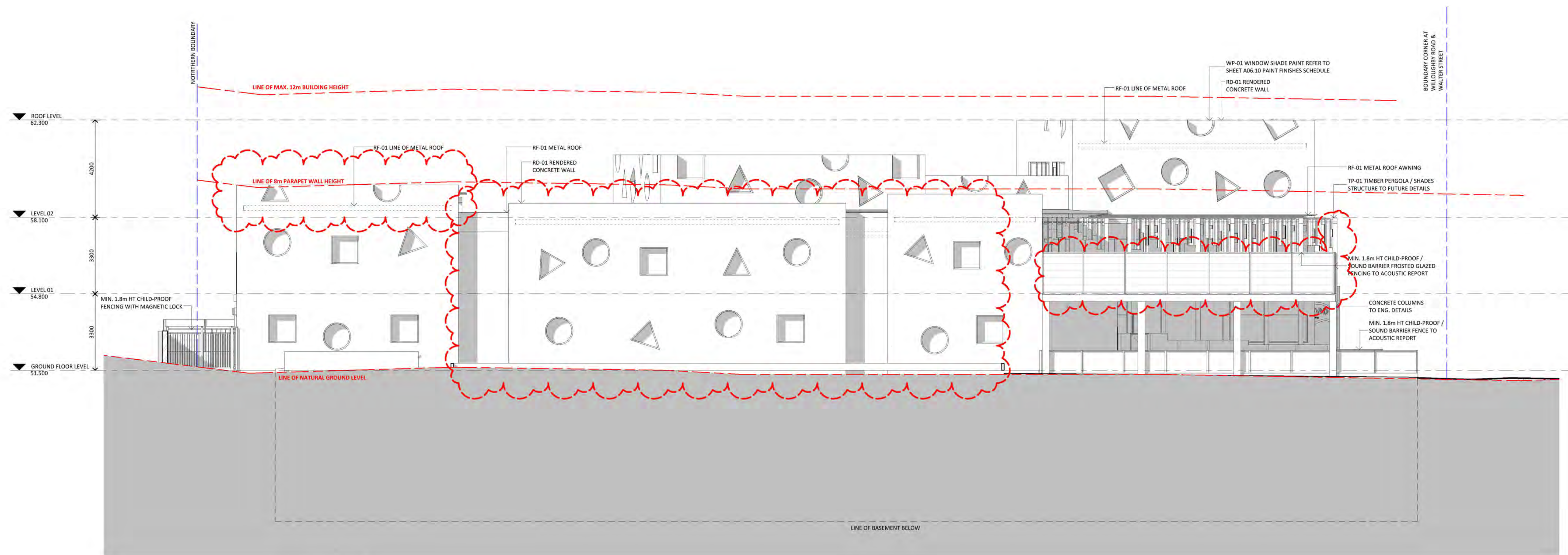
Sheet Size	Scale	L.G.A.
A1	1:100	WILLOUGHBY

Drawn By	Checked By	Date
KZ	YN	03.03.2017

NOT FOR CONSTRUCTION



1 NORTH ELEVATION
1:100



2 WEST ELEVATION
1:100

NOT FOR CONSTRUCTION

ISSUE	DATE	DESCRIPTION
E	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
D	07.02.2017	AMENDED PLAN FOR REVIEW/COORDINATION
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ASSOCIATED CONSULTANTS

ACCESS
ACOUSTIC
BCA
CIVIL
ELECTRICAL
FIRE
GEOTECH
HYDRAULIC
LANDSCAPE
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STRUCTURE
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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

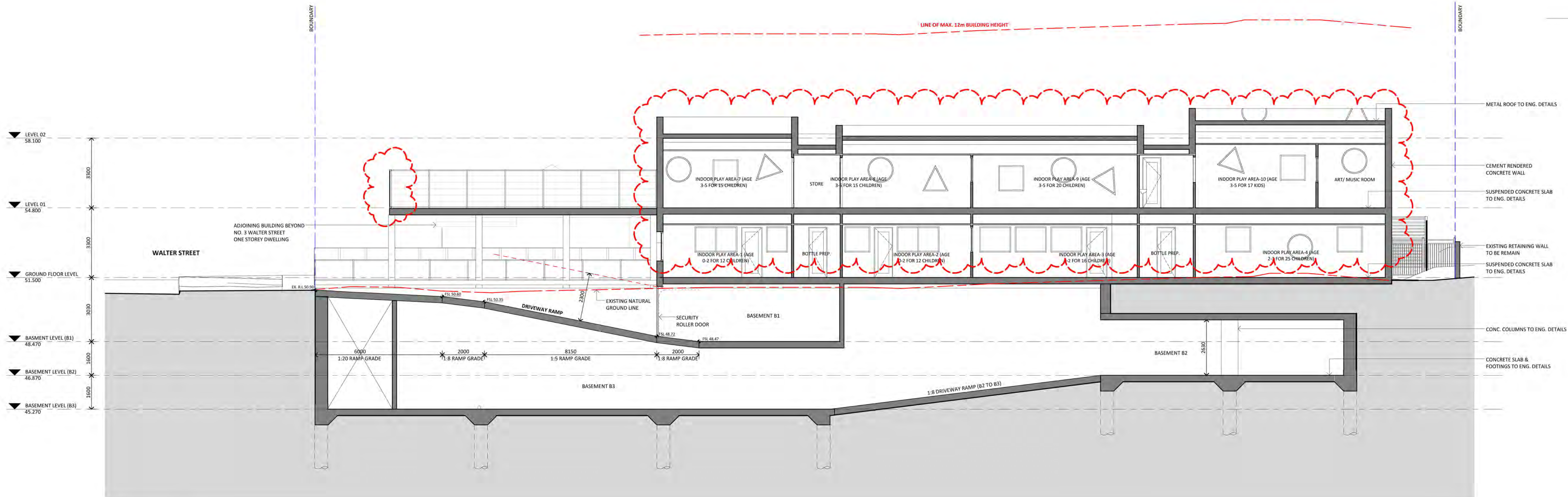
EXTERNAL ELEVATIONS 2

ISSUED FOR DEVELOPMENT APPLICATION

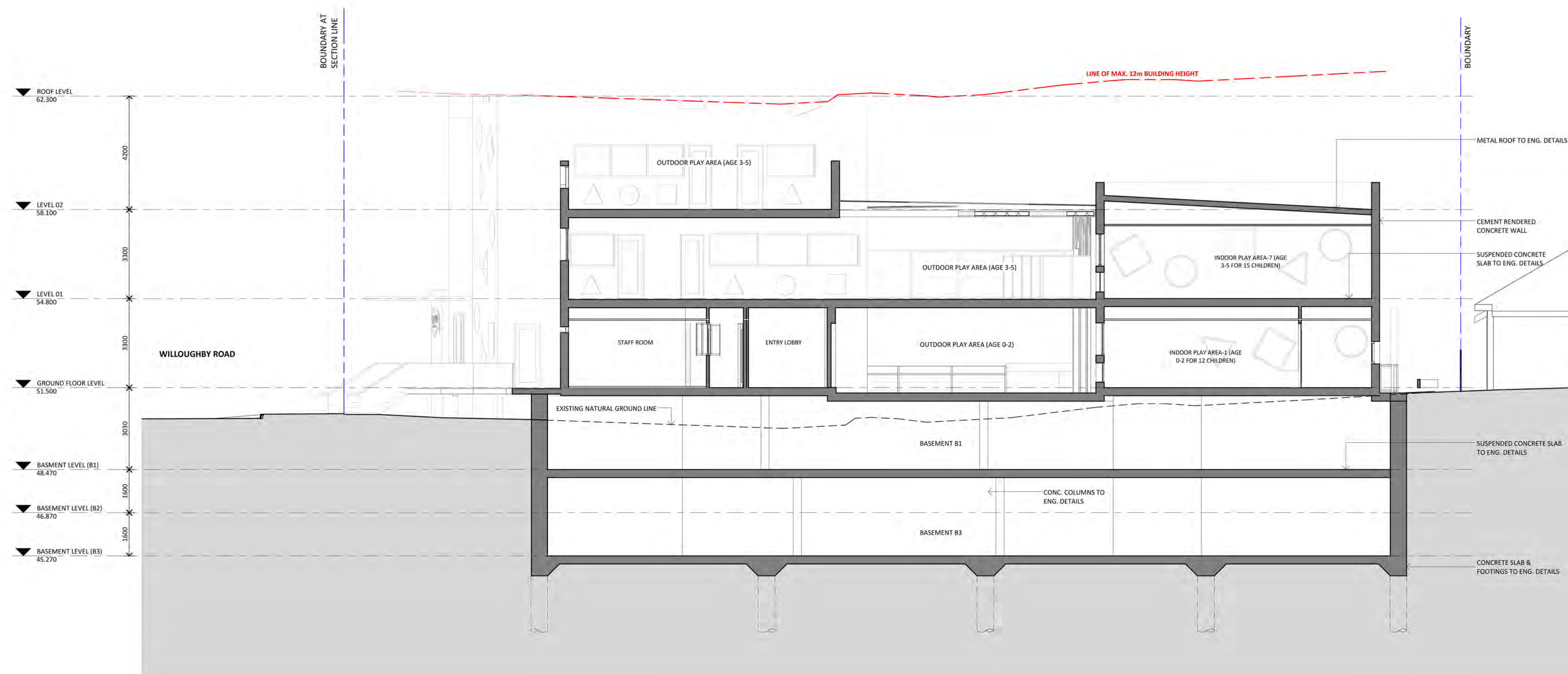
Project number	Sheet No.	Issue	Phase
48016	A04.02	E	DA

Sheet Size	Scale	L.G.A.
A1	1:100	WILLOUGHBY

Drawn By	Checked By	Date
KZ	YN	03.03.2017



A SECTION A-A
1:100



B SECTION B-B
1:100

ISSUE	DATE	DESCRIPTION
E	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
D	07.02.2017	AMENDED PLAN FOR REVIEW/COORDINATION
C	30.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
B	24.01.2017	AMENDED PLAN FOR REVIEW/COORDINATION
A	15.07.2016	ISSUE FOR DEVELOPMENT APPLICATION

ASSOCIATED CONSULTANTS

ACCESS
ACOUSTIC
BCA
CIVIL
ELECTRICAL
FIRE
GEOTECH
HYDRAULIC
LANDSCAPE
MECH
SEC J
STRUCTURE
SURVEY

NOTES

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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

BUILDING SECTIONS

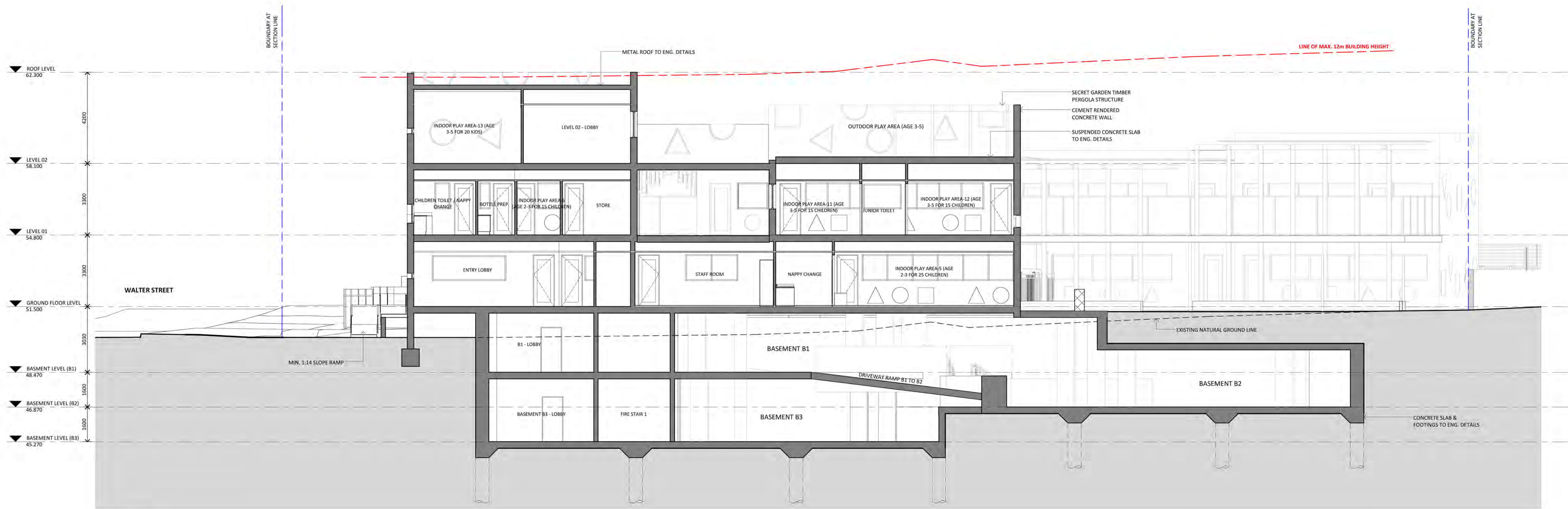
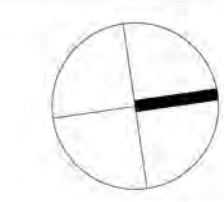
ISSUED FOR DEVELOPMENT APPLICATION

Project number	Sheet No.	Issue	Phase
48016	A05.01	E	DA

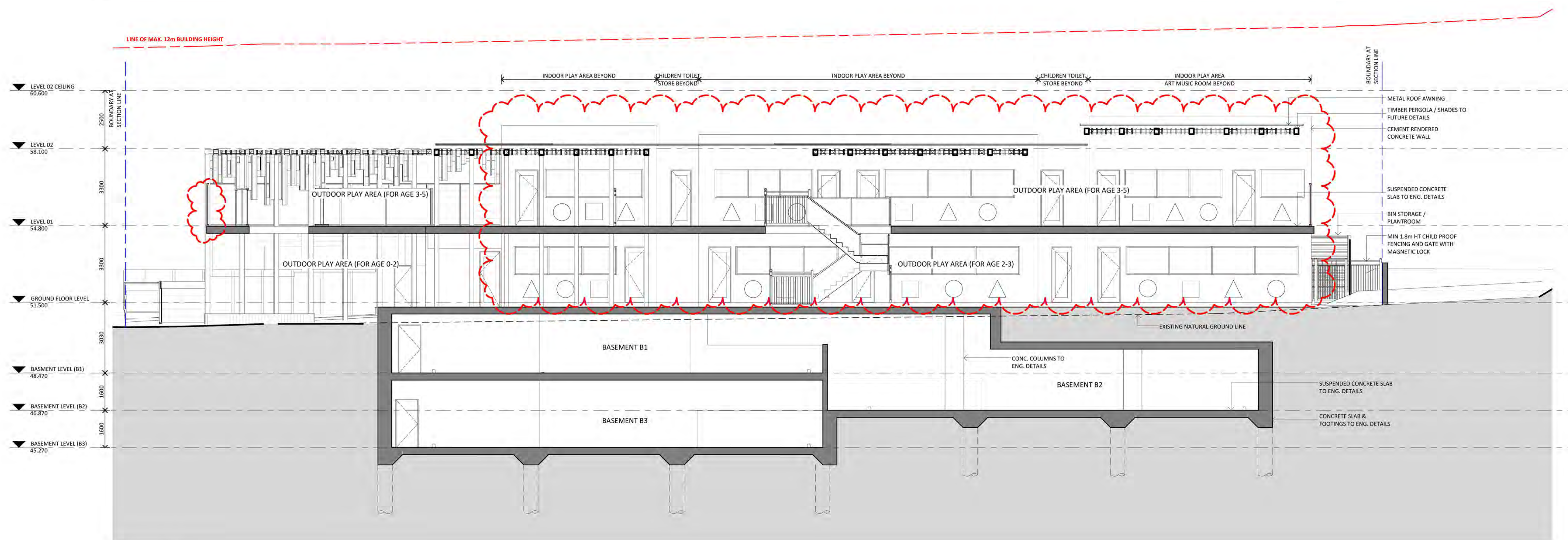
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A1	1:100	WILLOUGHBY

Drawn By	Checked By	Date
FR	YN	03.03.2017

NOT FOR CONSTRUCTION



C SECTION C-C
1:100



D Section D-D
1:100

ISSUE	DATE	DESCRIPTION
E	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
D	07.02.2017	AMENDED PLAN FOR REVIEW/COORDINATION
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GREENWOOD
CHILD CARE CENTRE

ARCHITECT

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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

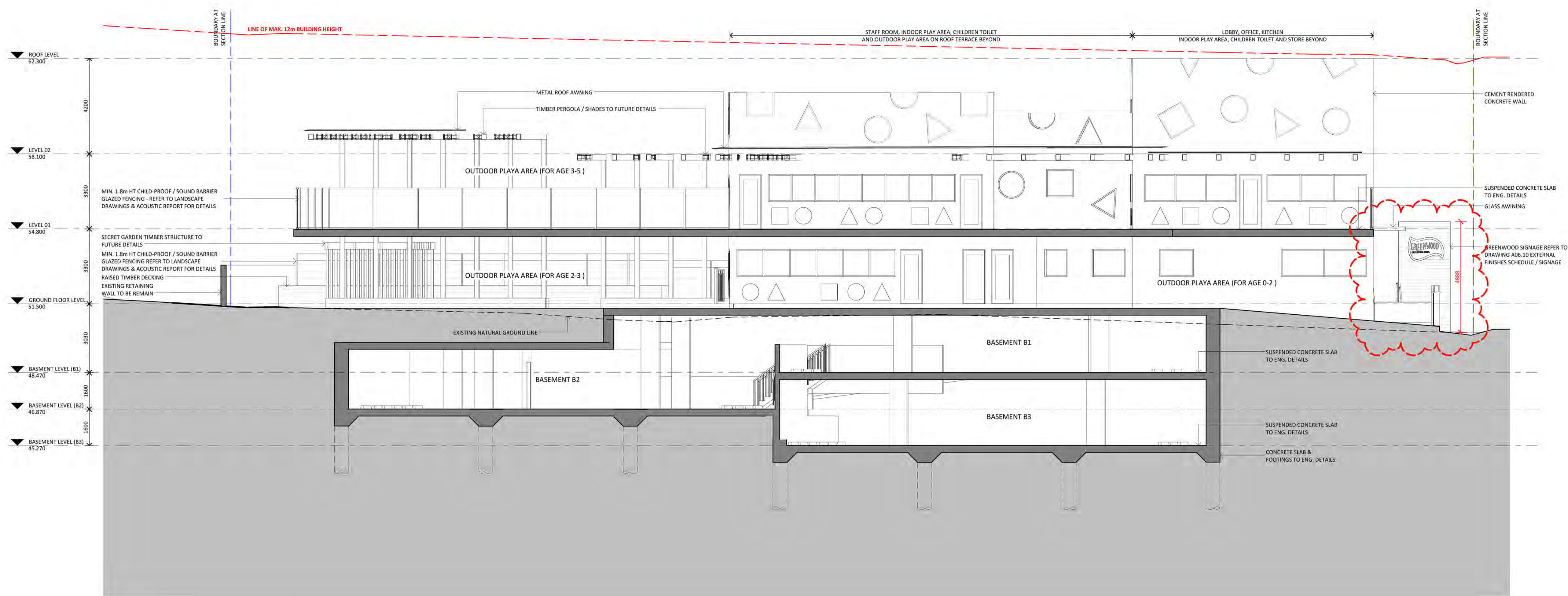
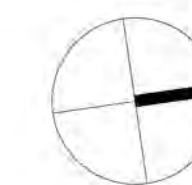
**1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY**

SHEET NAME

BUILDING SECTIONS

Project number	Sheet No.	Issue	Phase
48016	A05.02	E	DA
Sheet Size	Scale	L.G.A.	
A1	1:100	WILLOUGHBY	
Drawn By	Checked By	Date	
FR	YN	03.03.2017	

NOT FOR CONSTRUCTION



E Section E-E
1:100

ISSUE	DATE	DESCRIPTION
B	03.03.2017	DA - AMENDMENT TO ADDRESS COUNCIL LETTER
A	15.07.2016	ISSUE FOR DEVELOPMENT APPLICATION

ISSUE	DATE	DESCRIPTION
ACCESS		
ACOUSTIC		
BCA		
CIVIL		
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MECH		
SEC J		
STRUCTURE		
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PROJECT

PROPOSED CHILDCARE CENTRE

PROJECT ADDRESS

1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY

SHEET NAME

BUILDING SECTION

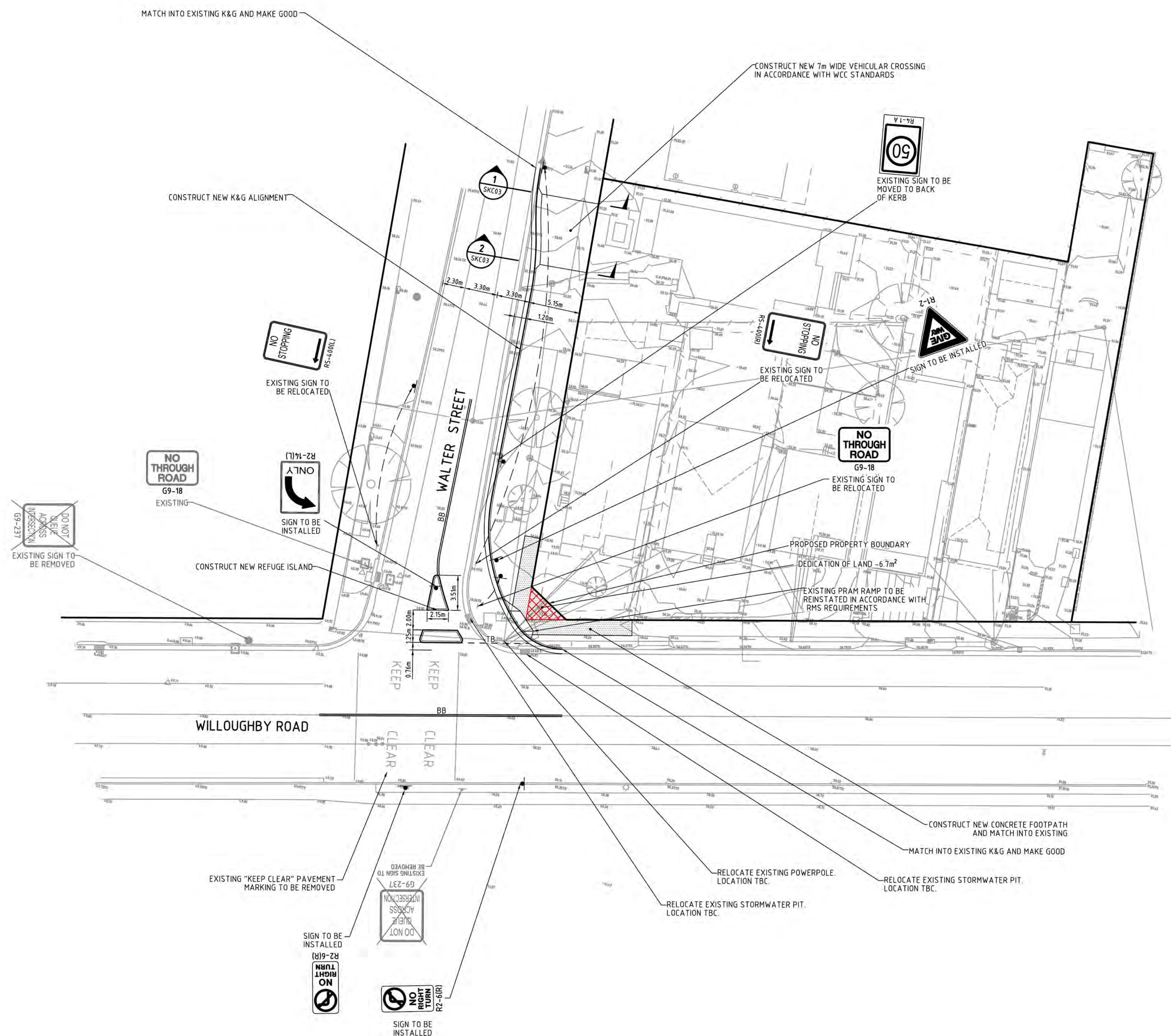
ISSUED FOR DEVELOPMENT APPLICATION

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48016	A05.03	B	DA

Sheet Size	Scale	L.G.A.
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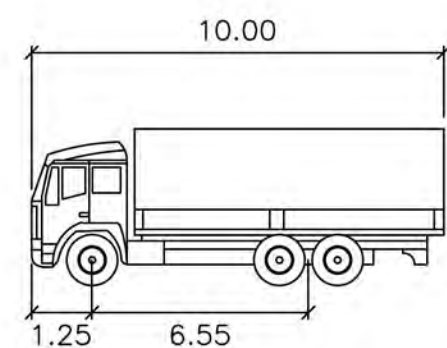
Drawn By	Checked By	Date
KZ	YN	03.03.2017

NOT FOR CONSTRUCTION



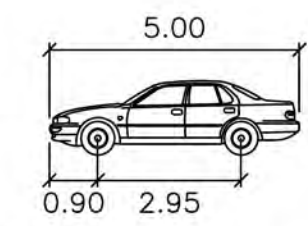
SITEWORKS, SIGNAGE AND LINEMARKING PLAN

[illegible]



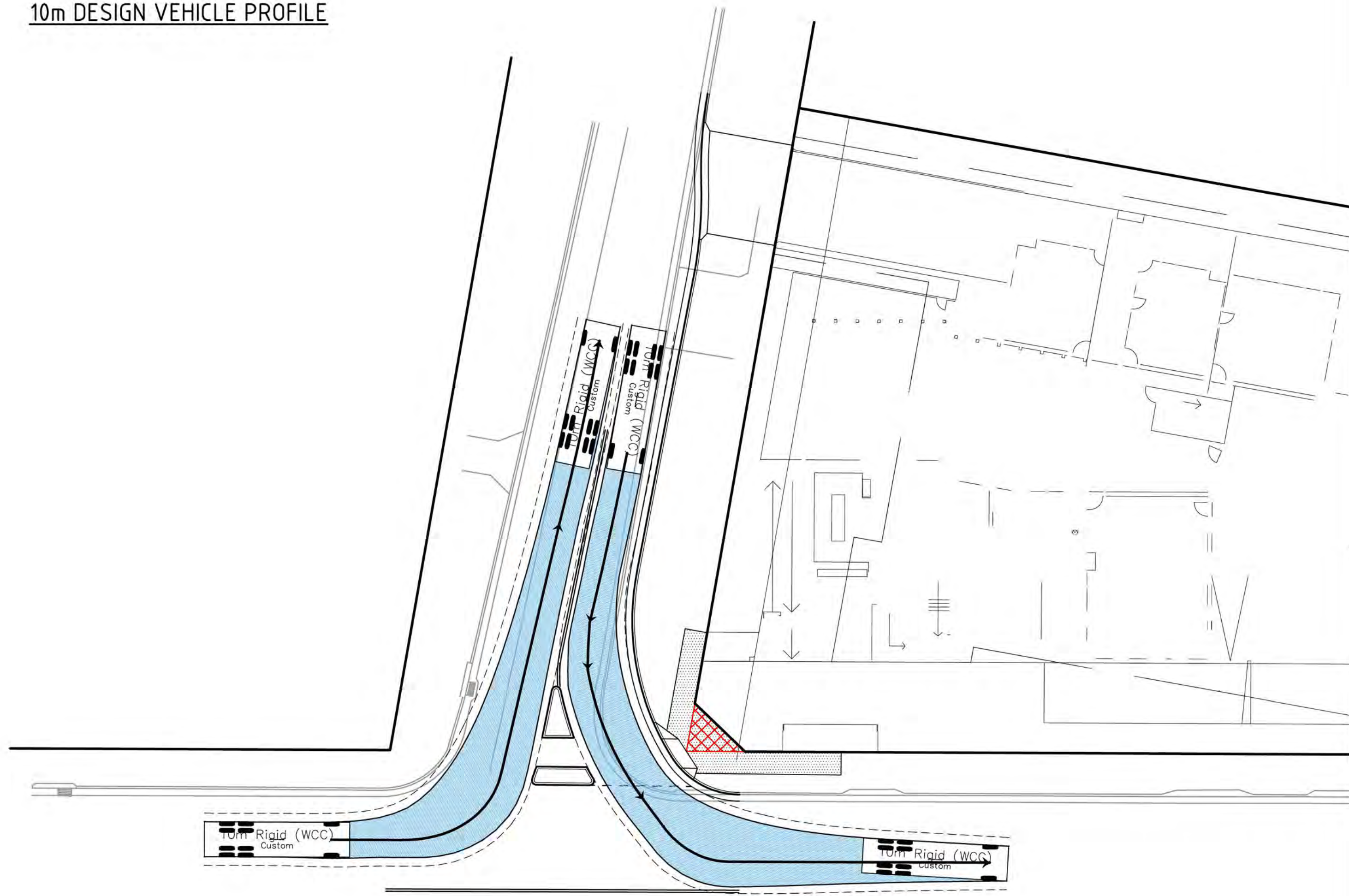
10m Rigid (WCC) meters
Width : 2.40
Track : 2.40
Lock to Lock Time : 6.0
Steering Angle : 45.0

10m DESIGN VEHICLE PROFILE



CAR meters
Width : 1.90
Track : 1.55
Lock to Lock Time : 6.0
Steering Angle : 24.0

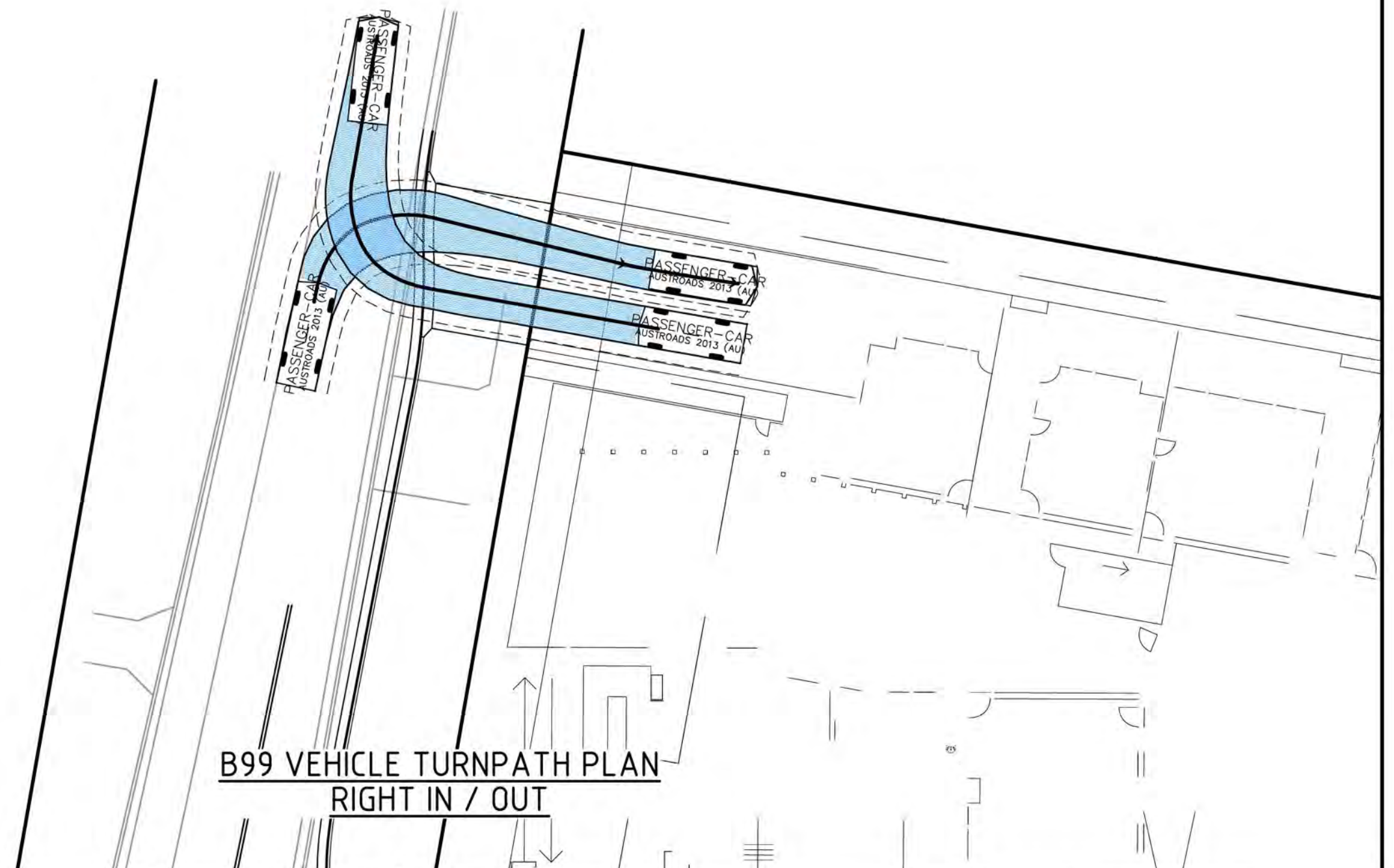
B99 DESIGN VEHICLE PROFILE



10m VEHICLE TURNPATH PLAN



B99 VEHICLE TURNPATH PLAN
LEFT IN / OUT



B99 VEHICLE TURNPATH PLAN
RIGHT IN / OUT

A	ISSUE FOR DA APPROVAL	09-02-17
Issue	Description	Date

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

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Client

GREENWOOD EARLY LEARNING CENTRE

Scales	1 : 200 @ A1	Drawn	AC
		Designed	
Grid	MGA	Checked	
Height Datum	AHD	Approved	

Project

452-460 WALTER STREET
CHILCARE CENTRE

Title

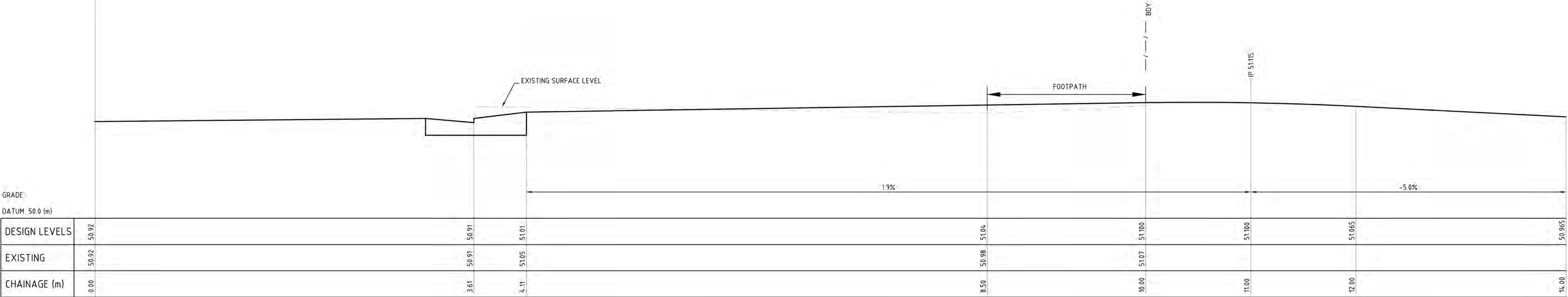
VEHICULAR TURNPATH
PLAN

Civil Engineers and Project Managers

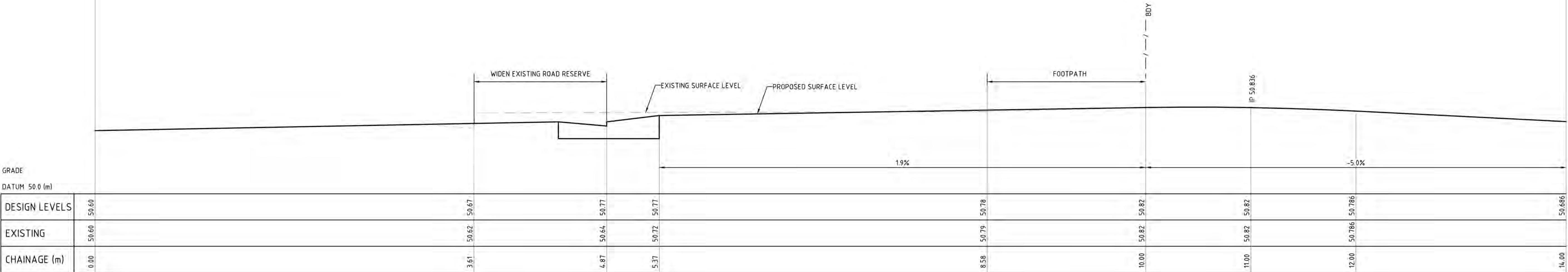
at&l

Level 7, 153 Walker Street
North Sydney NSW 2060
ABN 96 130 882 405
Tel: 02 9439 1777
Fax: 02 9923 1055
www.atl.net.au
info@atl.net.au

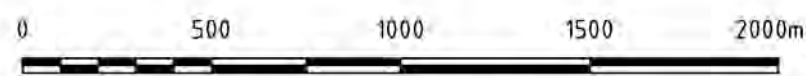
Status	CONCEPT DESIGN NOT TO BE USED FOR CONSTRUCTION	A1
Project - Drawing No.	17-466 - SKC02	Issue A



SECTION 1
1:20



SECTION 2
1:20

		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 GREENWOOD EARLY LEARNING CENTRE	Scales 1 : 20 @ A1	Drawn Designed	AC	Project 452-460 WALTER STREET CHILCARE CENTRE	Civil Engineers and Project Managers  Level 7, 153 Walker Street North Sydney NSW 2060 ABN 96 130 882 405 Tel: 02 9439 1777 Fax: 02 9923 1055 www.atl.net.au info@atl.net.au		
					Grid MGA	Checked	Title VEHICULAR LONG SECTIONS			Status CONCEPT DESIGN NOT TO BE USED FOR CONSTRUCTION	A1
A	ISSUE FOR DA APPROVAL				13-02-17	Project - Drawing No. 17-466 - SKC03				Issue A	
Issue	Description				Date						

LEGEND	
	proposed 40mm artificial grass
	stoneset permeable paving - evergreen 10mm
	cobblestones charcoal
	wetpour rubber surfacing - beige or similar
	tree stump feature path
	rainbow track wetpour rubber surfacing
	black wetpour rubber small car track surfacing
	jumping mat
	timber look tiles or floor decking
	sandstone coloured rendered concrete edge to sandpit/s
	timber decking as specified in Notes
	tree stumps - 200-550mm max heights
	sandstone table and boulder seats
	remnant tree log 300mmØ min
	timber poles with carabiner hooks for sandpit storage
	sandstone flagging stepping stones

Australian Standards
All materials & workmanship shall be in accordance with the relevant standards of the *Standards Association of Aus.*

- AS1684 Residential Timber Framed Construction Part 1
- AS1720.1 - 1997 (Amdt 4) 2002 Timber Structures - Design
- AS4419 - 2002 Soils for Landscaping and Garden Use
- AS3600 - 2009 (Amdt 1 - 2012) Concrete Structures
- AS1012 Methods of Testing Concrete
- AS3610 - 1996 Formwork for Concrete
- AS/NZ4455 - Part 1 - 2008 and Part 2 - 2010 Masonry Units, Pavers, Flags and Segmental Retaining Walls - Masonry Units
- AS/NZS 4486.1: 2014 Playgrounds and playground equipment
- AS/NZS 4422: 2014 Playground surfacing - Specifications, requirements and test methods
- AS1428.1 - 2009 (Amdt 1 - 2010) Design for Access and Mobility: General requirements for Access - New Building Works
- AS1428.3 - 1992 Requirements for children and adolescents with physical disabilities.

PLANTS					
TREES - E - evergreen - D - deciduous - (under 10m) - I - indigenous					
	<i>tristanopsis laurina</i> "luscious" - E - I	luscious water gum	5-6m	3-4m	for use in playspace
	<i>lagerstroemia indian summer</i> "bloxi" - D	natchez crepe myrtle	7m	5m	for use in playspace
	<i>ceratopetalum gummiferum</i> - E - I	christmas bush	5m	3m	for use in playspace
	<i>banksia intergrifolia</i> - E - I	coastal banksia	5-8m	4m	to be used outside of playspace
SHRUBS UNDER 2m					
symbol	botanical name	common name	height	width	comments
	<i>bauera rubioides</i> - I	river dog rose	0.5-1.5m	0.5-1m	n/a
	<i>philotheca myoporoides</i> "winter rouge" - I	n/a	0.6-0.8m	0.3-0.5m	n/a
	<i>crowea saligna</i> - I	willow leaf crowea	1m	0.5-0.7m	n/a
	<i>ozothamnus diosmitolia</i> "radiance" - species - I	n/a	1.5-2m	1m	n/a
	<i>leptospermum "cardwell"</i> - species - I	cardwell tea tree	2m	2m	n/a
GRASSES/GROUNDCOVERS - G - Grass - Gro - Groundcover					
symbol	botanical name	common name	height	width	comments
	<i>lomandra longifolia</i> "tanika" - G and Gro - species - I	n/a	0.6m	0.6m	n/a
	<i>dianella "breeze"</i> - G and Gro - species - I	n/a	0.6-0.7m	0.6-0.7m	not to be used in under 2s playspace
	<i>dianella "cassa blue"</i> - G and Gro - species - I	n/a	0.5m	0.5m	not to be used in under 2s playspace
	<i>viola hederacea</i> - Gro - I	native violet	0.1-0.3m	0.5-0.75m	n/a
	<i>lomandra longifolia "nyala"</i> - G and Gro - species - I	n/a	0.8-0.9m	0.8-0.9m	n/a
	<i>themeda "mingo"</i> - G - species - I	mingo kangaroo grass	0.1-0.25m	0.5m	n/a
	<i>grevillea juniperina "gold cluster"</i> - Gro	gold cluster grevillea	0.3m	0.8-1m	n/a
	<i>myoporum parvifolium "yareena"</i> - Gro	n/a	0.1	1m	n/a
CLIMBERS					
symbol	botanical name	common name	height	width	comments
	<i>hardenbergia violacea</i> - I	false sarsparilla	climber	climber	n/a
	<i>pandorea pandorana</i> - I	wonga wonga vine	climber	climber	n/a

NOTES

soil and mulch
Use an Australian Standard planter mix with low phosphorus for where natives have been specified & other good quality soil mix in other areas with a min of 5% OM.

mulch
Use mulch with material size greater than 15mm only - recommend Forest Blend - ANL in all planters

planting
Plants shall be vigorous, well established, hardened off, of good form consistent with the species or variety, free from disease & insect pests, with large healthy root systems & no evidence of having been restricted or damaged. All plants to be planted in locations specified on this plan. Planting holes to be twice the pot size & all soil to loosely fill the planting hole. Plants must be watered before planting begins, immediately after planting and on a continual basis thereafter until established. Construct a watering basin around the base of each individual planted tree

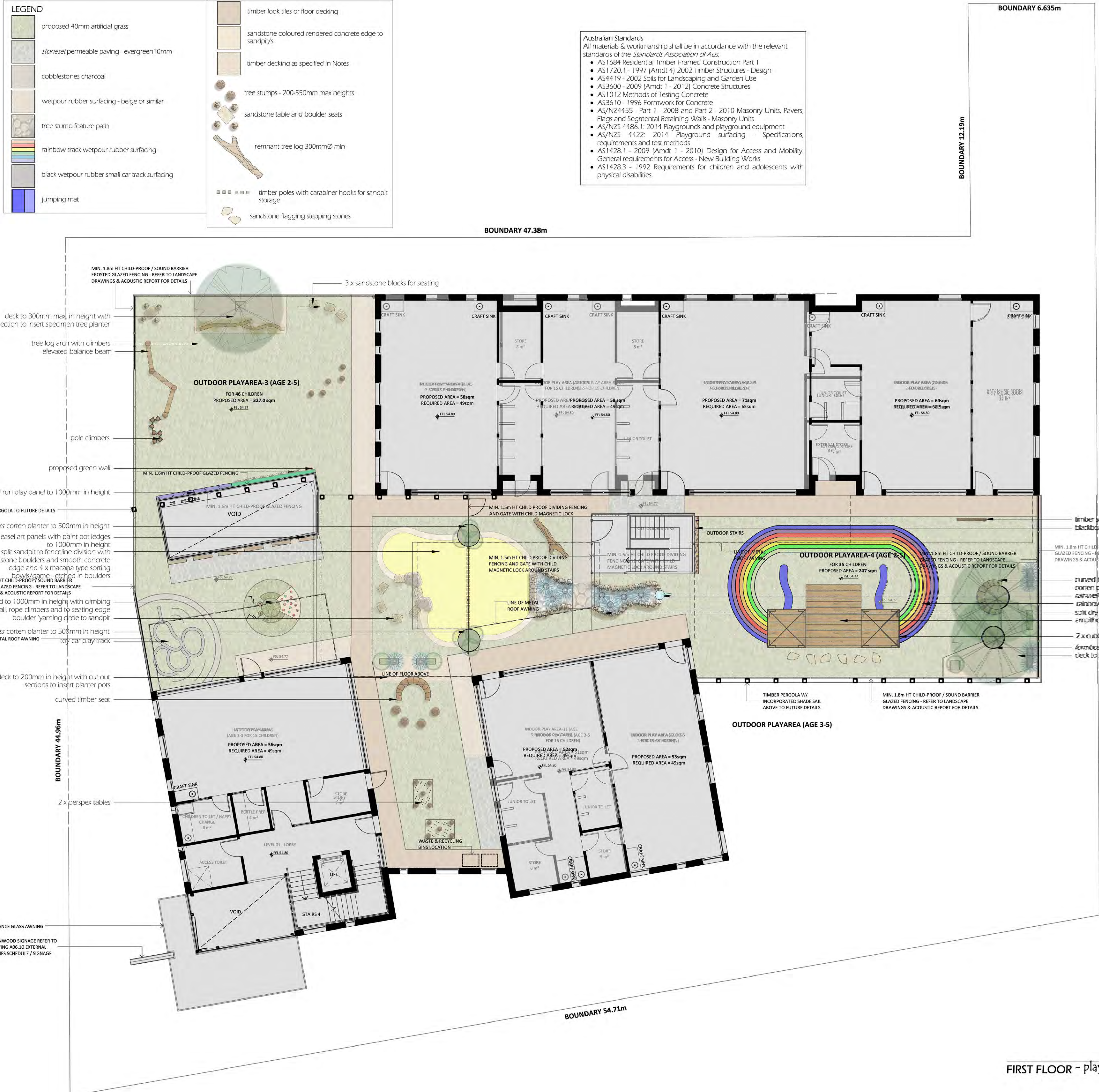
All plants selected and specified are appropriate, non-toxic and non-hazardous and comply with the *Education and Care Services National Regulations 2011* and *Kidsafe* as being suitable for use in child care centres

timber
Use hardwood timber only preferably *Spotted Gum* for all visible timber sections & treated Durability class 1, H4 for in ground use & H3 otherwise. Use of sustainable hardwood timbers are preferred. Open timber features such as knot holes, loose or unsound knots, gum pockets, loose gum veins, shakes & termite galleries not to be used on the outer face of the timber. All timber contactable by hand shall be dressed or sanded smooth free of splinters & shavings. All bolted connections shall use washers under bolt heads & nuts & all external bolts, nuts, washers & decking screws shall be stainless steel. All exposed timber to be sealed with *Sikkens Cetol HLS* in Mahogany material substitutions

Materials which are not available or cannot be reasonably provided for the works may be substituted in consultation with the client

Irrigation
Drip irrigation system to be installed as required. Backflow prevention device to be located at each main point of connection. Valve to be a double check, stainless steel to AS3500, 32mmØ with inlet and outlet isolation valves
Conduits for garden areas to be 90mmØ and across paths 40mmØ. Irrigation control panel to be contained in a steel, lockable powder coated box and located as per irrigation installers recommendations

tree protection - 2 x trees outside of site boundary
Action must be taken to protect all existing trees on site from any damage from construction works - including appropriate temporary protection fencing. No storage of construction materials/equipment or cleaning activities shall occur within the drip line of any existing trees. All vertical excavation around tree roots must be manual. All excavation around existing tree protection zones will be by hand



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Tessa Rose

playspace and landscape design

PROJECT:
Proposed CCC - Greenwood
1 & 1A WALTER STREET & 452-460
WILLOUGHBY ROAD, WILLOUGHBY NSW 2068
date: 8/3/2017 drawing no.: 2/4
scale: 1:100/A1 drawn by: tess michaels

drawing notes
1. Contractor should check site conditions and levels/measurements prior to works
2. No substitutions for plants and materials may occur without prior approval

FINAL
FIRST FLOOR - playspace/landscape design plan

This plan is certified as meeting all relevant local government DCP's & legislation and the *Education and Care Services National Regulations 2011*

PROPOSED CHILDCARE CENTRE

1-1A WALTER STREET &

452-460 WILLOUGHBY ROAD, WILLOUGHBY

DRAWING LIST

HYDRAULIC SERVICES

SHEET	TITLE	SCALE
H000	DRAWING SCHEDULE & LEGEND	AS SHOWN
H101	BASEMENT 3 FLOOR PLAN	1:100
H102	BASEMENT 1 & 2 FLOOR PLAN	1:100
H103	GROUND FLOOR PLAN	1:100
H104	LEVEL 1 FLOOR PLAN	1:100
H105	LEVEL 2 FLOOR PLAN	1:100
H106	ROOF PLAN	1:100
SW001	SITE SOIL & WATER MANAGEMENT PLAN	1:200

LEGEND

—xsw—	EX. STORMWATER DRAINAGE
—sw—	STORMWATER DRAINAGE (SW)
—rw—	RAINWATER DRAINAGE (RW)
—rm—	RIISING MAIN (RM)
—/—/—	AGRICULTURAL DRAIN (AG)
—o—	THROUGH DROPPER / RISER
—>—	BEND DOWN
—o—	TEE UP
—o—	TEE DOWN
—■—	SUMP
—>—	OVERLAND FLOW PATH
—>—	REDUCER
—■—	RISER
—■—	SERVICE NAME
—■—	SIZE
—■—	DROPPER
—>—	FLOW DIRECTION

SYMBOLS

ABBREVIATIONS

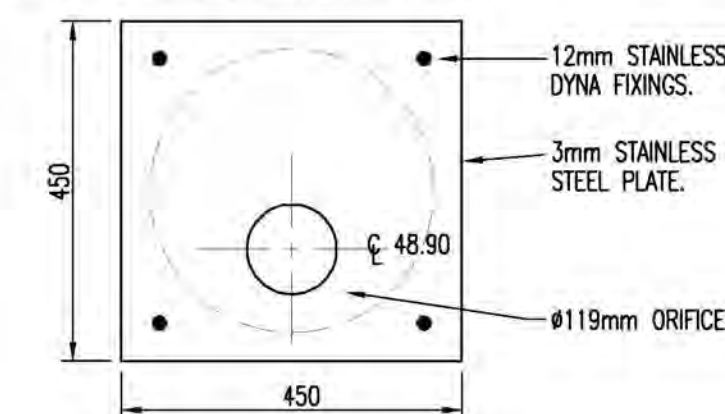
CO	CLEAR OUT
DP	DOWNPIPE
ED	ELEVATED DRAINAGE
EX	EXISTING
IL	INVERT LEVEL
I.O	INSPECTION OPENING
IS	INSPECTION SHAFT
PVC	POLYVINYL CHLORIDE
RL	RELATIVE LEVEL
EJ	EXPANSION JOINT

NOTES:

- ALL WORKS TO BE INSTALLED IN ACCORDANCE WITH LOCAL COUNCIL REQUIREMENTS, AS3500 NATIONAL PLUMBING & DRAINAGE CODE.
- THE CONTRACTOR IS TO CONFIRM LOCATION & DEPTH OF EXISTING SERVICES ON SITE PRIOR TO CONSTRUCTION. IF ANY CONFLICT EXISTS NOTIFY BUILDER IMMEDIATELY.
- THE CONTRACTOR IS TO CONFIRM EXISTING & PROPOSED SURFACE LEVELS PRIOR TO INSTALLATION OF PIPEWORK, SUMPS, MANHOLES, PITS, ETC.
- BACKFILLING
BACKFILL SERVICE TRENCHES AS SOON AS POSSIBLE AFTER SERVICE HAS BEEN LAID AND BEDDED. PLACE THE BACKFILL IN LAYERS <150mm THICK AND COMPACT TO THE DENSITY WHICH APPLIES TO THE LOCATION OF THE TRENCHES TO MINIMISE SETTLEMENT.
- BACKFILL MATERIAL
GENERAL FILL WITH NO STONES GREATER THAN 25mm OCCURRING WITHIN 150mm OF THE SERVICE UNDER ROADS AND PAVED AREAS AND WITHIN 4 METRES OF BUILDING: COARSE SAND, CONTROLLED LOW STRENGTH MATERIAL OR FINE CRUSHED ROCK.
- ON COMPLETION OF PIPE INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION INCLUDING: KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AREAS & ROAD PAVEMENTS.
- CARE SHALL BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. EXCAVATE BY HAND IN THESE AREAS.
- THE PLUMBING CONTRACTOR SHALL OBTAIN ALL AUTHORITY APPROVALS AND PAY ALL FEES.
- INVERT LEVELS SHOWN ARE INDICATIVE ONLY. CONFIRM ALL LEVELS ON SITE BEFORE COMMENCING CONSTRUCTION.

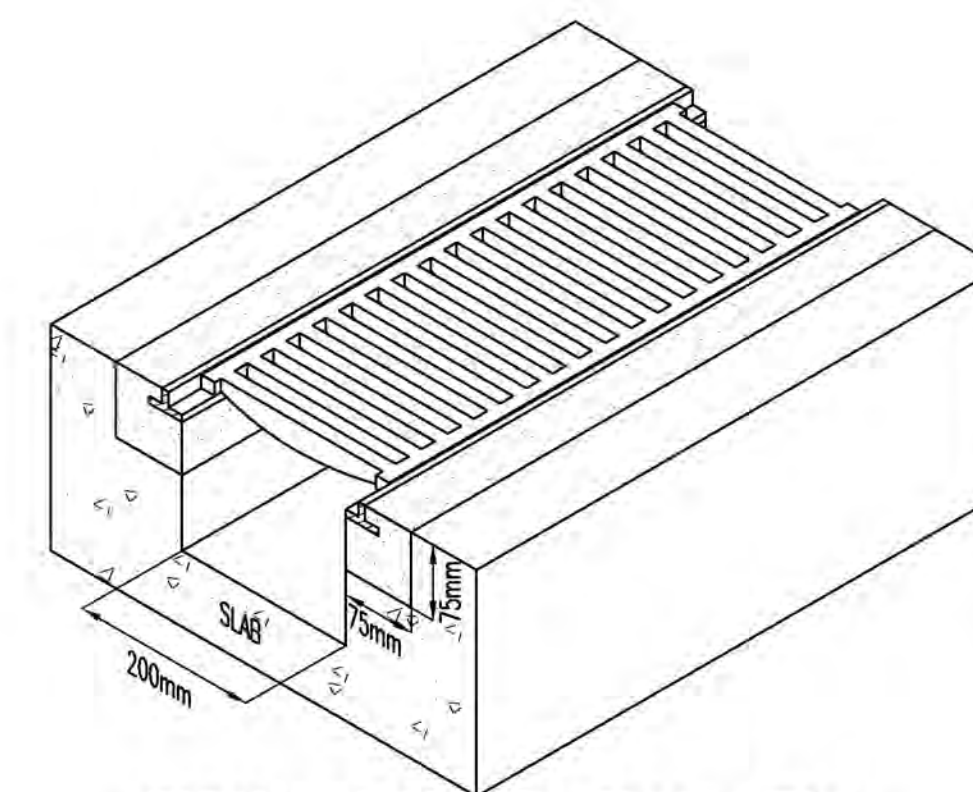
ORIFICE PLATE NOTES:

- HOLE IN ORIFICE PLATE TO BE PRECISION CUT WITH SHARP EDGES TO THE SPECIFIED DIAMETER.
- ORIFICE PLATE TO BE PLACED CENTRALLY OVER THE OUTLET PIPE.
- PLATE TO BE MADE FROM STAINLESS STEEL HOT DIPPED GALVANISED OR OTHERS NOT ACCEPTABLE.
- OUTLET PIPE TO BE CAST INTO THE WALL OF THE PIT.
- HOLE IN PLATE TO BE CENTRALLY PLACED.



ORIFICE PLATE DETAIL

SCALE: 1:10



TRENCH GRATE WITH FRAME DETAIL

SCALE: N.T.S.

ON-SITE DETENTION BASIN CALCULATIONS:

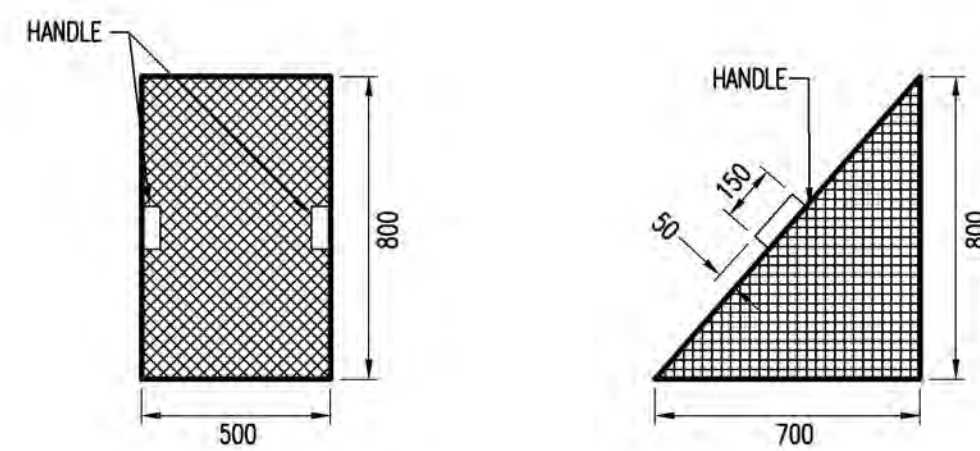
OSD HAS BEEN CALCULATED USING WILLOUGHBY COUNCIL'S ON-SITE DETENTION BASIN CALCULATION METHOD

SITE AREA =	2250m ²
ZONE =	3
STORAGE CALCULATION =	3.8m ³ /100m ²
TOTAL STORAGE REQUIRED =	85.5m ³
RAINWATER TANK PROVIDED =	10,000 LITRES
STORAGE PROVIDED =	75.5m ³ (AFTER 10,000 LITRE RAINWATER TANK OFFSET)

PERMISSIBLE SITE DISCHARGE CALCULATION = 1.8L/s/100m²
PERMISSIBLE SITE DISCHARGE = 40.5L/s

DEPTH OF WATER =	1.85m
BASE LEVEL OF TANK =	RL:48.90
TOP WATER LEVEL =	RL:50.75
OVERFLOW WEIR LEVEL =	RL:50.75

ORIFICE SIZE =	119mm
ORIFICE CENTRE =	RL:48.90
OUTLET SIZE =	Ø375



FRONT VIEW

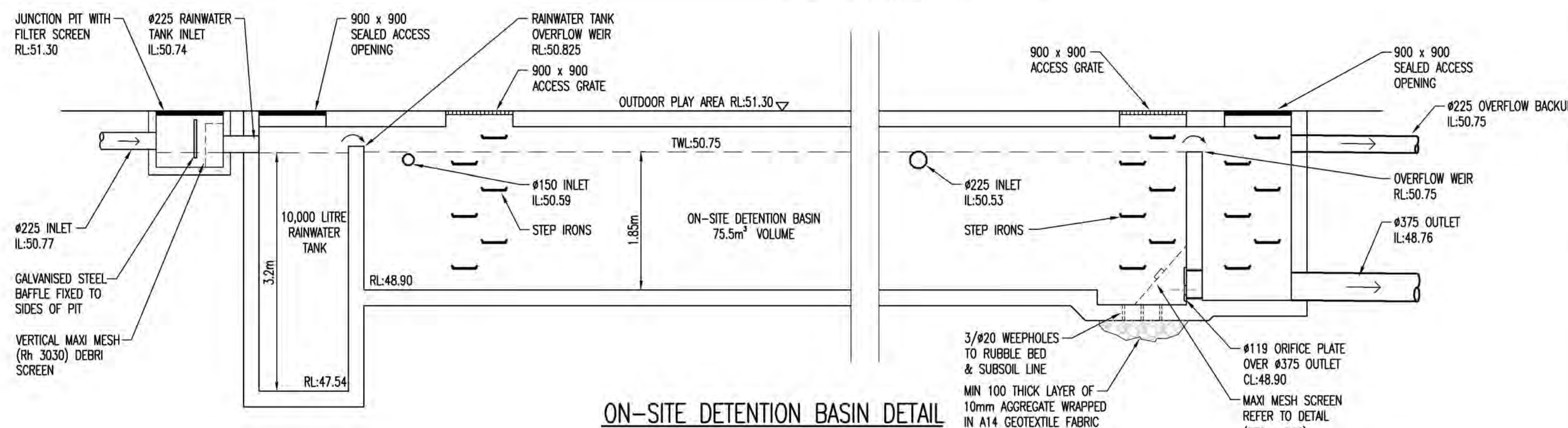
SIDE VIEW

NOTES:

SCREEN TO BE POSITIONED TO COMPLETELY SCREEN ORIFICE PLATE

MAXI MESH SCREEN DETAIL

SCALE: 1:20

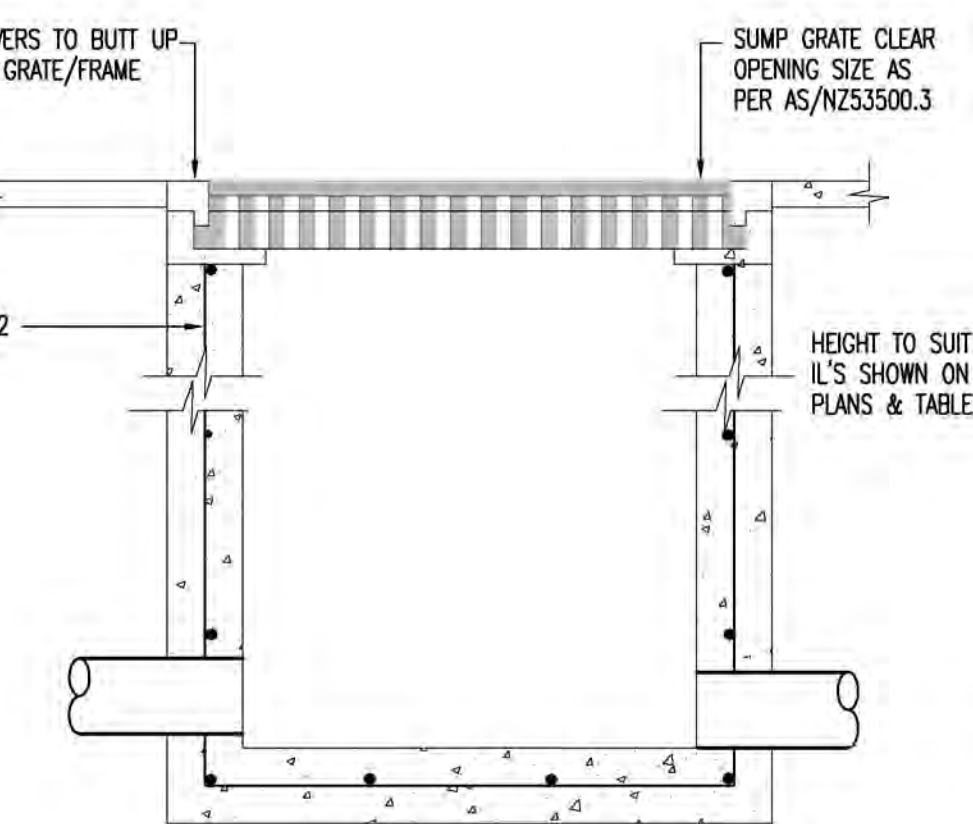


ON-SITE DETENTION BASIN DETAIL

SCALE: 1:50

MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS

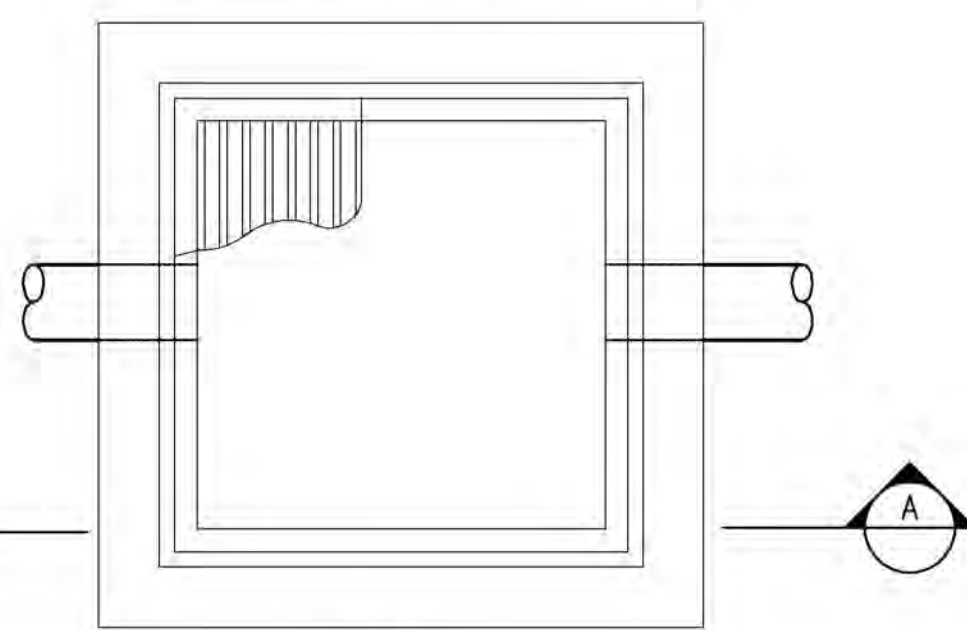
DEPTH TO INVERT OF OUTLET	MINIMUM INTERNAL DIMENSIONS mm		
	RECTANGULAR	CIRCULAR	
	WIDTH	DEPTH	DIAMETER
≤600	450	450	600
>600	≤900	600	900
>900	≤1200	600	1000
>1200		900	1000



SECTION A-A

STORMWATER SUMP DETAIL

N.T.S.



PLAN

I HEREBY CERTIFY THAT THE CIVIL WORKS DESIGN SHOWN IS IN ACCORDANCE WITH WILLOUGHBY CITY COUNCIL ENGINEERING REQUIREMENTS

SIGNED: GREG POWER
REGISTERED CIVIL ENGINEER
06/03/17

06.03.17	2	REISSUE FOR COUNCIL APPROVAL	B
22.02.17	1	ISSUE FOR COUNCIL APPROVAL	A

DATE	No.	AMENDMENT	ISSUE
------	-----	-----------	-------

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REVESEY NSW 2212

CLIENT :
GREENWOOD EARLY
EDUCATION CENTRES

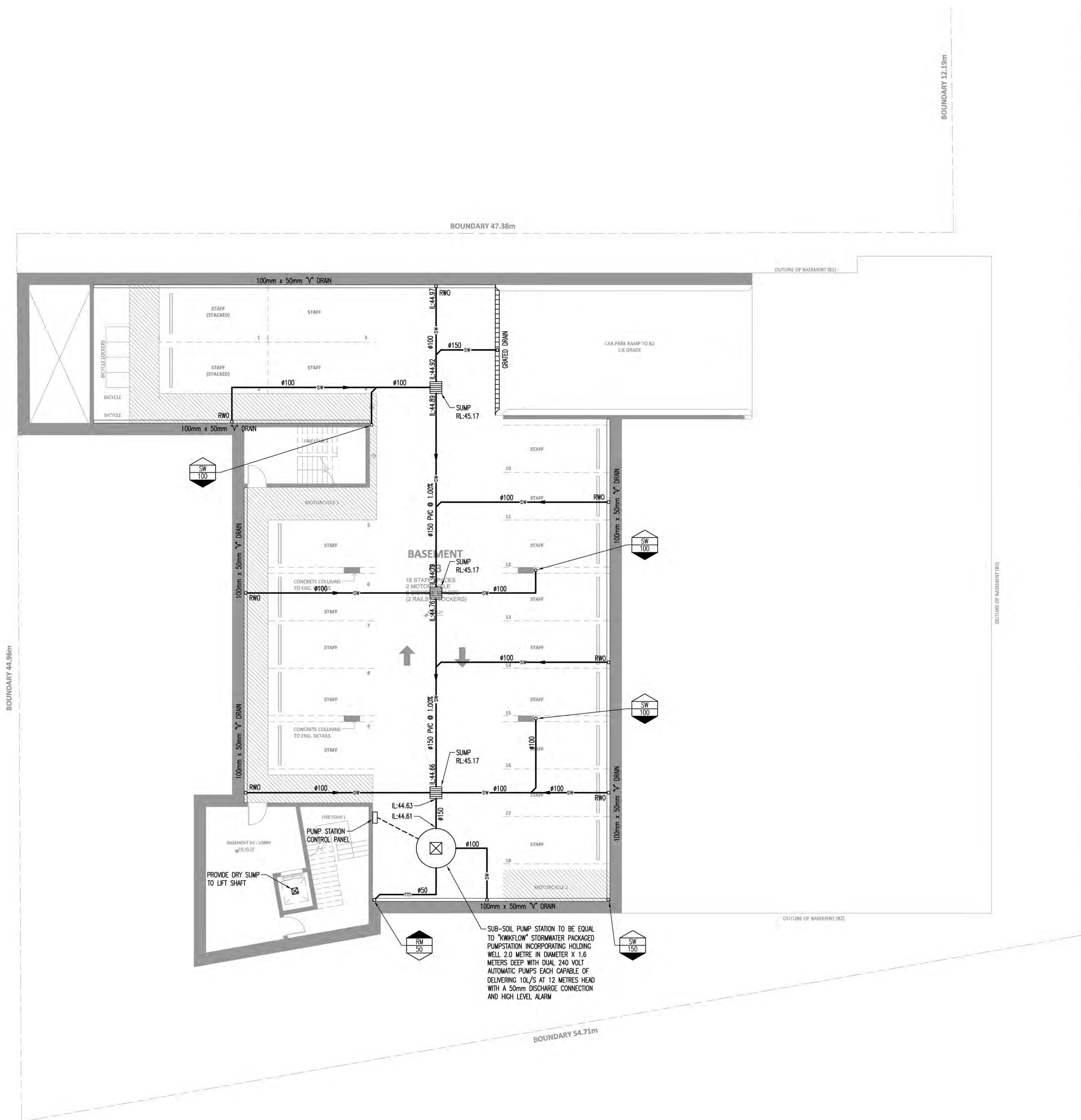
PROJECT :
PROPOSED CHILDCARE CENTRE
1-1A WALTER STREET &
452-460 WILLOUGHBY ROAD
WILLOUGHBY NSW 2068

GLENN HAIG & PARTNERS
HYDRAULIC + FIRE CONSULTANTS
Coffs Harbour
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PO Box 192
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office@glennhaig.com.au
Sydney
P: 02 9310 1352
PO Box 689
SURRY HILLS, NSW, 2010

TITLE : HYDRAULIC SERVICES

DRAWING SCHEDULE & LEGEND

Date :	JUNE 2016	Drawn :	NG
Scales :	1:100 @ A1	Checked :	GH
Job No. :	162813	Cad File No. :	162813H000
Drawing No. :	H000		



06.03.17	2	REISSUE FOR COUNCIL APPROVAL	B
22.02.17	1	ISSUE FOR COUNCIL APPROVAL	A
DATE	No.	AMENDMENT	ISSUE

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CLIENT :
**GREENWOOD EARLY
EDUCATION CENTRES**

PROJECT :
PROPOSED CHILDCARE CENTRE
1-1A WALTER STREET &
452-460 WILLOUGHBY ROAD
WILLOUGHBY NSW 2068

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TITLE :
HYDRAULIC SERVICES
BASEMENT 3 FLOOR PLAN

Date : JUNE 2016		Drawn : NG	
Scales : 1:100 @ A1		Checked : GH	
Job No. : 162813	Cad File No. : 162813H101	Drawing No. : H101	

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CITY COUNCIL ENGINEERING
REQUIREMENTS

SIGNED.....
GREG POWTER
REGISTERED CIVIL ENGINEER
06/03/17



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CITY COUNCIL ENGINEERING
REQUIREMENTS

SIGNED 

GREG POWER
REGISTERED CIVIL ENGINEER
06/03/17

Date : JUNE 2016			Drawn : NG		
Scales : 1:100 @ A1			Checked : GH		
Job No. : 162813		Cad File No. : 162813H102		Drawing No. : H102	



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CLIENT :
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EDUCATION CENTRES**

PROJECT :
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452-460 WILLOUGHBY ROAD
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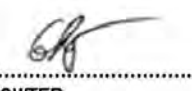
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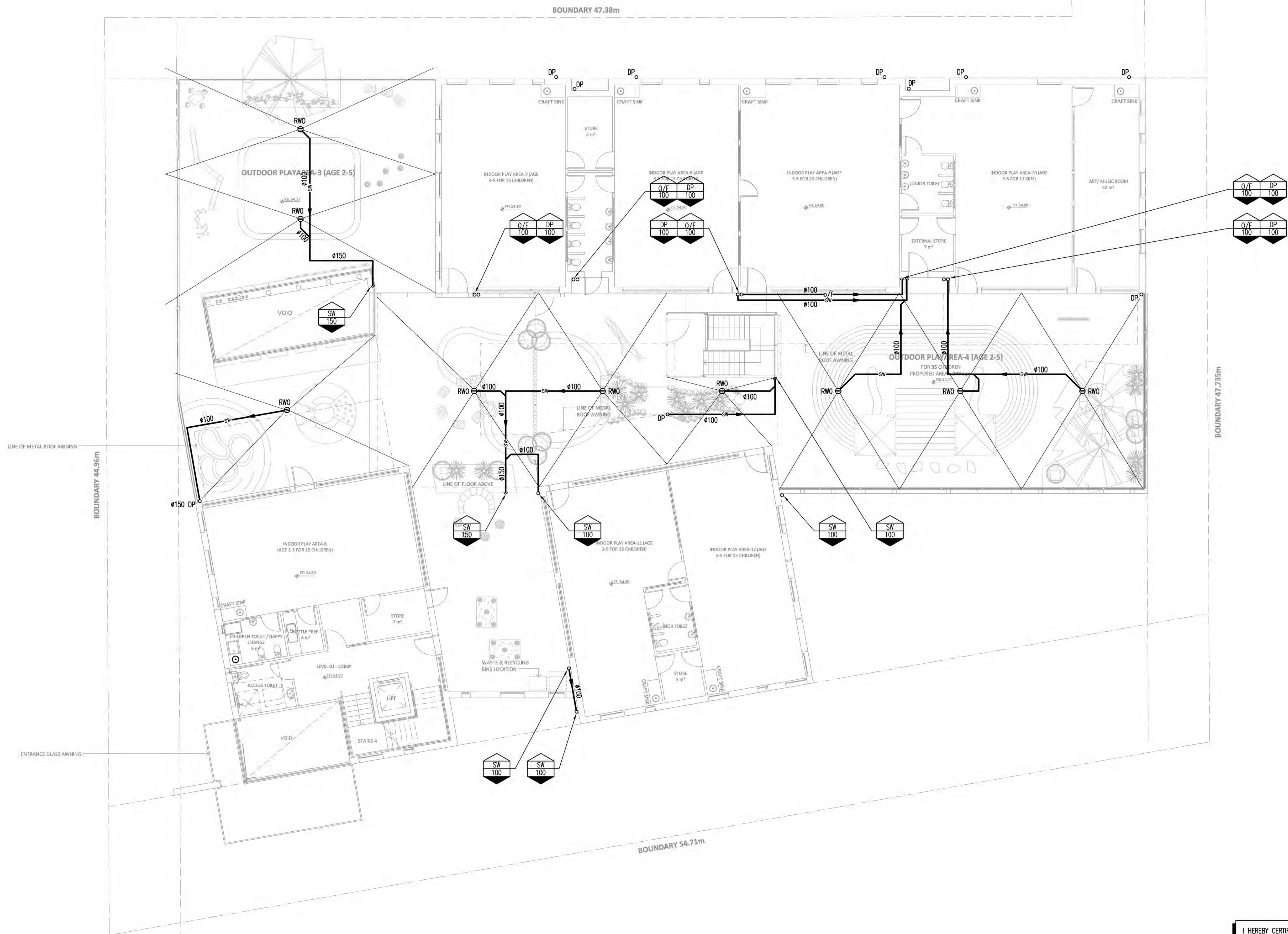
office@glennhaig.com.au

TITLE :
GROUND FLOOR PLAN

Date :	JUNE 2016	Drawn :	NG
Scales :	1:100 @ A1	Checked :	GH
Job No. :	162813	Cad File No. :	162813H103
Drawing No. :	H103		

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06/03/17



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22.02.17	1	ISSUE FOR COUNCIL APPROVAL	A
DATE	No.	AMENDMENT	ISSUE

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CLIENT :
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PROJECT :
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452-460 WILLOUGHBY ROAD
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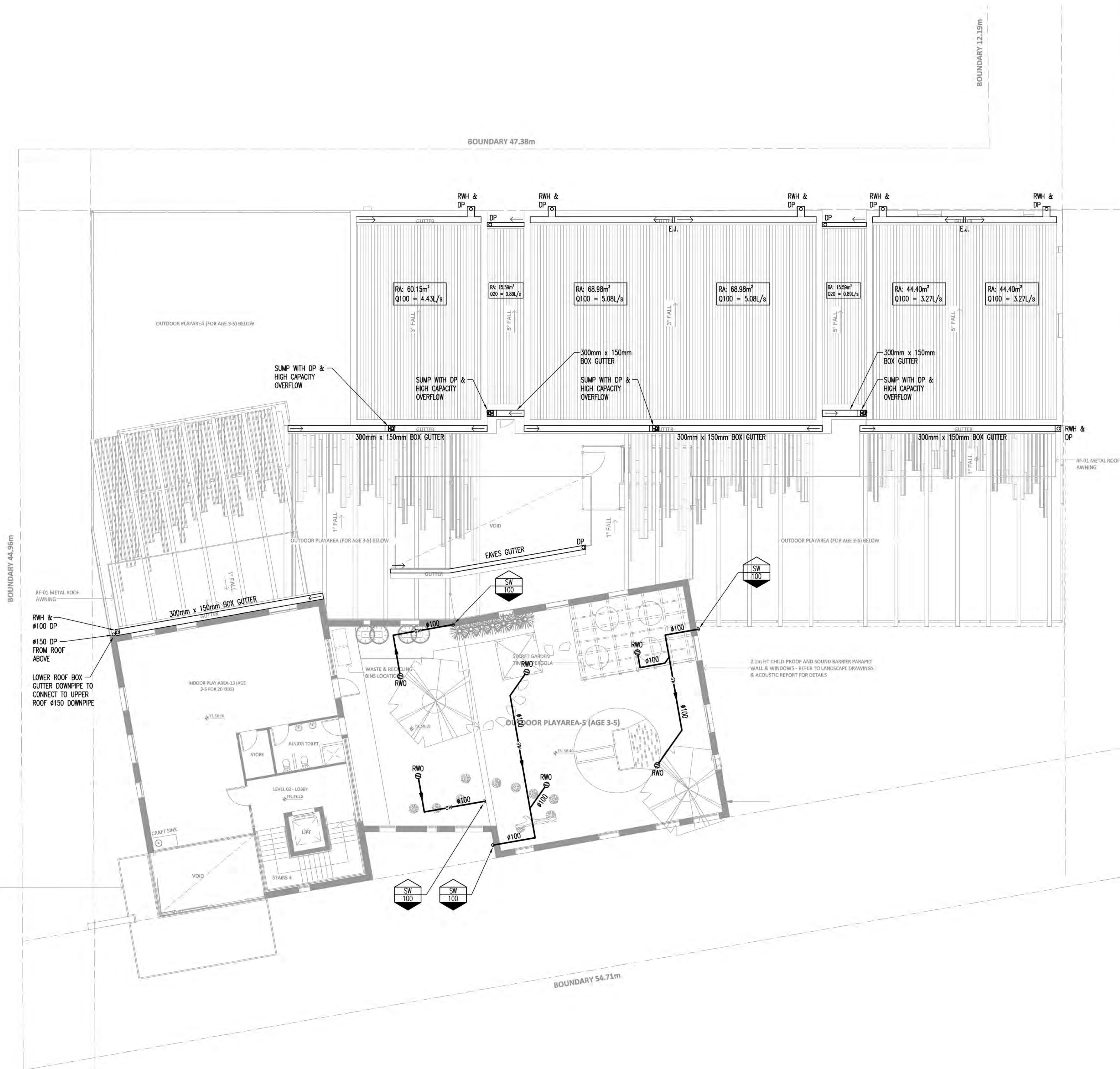
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TITLE : LEVEL 1 FLOOR PLAN		
Date : JUNE 2016	Drawn : NG	
Scales : 1:100 @ A1	Checked : GH	
Job No. : 162813	Cad File No. : 162813H104	Drawing No. : H104

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06/03/17



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22.02.17	1	ISSUE FOR COUNCIL APPROVAL	A
DATE	No.	AMENDMENT	ISSUE

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CLIENT : GREENWOOD EARLY
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PROJECT :
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452-460 WILLOUGHBY ROAD
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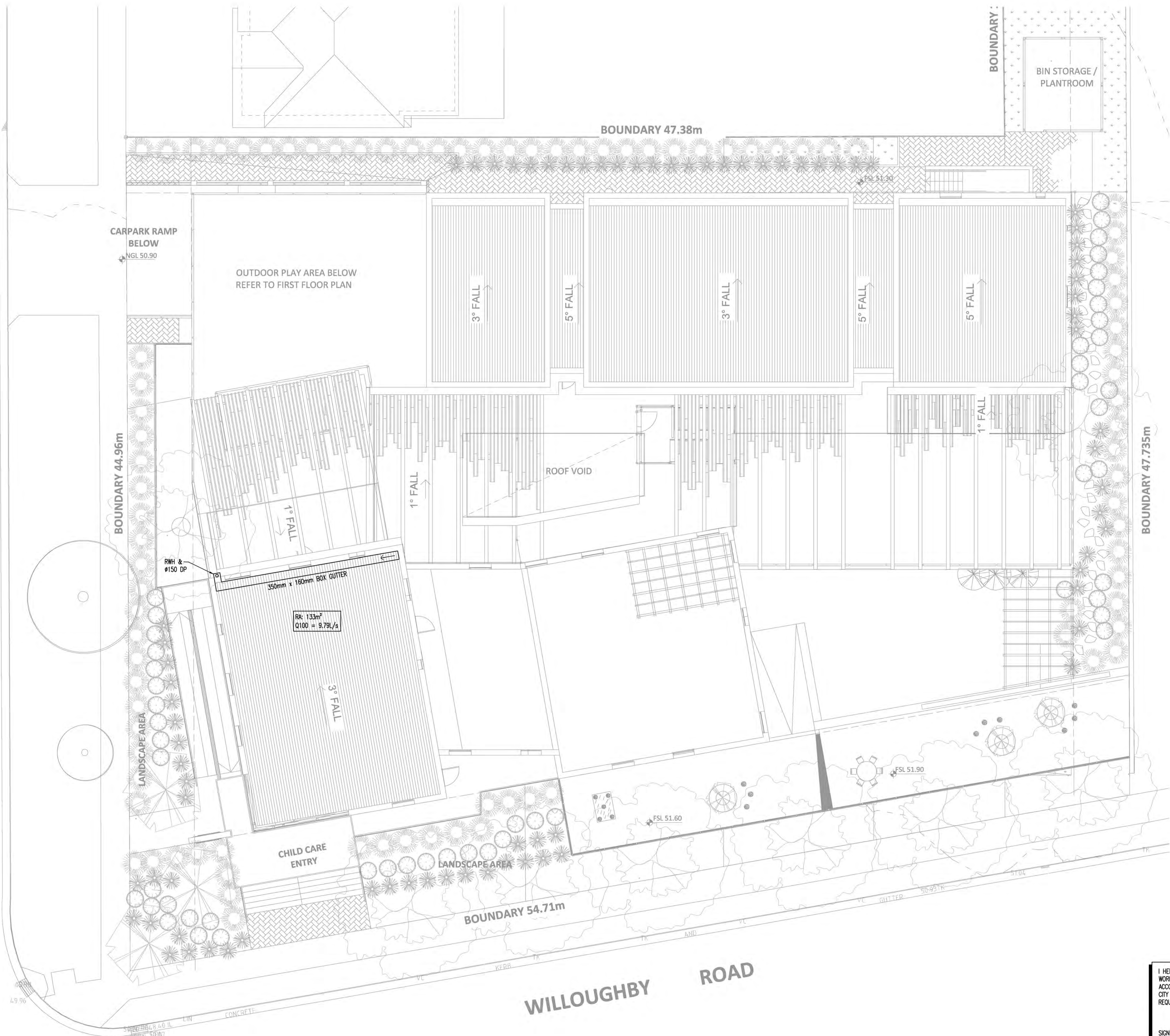
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TITLE : HYDRAULIC SERVICES			
LEVEL 2 FLOOR PLAN			
Date : JUNE 2016		Drawn : NG	
Scales : 1:100 @ A1		Checked : GH	
Job No. : 162813	Cad File No. : 162813H105	Drawing No. : H105	



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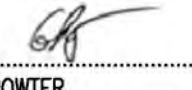
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office@glennhaig.com.au

TITLE :
ROOF PLAN

Date :	JUNE 2016	Drawn :	NG
Scales :	1:100 @ A1	Checked :	GH
Job No. :	162813	Cad File No. :	162813H106
		Drawing No. :	H106

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REGISTERED CIVIL ENGINEER
06/03/17



LEGEND

- SILT FENCE
- STABILISED CONSTRUCTION ENTRANCE
- DISTURBED AREA
- CATCHMENT AREA

PROCEDURE FOR SILTATION CONTROL DURING CONSTRUCTION

- CONSTRUCT SILT TRAP FENCE WHERE INDICATED ON PLAN. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES. CONSTRUCT SEDIMENT CATCHMENT BASIN.
- COMMENCE CONSTRUCTION PROVIDING DRAINAGE FROM TRENCH EXCAVATION TO SEDIMENT CATCHMENT BASIN.
- SHOULD S.C.B. FILL TO WITHIN 60% OF CAPACITY, REMOVE SILT FROM SITE TO APPROVED DISPOSAL SITE.
- CARRY OUT DAILY SITE INSPECTION OF SILT FENCES FOR STRUCTURAL DAMAGE.
- PROVIDE SITE WATERING SHOULD WIND EROSION OCCUR.
- REMOVE SILT FENCES AFTER LANDSCAPE IS COMPLETED & LAWN IS FULLY ESTABLISHED.

SEDIMENT CONTROL

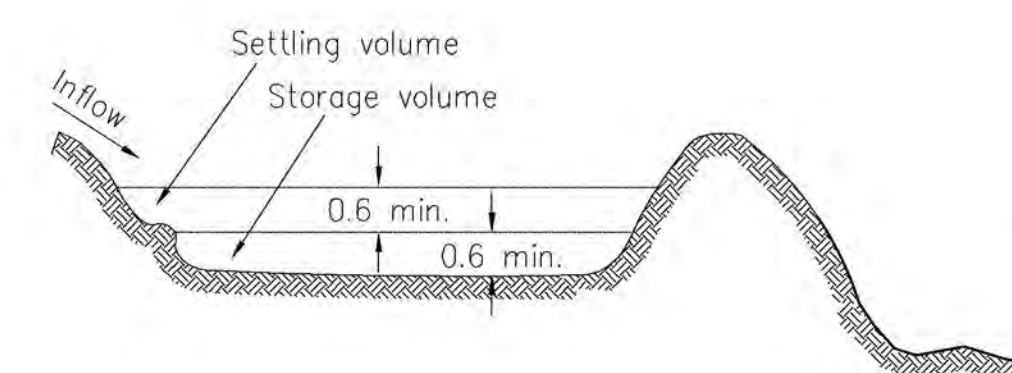
- ALL PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT THE TRANSPORTATION OF MATERIAL FROM THE AREA OF THE WORKS BY WINDS, STORMWATERS OR ARTIFICIAL MEANS.
- THE SITE SHALL BE WATERED IN DRY PERIODS & SHOULD CLEARED AREAS BECOME BARREN, THEY SHALL BE SEEDED & WATERED TO PROMOTE VEGETATION COVER OF GRASS.
- THE SEDIMENT CONTROL FABRIC OF FENCES INDICATED ON THE DRAWING SHALL BE TAKEN AS A MINIMUM PROTECTION MEASURE ONLY. EXTRA CONTROLS SHALL BE ESTABLISHED TO PROVIDE AN EFFECTIVE PROTECTION.
- SUPPORT MEASURES SUCH AS HAY BALES SHALL BE USED IN AREAS OF STEEP SLOPES OR WHERE STREAM FLOW MAY OCCUR.

DEWATERING NOTES:

- THE TRENCHES SHALL BE KEPT FREE OF WATER AFTER EXCAVATION AND DURING CONSTRUCTION. ANY AUXILIARY EXCAVATION CARRIED OUT IN OR ADJACENT TO THE TRENCH EXCAVATION FOR THAT PURPOSE SHALL BE BACKFILLED BY THE CONTRACTOR USING MATERIALS AND IN A MANNER SATISFACTORY TO COUNCIL. THE CONTRACTOR SHALL USE EXTERNAL DEWATERING IF DIRECTED BY COUNCIL. INTERNAL DEWATERING CAN BE UNDERTAKEN BY THE USE OF SUMP PUMPS LOCATED IN THE BOTTOM OF THE TRENCH.
- EXTERNAL DEWATERING:- SHALL MEAN A SYSTEM OF WELL POINTS OF OTHER DEVICES SUNK IN THE GROUND IN THE VICINITY OF THE EXCAVATION AND OPERATED CONTINUOUSLY FROM THE TIME OF EXCAVATION OF THE TRENCHES TO THE TIME THE TRENCHES HAVE BEEN BACKFILLED.
 - THE USE OF SUMP PUMPS LOCATED IN THE BOTTOM OF THE TRENCH OR THE BOTTOM OF A LATERAL TRENCH IS NOT DEFINED AS EXTERNAL DEWATERING
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND OPERATION OF ALL GROUNDWATER CONTROL AND DEWATERING SYSTEMS NECESSARY TO:
 - PREVENT HEAVE OF, OR LOSS OF DENSITY IN THE MATERIAL COMPRISING THE FLOOR OF ANY EXCAVATION OR PIPE TRENCH
 - MAINTAIN THE STABILITY OF THE WALLS OF ALL EXCAVATIONS AND TRENCHES
 - MAINTAIN "DRY" WORKING CONDITIONS IN ALL EXCAVATIONS AND TRENCHES
 - PREVENT FLOATION OF ANY PIPELINE OR STRUCTURE DURING CONSTRUCTION AND AT ALL OTHER TIMES
- DEWATERING PUMP IS TO HAVE A TEMPORARY BAFFLE FENCE AROUND IT DURING OPERATING HOURS.
- THE CONTRACTOR IS TO TAKE A WATER SAMPLE OF THE GROUND WATER PRIOR TO CONSTRUCTION AND TEST IT FOR ACID SULPHATE. WATER SAMPLE IS TO BE EQUAL TO WATER QUALITY AT THE PUMP DISCHARGE POINT. IF NOT EQUAL, WATER TO BE PUMPED TO A HOLDING TANK, PH DOSING UNIT AND SETTLEMENT TANK, THEN DISCHARGE TO KERB INLET PIT IN OAKLAND COURT ON THE NORTH WESTERN CORNER OF THE PROPERTY.

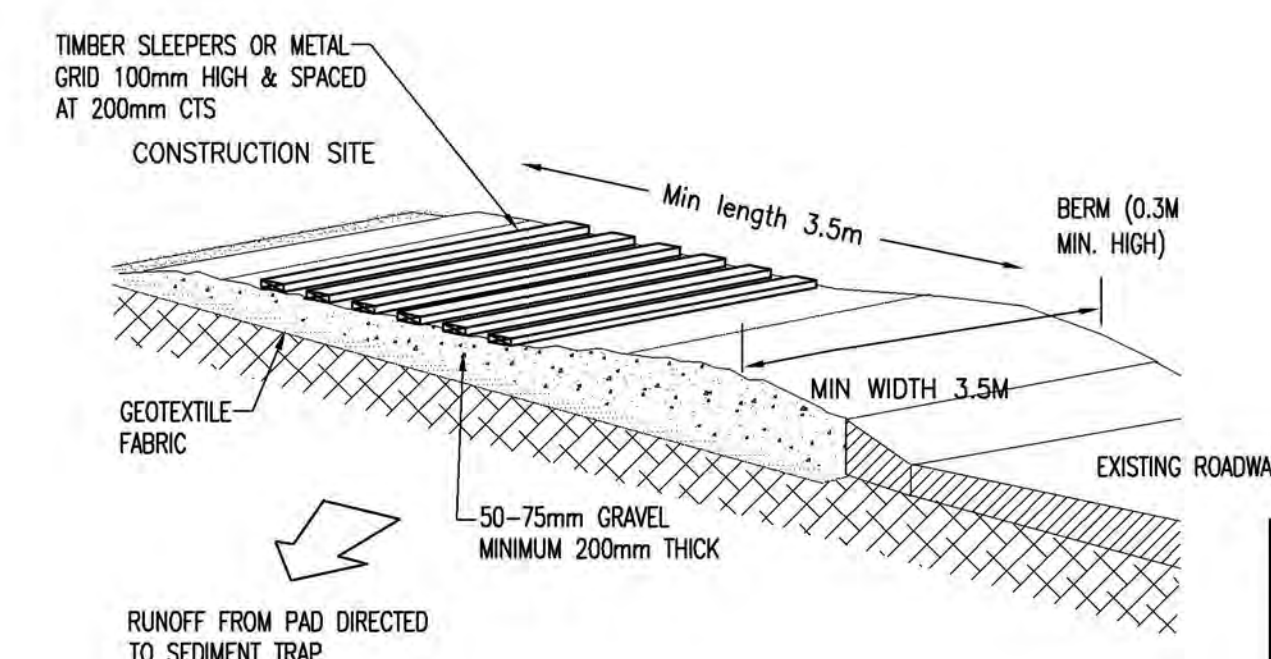
EROSION AND SEDIMENT CONTROL NOTES:

- THE CONTRACTOR SHALL ADOPT SUCH MEASURES AS MAY BE NECESSARY FOR EROSION, CONTAMINATION AND SEDIMENT CONTROL DURING CONSTRUCTION INCLUDING THE FOLLOWING WHERE PRACTICABLE:
 - PROGRESSIVE RESTORATION OF DISTURBED AREAS
 - TEMPORARY DRAINS
 - TEMPORARY FENCING
 - DIVERSION AND DISPERSAL OF CONCENTRATED FLOWS TO POINTS WHERE WATER CAN PASS THROUGH THE SITE WITHOUT DAMAGE
 - PLACE SPOIL ON THE UPHILL SIDE OF TRENCHES
 - CONSTRUCTION AND MAINTENANCE OF SILT TRAPS TO PREVENT THE DISCHARGE OF SCOURED MATERIALS TO DOWNSTREAM AREAS
- THE CONTRACTOR SHALL PREPARE AN EROSION AND SEDIMENT CONTROL PLAN TO THE REQUIREMENTS OF DWE AND DECC (EPA) AND THESE PLANS ARE TO BE SUBMITTED TO COUNCIL PRIOR TO CONSTRUCTION



TOTAL BASIN VOLUME CALCULATIONS:
 $Q_{tc} 0.25 \text{ (m}^3/\text{s)} = 0.01859837$
AREA FACTOR = 4100
BASIN SURFACE AREA REQUIRED = 76.253m^2
BASIN SURFACE AREA PROVIDED = 76.5075m^2
DEPTH OF SETTLING ZONE = 0.6m
SETTLING ZONE VOLUME = 45.9045m^3
SEDIMENT STORAGE VOLUME = 45.9045m^3
TOTAL BASIN VOLUME = 91.809m^3
LENGTH = 15.15m
WIDTH = 5.05m

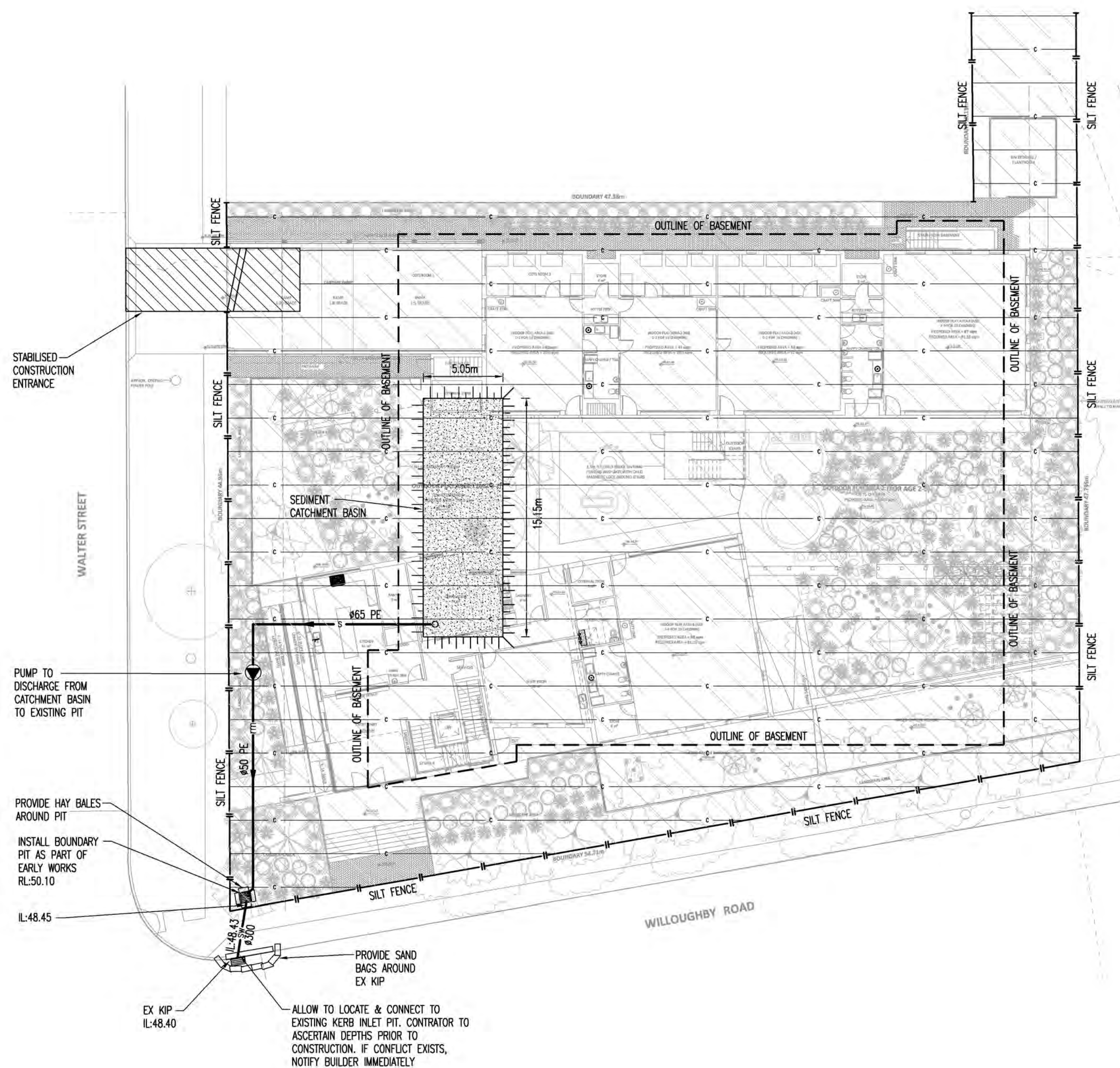
TYPICAL SECTION AT SEDIMENT CATCHMENT BASIN
N.T.S.



TEMPORARY CONSTRUCTION EXIT
N.T.S.

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SIGNED:
GREG POWTER
REGISTERED CIVIL ENGINEER
06/03/17



SILT FENCE DETAIL
N.T.S.

HAY BALE DROP INLET
SEDIMENT TRAP
N.T.S.

06.03.17	1	REISSUE FOR COUNCIL APPROVAL	A
DATE	No.	AMENDMENT	ISSUE

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CLIENT :
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PROJECT :
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TITLE :
HYDRAULIC SERVICES
**SITE SOIL & WATER
MANAGEMENT PLAN**

Date : JUNE 2016	Drawn : NG
Scales : 1:200 @ A1	Checked : GH
Job No. : 162813	Cod File No. : 162813SW001
Drawing No. : SW001	