



MARMORA

SECTION 96AA

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CLIENT  
Moorgate Property  
Suite 1, 38 East Esplanade  
Manly NSW 2095

PROJECT DETAILS  
Marmora  
18 Marmora Street  
Freshwater NSW 2096



SCALE  
1:200 @ A3

PROJECT NO.  
1353A

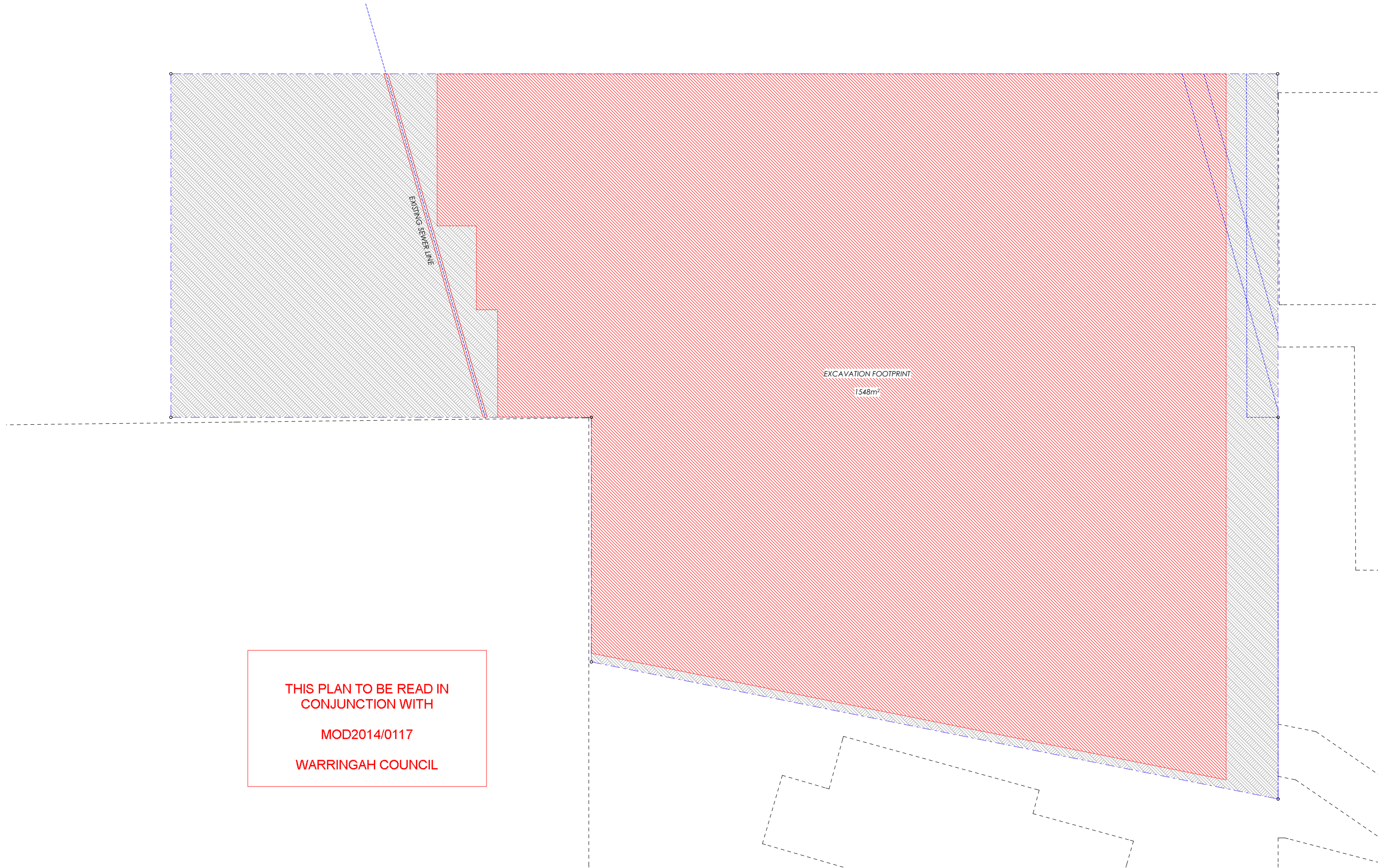
DRAWING  
DEMOLITION PLANS

DRAWING NO.  
A-0010

ISSUE  
B

ARCHITECT  
benson mccormack  
arch: 76 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
p: 61 2 9818 0777 f: 61 2 9818 0778  
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Suite 1, 38 East Esplanade  
Manly NSW 2095

PROJECT DETAILS  
**Marmora**  
18 Marmora Street  
Freshwater NSW 2096



SCALE  
1:200 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**EXCAVATION PLANS**

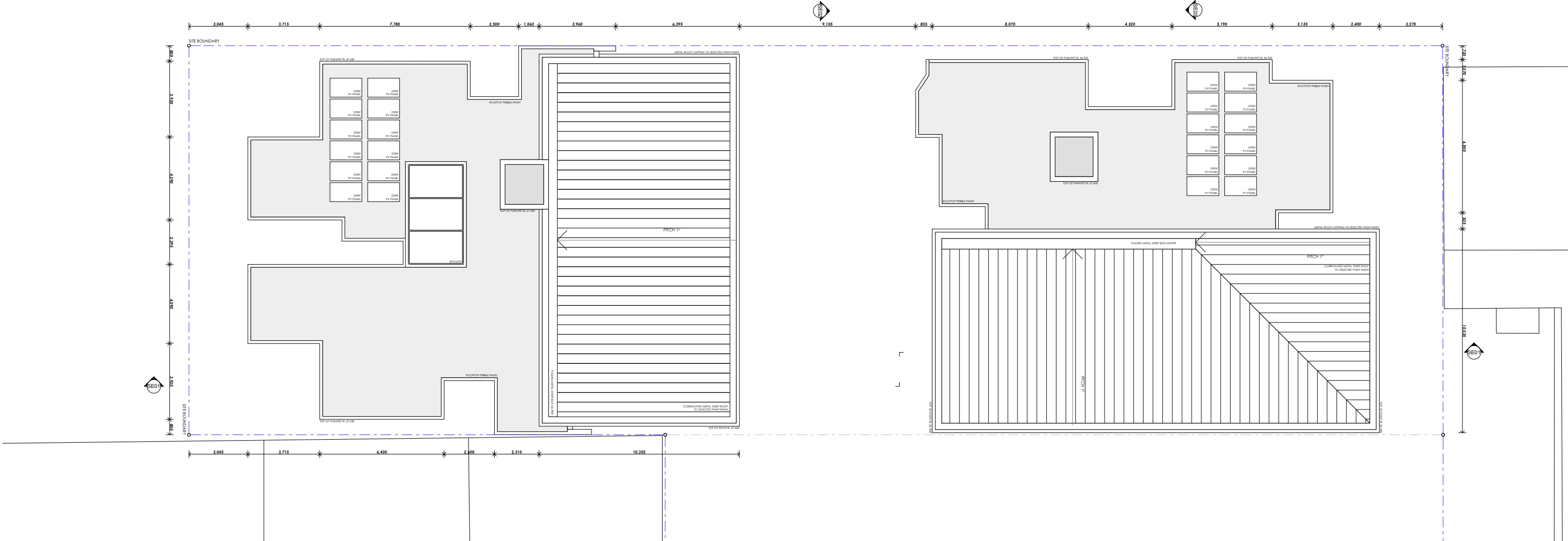
DRAWING NO.  
**A-0050**

ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
abr: 74 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
p: 61 2 9818 0777 f: 61 2 9818 0778  
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## SECTION 96AA



- BASIX NOTES**
- The following assumptions have been used in the thermal and BASIX assessment
- BASIX WATER**
- 3 star rated (>6 but <= 7.5 L/min) showerheads, 4 star rated toilets, 4 star rated kitchen and bathroom taps.
- ALTERNATIVE WATER SOURCE**
- 3000L Central Water Tank      Single tank connected to Units B01, B02 and B03  
Single tank connected to Units C01, C02 and C03
- BASIX ENERGY**
- HOT WATER SYSTEM**
- 5.5 star rated central gas instantaneous hot water system.
- VENTILATION**
- All individual exhaust fans to be sealed, ducted to facade or roof
- ARTIFICIAL LIGHTING**
- All bedrooms, all living areas, all kitchens, all bathrooms, all laundries and all hallways are to be primarily lit by LED or fluorescent lighting.
- Plans have been assessed with 2 downlights in each bedroom, 1 in each bathroom, 1 in each laundry and 5 in living/kitchen areas.
- ALTERNATIVE ENERGY SUPPLY**
- 5.5kW peak output photovoltaic system

BASIX THERMAL COMFORT			
EXTERNAL WALLS	INSULATION	COLOUR	
Cavity Brick	R0.14 cellular insulation to all external walls of Units B02, B05, B06, B07 and B08	Light	
	R1.14 polystyrene insulation to external walls of Units B01, B03, B04, C01 (including walls to hallways), C04 (including walls to hallways)		
Weatherboard clad Reverse Brick Veneer	R1.5 insulation to all external walls of Units B07, B08, C07 and C08.	Dark	
Weatherboard clad Reverse Brick Veneer	R1.5 insulation to all external walls of Unit D01	Medium	
INTERNAL WALLS			
Brick	Nil		
Concrete Block Party Walls	Nil		
FLOORS	INSULATION	COVERING	
200mm Concrete	R3.5 to slab soffit of Unit B01, B02, B03, C01, C02, C03 and D01	Timber board/Tile	
ROOFING	INSULATION	COVERING	COLOUR
Concrete	Foil (sisalation) to Metal roof	Loose pebble	Light
		Colorbond steel	Dark
CEILING	INSULATION	COLOUR	
Suspended Plasterboard	R3.0 to ceiling of Unit B07, B08, C07, C08 and D01	Light	
GLAZING	FRAME	U VALUE	SHGCw
6.38 Laminated	Aluminium	6.35	0.77

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Marmora  
18 Marmora Street  
Freshwater NSW 2096



SCALE  
1:200 @ A3

PROJECT NO.  
1353A

DRAWING  
ROOF PLAN

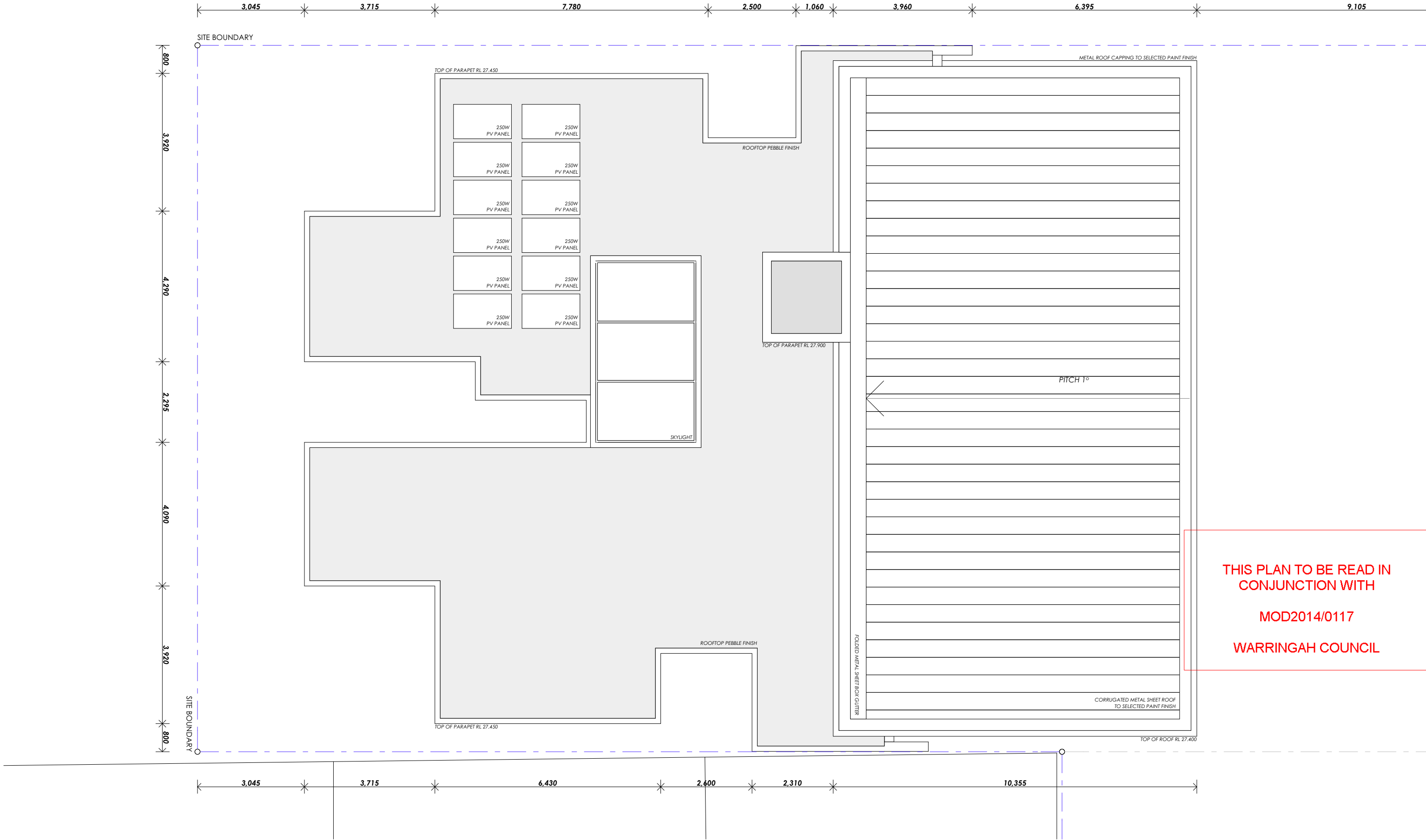
DRAWING NO.  
A-0103

ISSUE  
B

ARCHITECT  
benSON mCCORMACK  
abn: 76 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
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# SECTION 96AA



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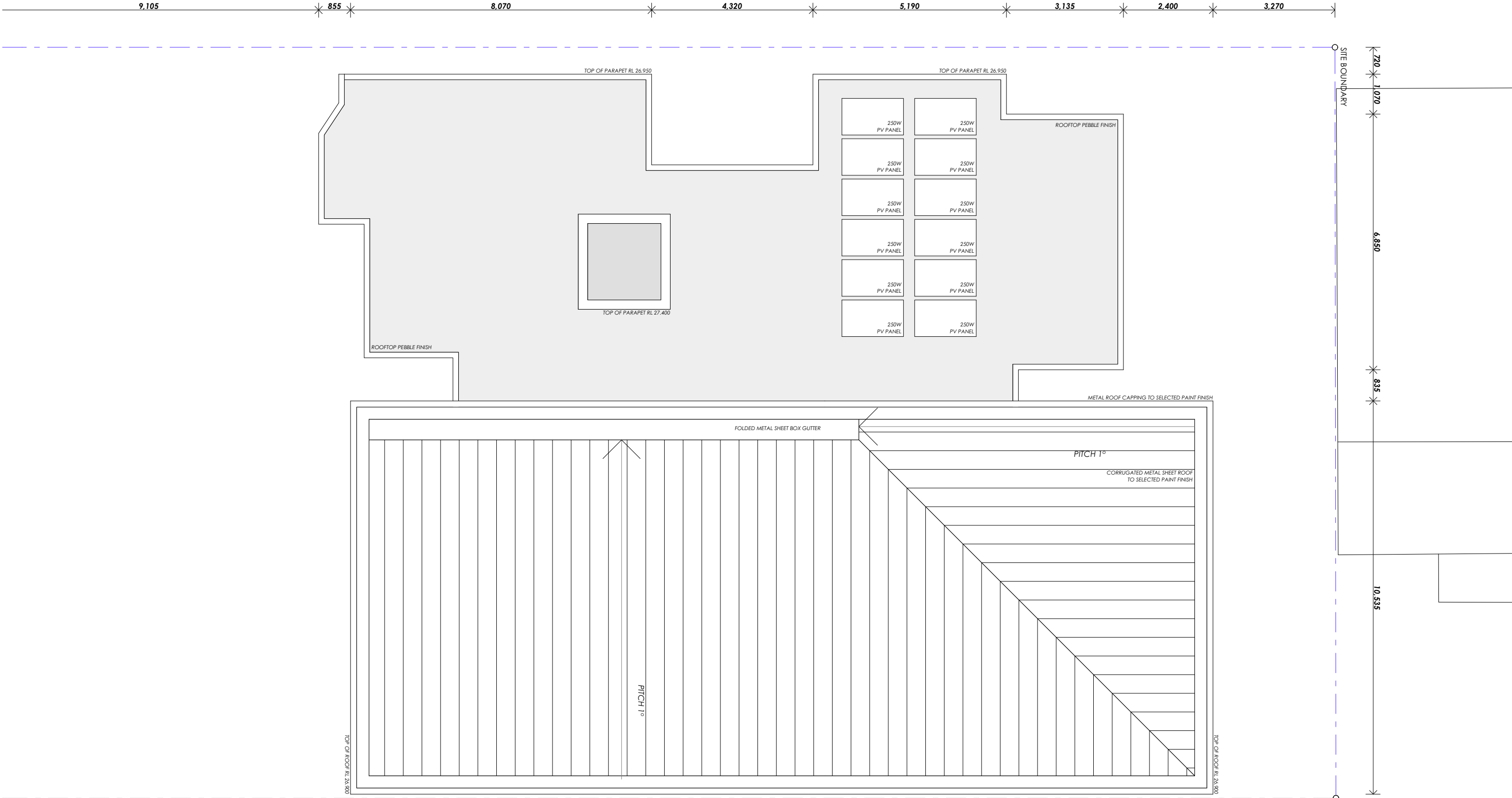
DRAWING  
BUILDING B ROOF PLAN

DRAWING NO.  
A-0108

ISSUE  
B

ARCHITECT  
benson mccormack  
abr: 76 129 130 285  
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18 Marmora Street  
Freshwater NSW 2096



SCALE  
1:100 @ A3

PROJECT NO.  
1353A

DRAWING  
BUILDING C ROOF  
PLAN

DRAWING NO.  
A-0112

ISSUE  
B

ARCHITECT  
benson mccormack  
studio 5, 505 balmain rd lilyfield NSW  
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The following assumptions have been used in the thermal and BASIX assessment

3 star rated (>6 but ≤ 7.5 L/min) showerheads, 4 star rated toilets, 4 star rated kitchen and bathroom taps.

3 star rated (>6 but ≤ 7.5 L/min) showerheads, 4 star rated toilets, 4 star rated kitchen and bathroom taps.

3000L Central Water Tank      Single tank connected to Units B01, B02 and B03  
Single tank connected to Units C01, C02 and C03

## HOT WATER SYSTEM

## HOT WATER SYSTEM

5.5 star rated central gas instantaneous hot water system.

*All individual exhaust fans to be sealed, ducted to facade or roof*

*All bedrooms, all living areas, all kitchens, all bathrooms, all laundries and all hallways are to be primarily lit by LED or fluorescent lighting.*

Plans have been assessed with 2 downlights in each bedroom, 1 in each bathroom, 1 in each laundry and 5 in living/kitchen areas.

5.5kW peak output photovoltaic system

EXTERNAL WALLS	INSULATION	COLOUR
----------------	------------	--------

EXTERNAL WALLS	INSULATION	COLOUR
Cavity Brick	R0.14 cellular insulation to all external walls of Units B02, B05, B06, B07 and B08	Light
	R1.14 polystyrene insulation to external walls of Units B01, B03, B04, C01 (including walls to hallways), C04 (including walls to hallways)	
Weatherboard clad Reverse Brick Veneer	R1.5 insulation to all external walls of Units B07, B08, C07 and C08.	Dark
Weatherboard clad Reverse Brick Veneer	R1.5 insulation to all external walls of Unit D01	Medium

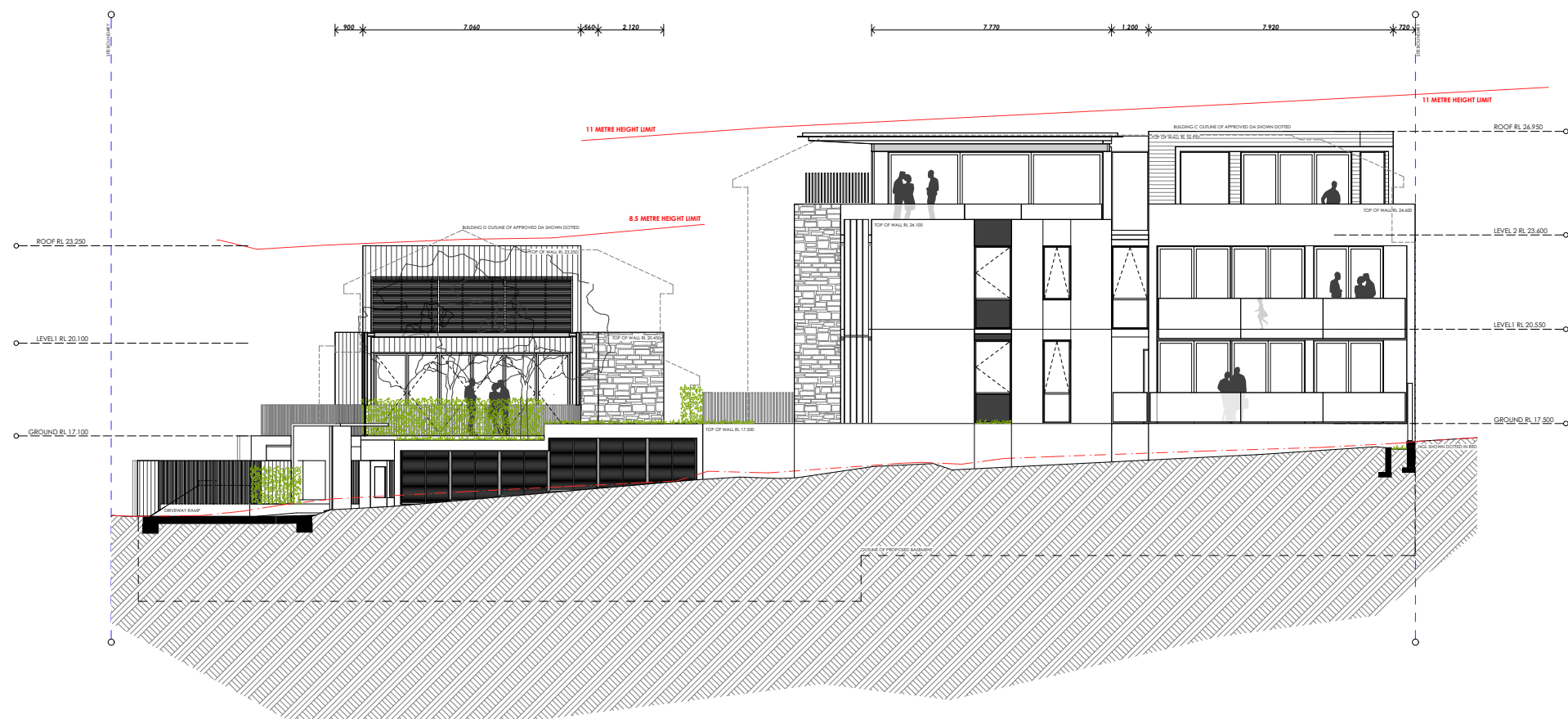
INTERNAL WALLS	INSULATION
Brick	Nil
Concrete Block Party Walls	Nil

FLOORS	INSULATION	COVERING
200mm Concrete	R3.5 to slab soffit of Unit B01, B02, B03, C01, C02, C03 and D01	Timber board/Tile

ROOFING	INSULATION	COVERING	COLOUR
Concrete		Loose pebble	Light
Timber	Foil (sisalation) to Metal roof	Colorbond steel	Dark

CEILING	INSULATION	COLOUR
Suspended Plasterboard	R3.0 to ceiling of Unit B07, B08, C07, C08 and D01	Light

GLAZING	FRAME	U VALUE	SHGC <sub>w</sub>
6.38 Laminated	Aluminium	6.35	0.77



WARRINGAH COUNCIL

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PROJECT DETAILS  
Marmora  
18 Marmora Street  
Freshwater NSW 2096

PROJECT NORTH



SCALE  
1:200 @ A3

PROJECT NO.  
1353A

DRAWING  
NORTH ELEVATION

DRAWING NO.  
A-0200

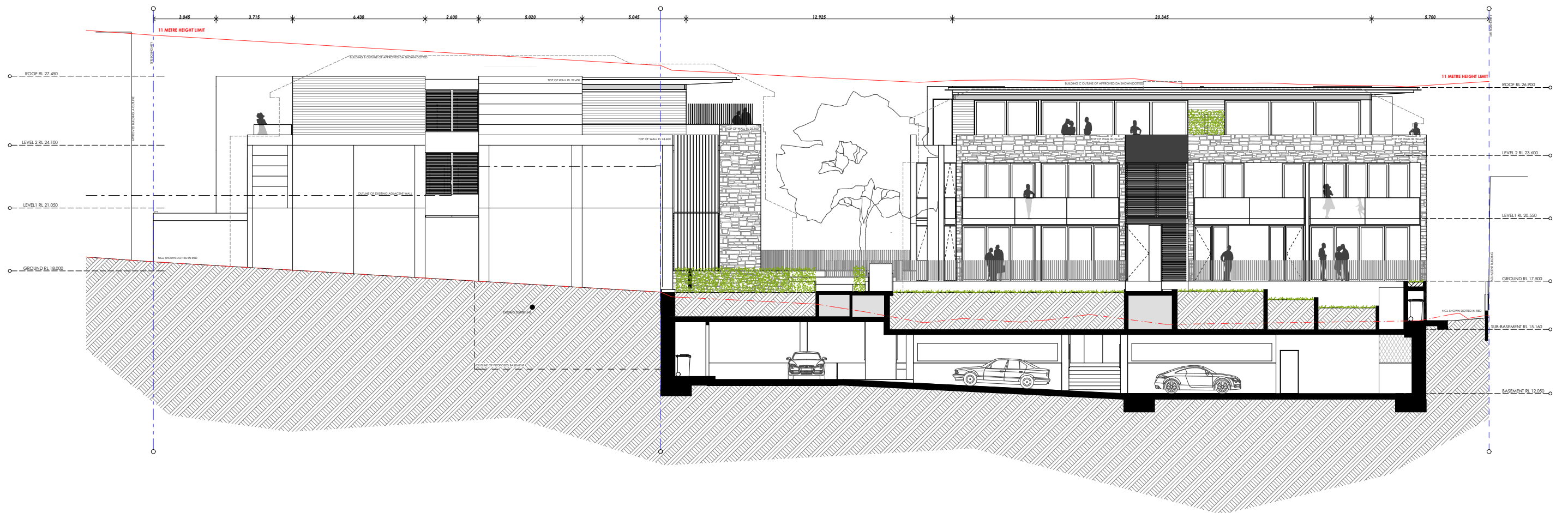
ISSUE  
B

ARCHITECT  
**benson mccormack**  
abn: 76 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
p: **61 2 9818 0777** f: 61 2 9818 0778  
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PROJECT DETAILS  
**Marmora**  
18 Marmora Street  
Freshwater NSW 2096

PROJECT NORTH



SCALE  
1:200 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**EAST ELEVATION**

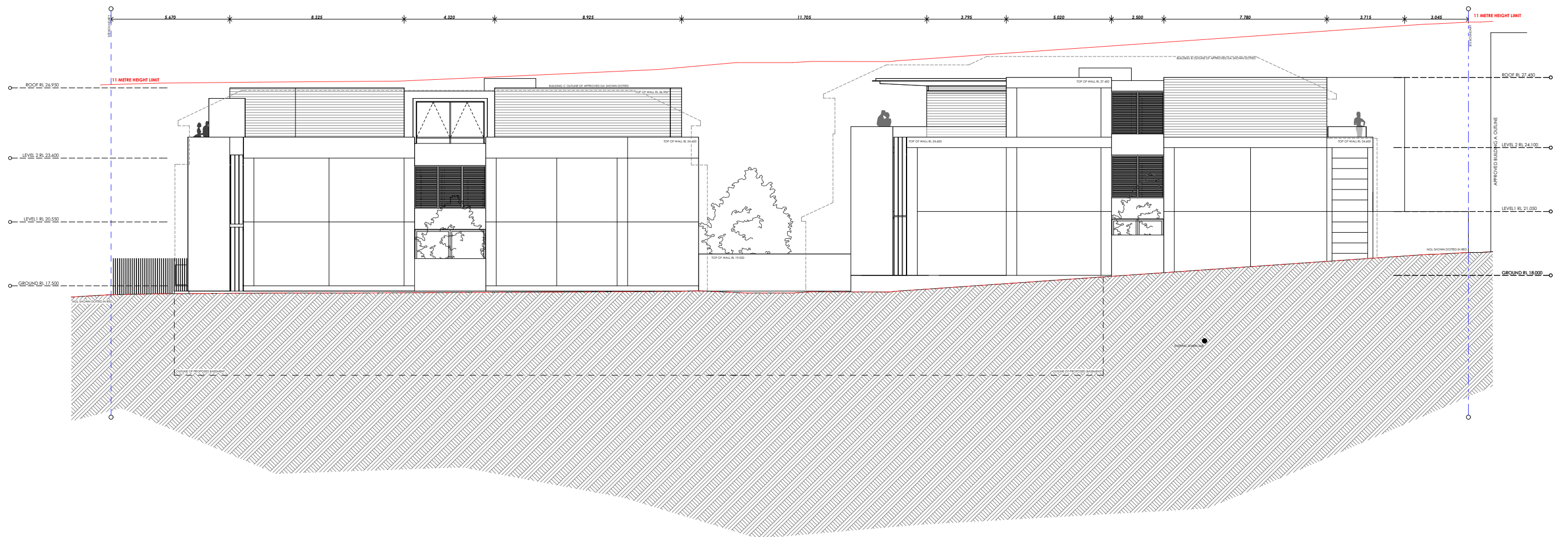
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**A-0201**

ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
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PROJECT DETAILS  
**Marmora**  
18 Marmora Street  
Freshwater NSW 2096

PROJECT NORTH



SCALE  
1:200 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**WEST ELEVATION**

DRAWING NO.  
**A-0202**

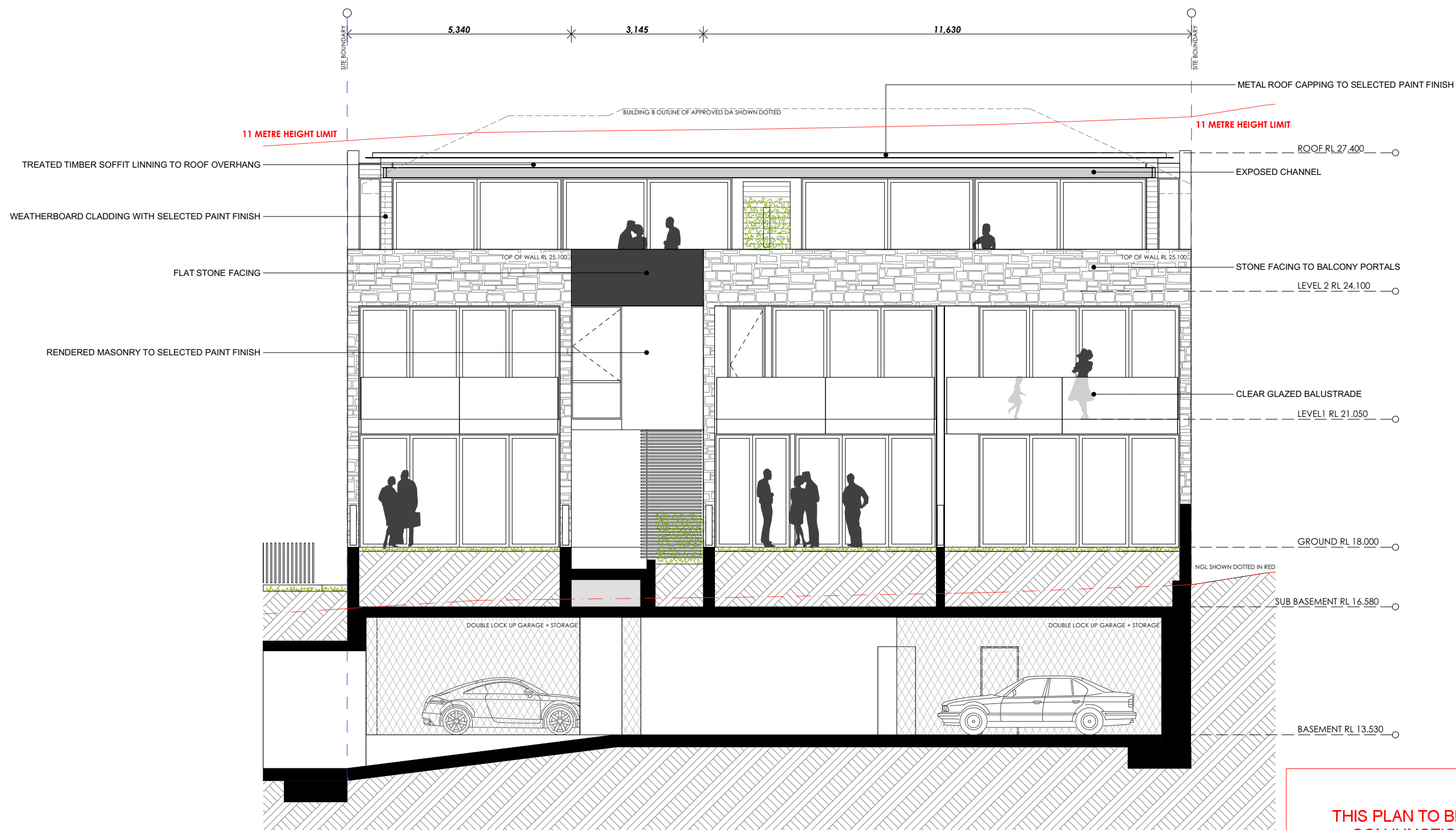
ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
abn: 76 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
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Manly NSW 2095

PROJECT DETAILS  
**Marmora**  
18 Marmora Street  
Freshwater NSW 2096

PROJECT NORTH



SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING B - NORTH  
ELEVATION**

DRAWING NO.  
**A-0203**

ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
also: 76 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
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PROJECT DETAILS  
**Marmora**  
18 Marmora Street  
Freshwater NSW 2096

PROJECT NORTH



SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING B - SOUTH  
ELEVATION**

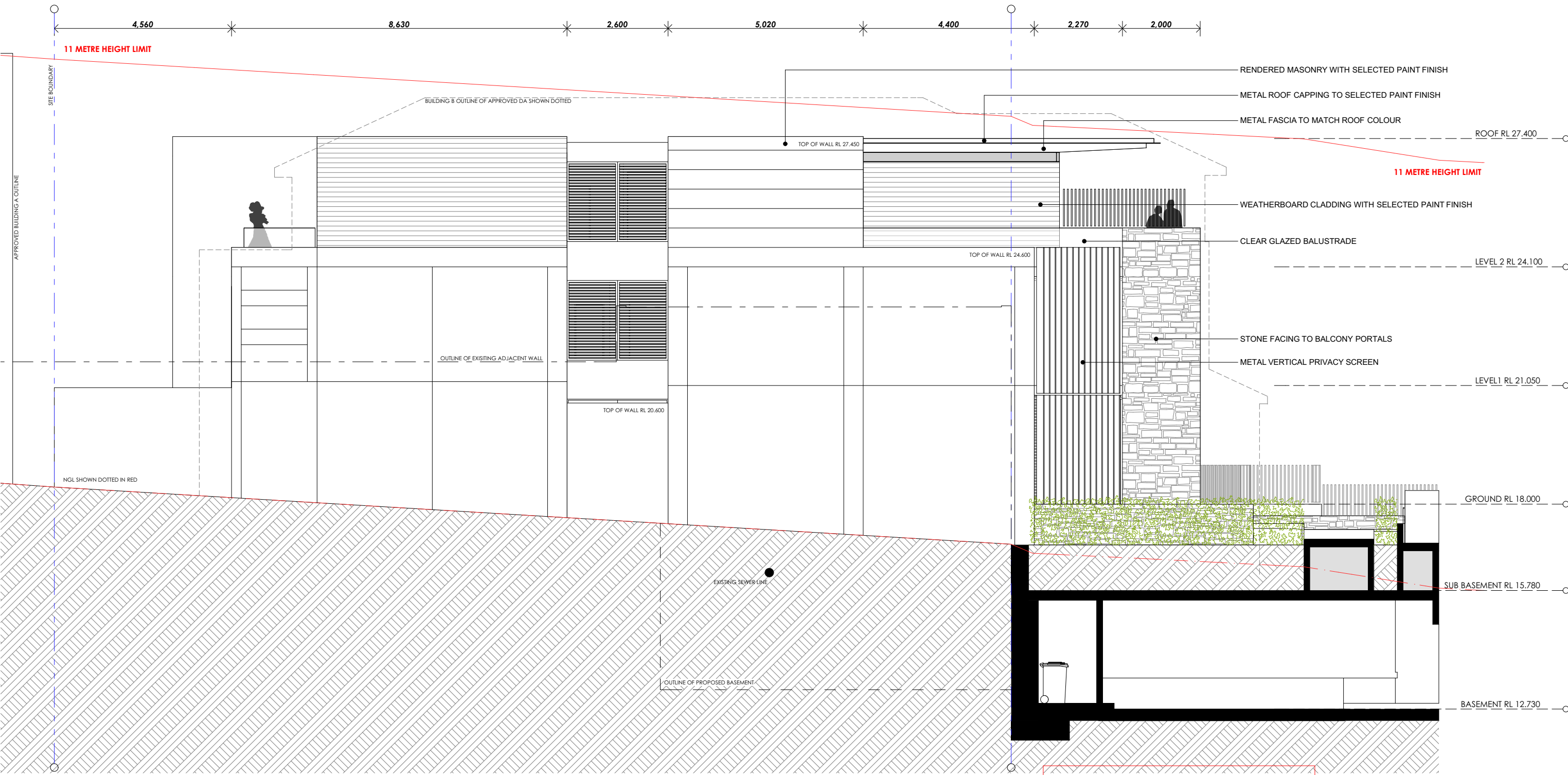
DRAWING NO.  
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ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
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studio 5, 505 balmain rd lilyfield NSW  
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Marmora  
18 Marmora Street  
Freshwater NSW 2096

PROJECT NORTH

SCALE  
1:100 @ A3

PROJECT NO.  
1353A

DRAWING  
BUILDING B - EAST  
ELEVATION

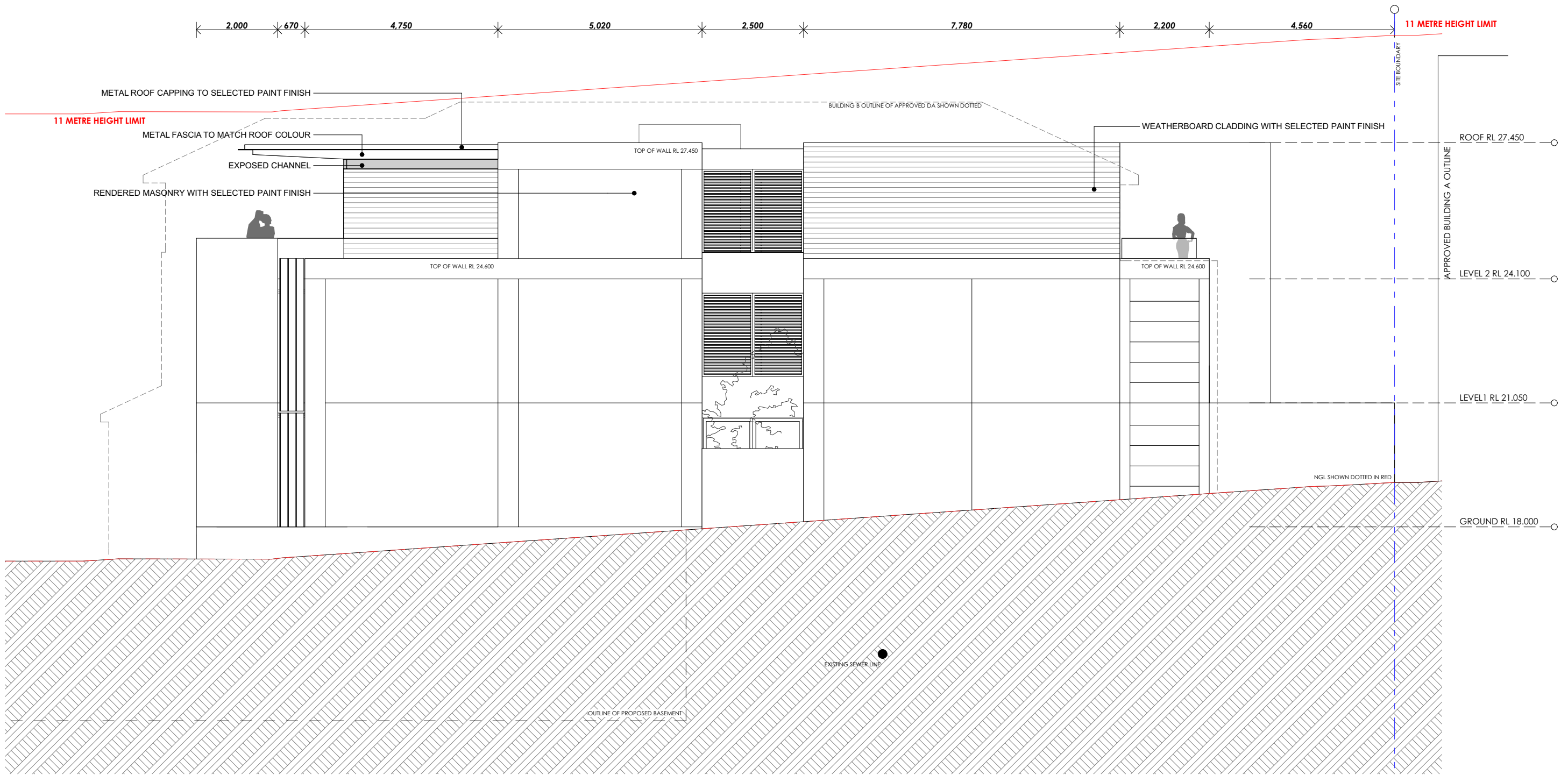
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ISSUE  
B

ARCHITECT  
benson mccormack  
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studio 5, 505 balmain rd lilyfield NSW  
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Freshwater NSW 2096

PROJECT NORTH

SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING B - WEST  
ELEVATION**

DRAWING NO.  
**A-0206**

ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
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PROJECT NORTH

SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING C - NORTH  
ELEVATION**

DRAWING NO.  
**A-0207**

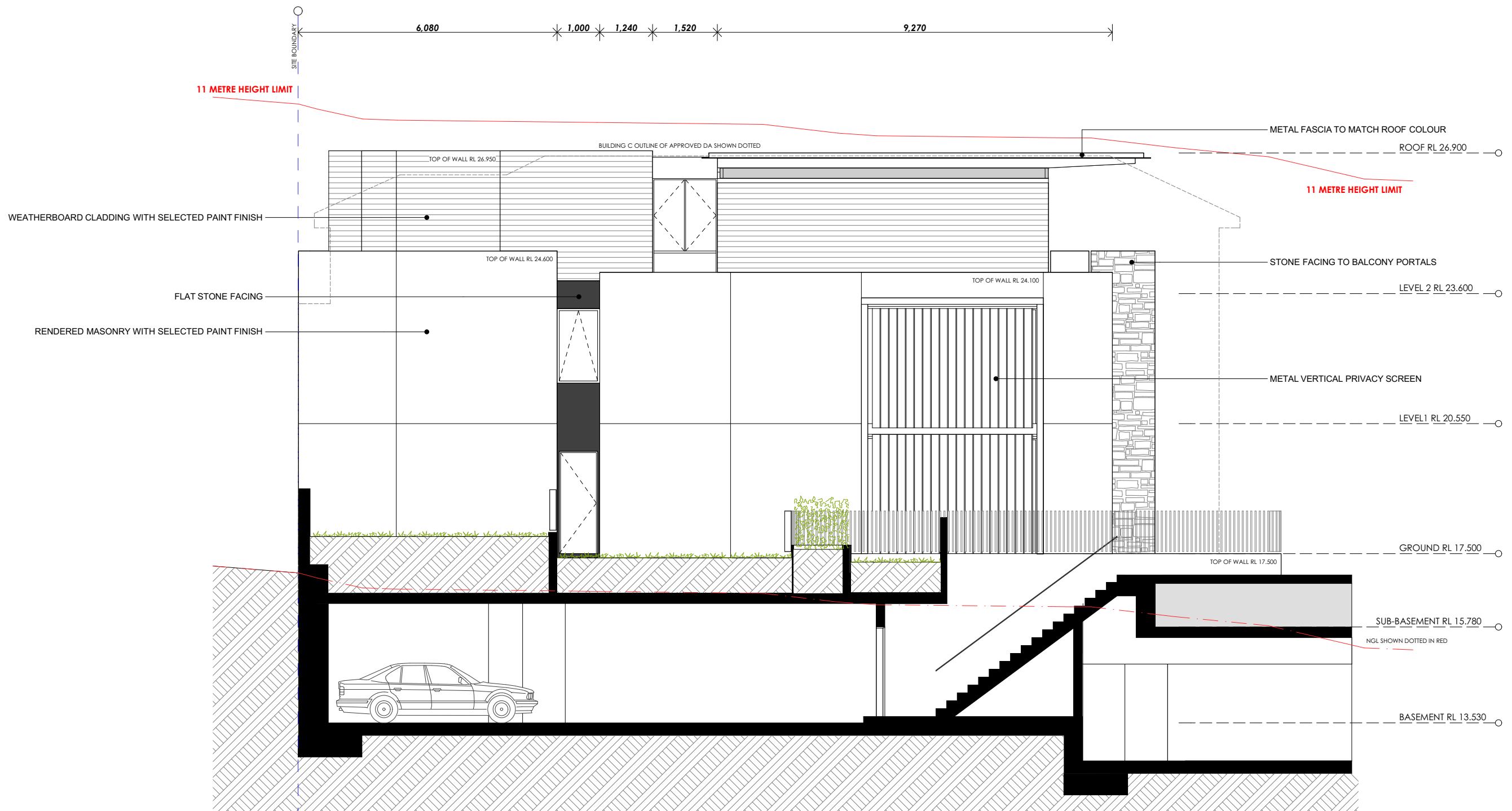
ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
studio 5, 505 balmain rd lilyfield NSW  
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SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING C - SOUTH  
ELEVATION**

DRAWING NO.  
**A-0208**

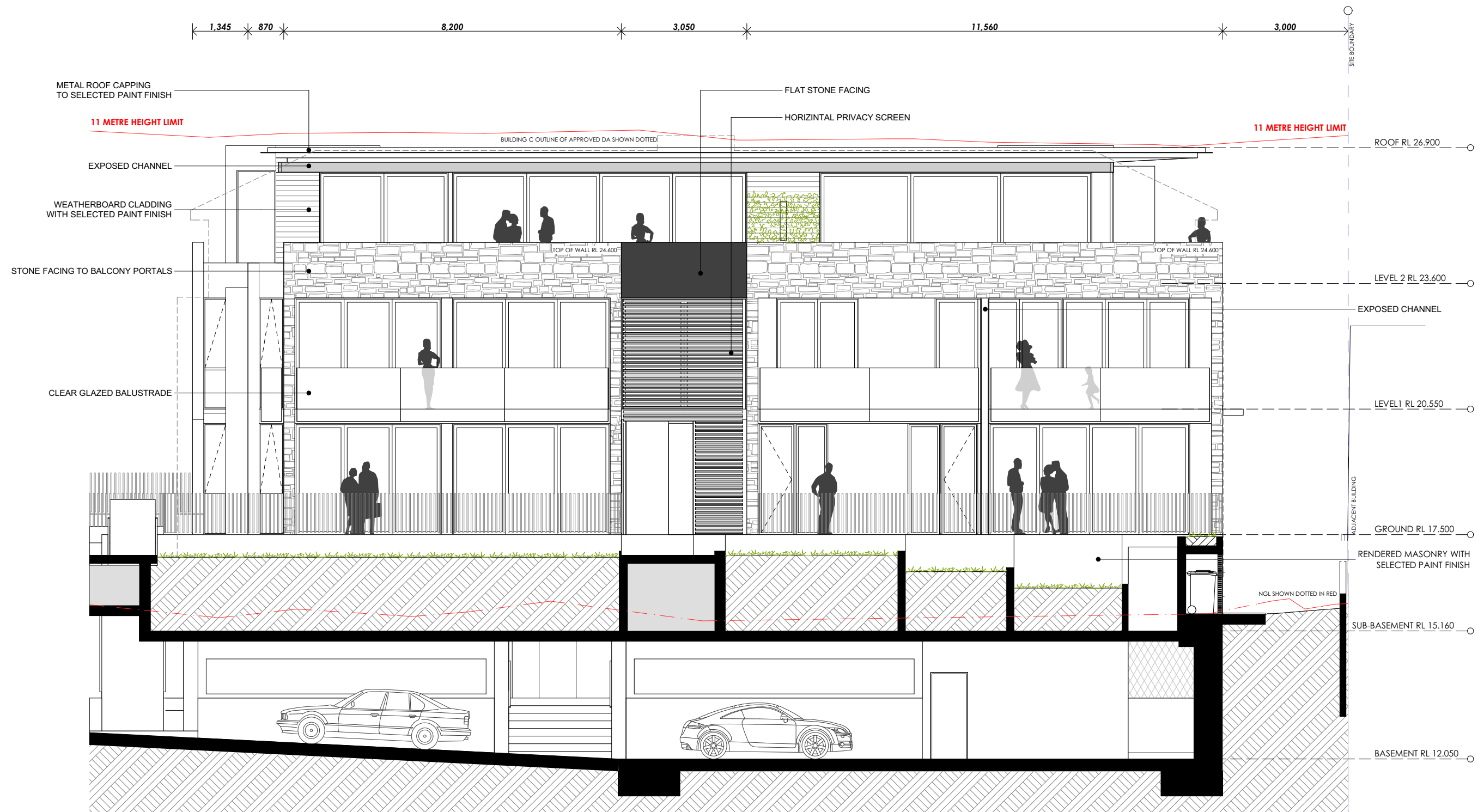
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ARCHITECT  
**benson mccormack**  
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PROJECT NORTH

SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING C - EAST  
ELEVATION**

DRAWING NO.  
**A-0209**

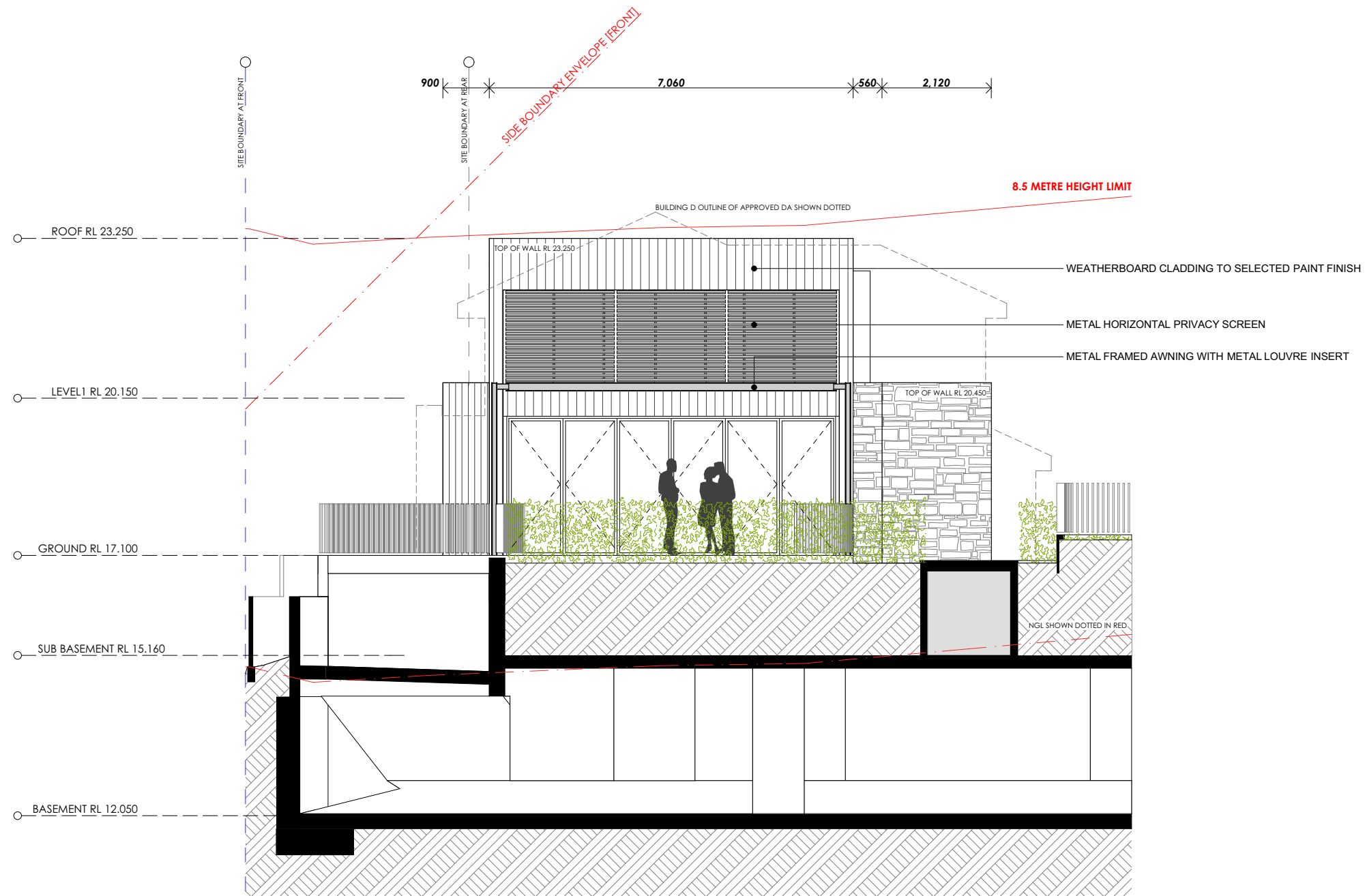
ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
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studio 5, 505 balmain rd lilyfield NSW  
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PROJECT NORTH

SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING D - NORTH  
ELEVATION**

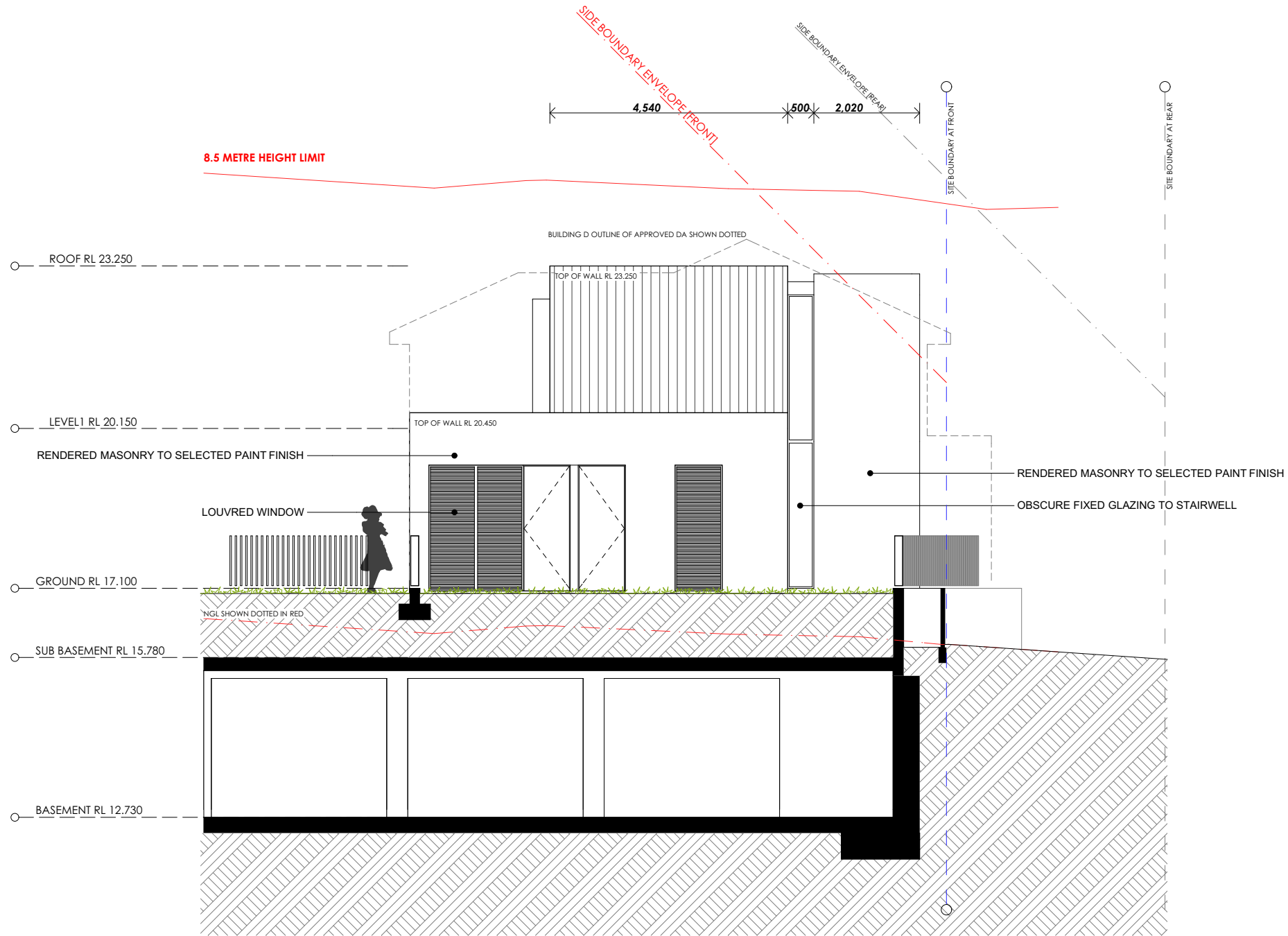
DRAWING NO.  
**A-0211**

ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
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PROJECT NORTH

SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING D - SOUTH  
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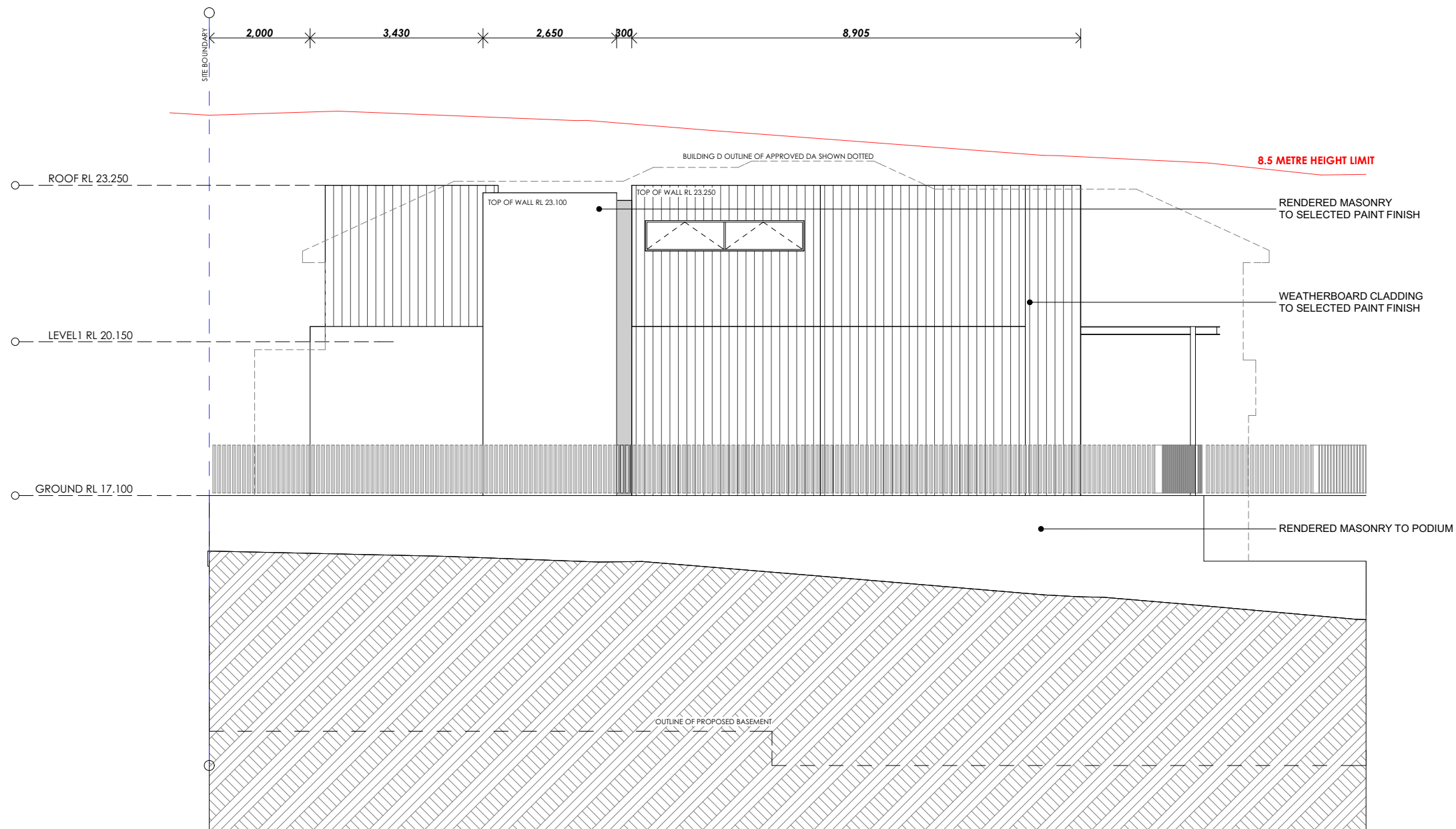
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**A-0212**

ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
abn: 76 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
p: 61 2 9818 0777 f: 61 2 9818 0778  
nom. arch - david benson 7285



## SECTION 96AA



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WARRINGAH COUNCIL

## MARMORA

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A	JAN 14	ISSUED TO COUNCIL FOR PRE DA
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CLIENT  
**Moorgate Property**  
Suite 1, 38 East Esplanade  
Manly NSW 2095

PROJECT DETAILS  
**Marmora**  
18 Marmora Street  
Freshwater NSW 2096



SCALE  
1:100 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**BUILDING D - EAST  
ELEVATION**

DRAWING NO.  
**A-0213**

ISSUE  
**B**

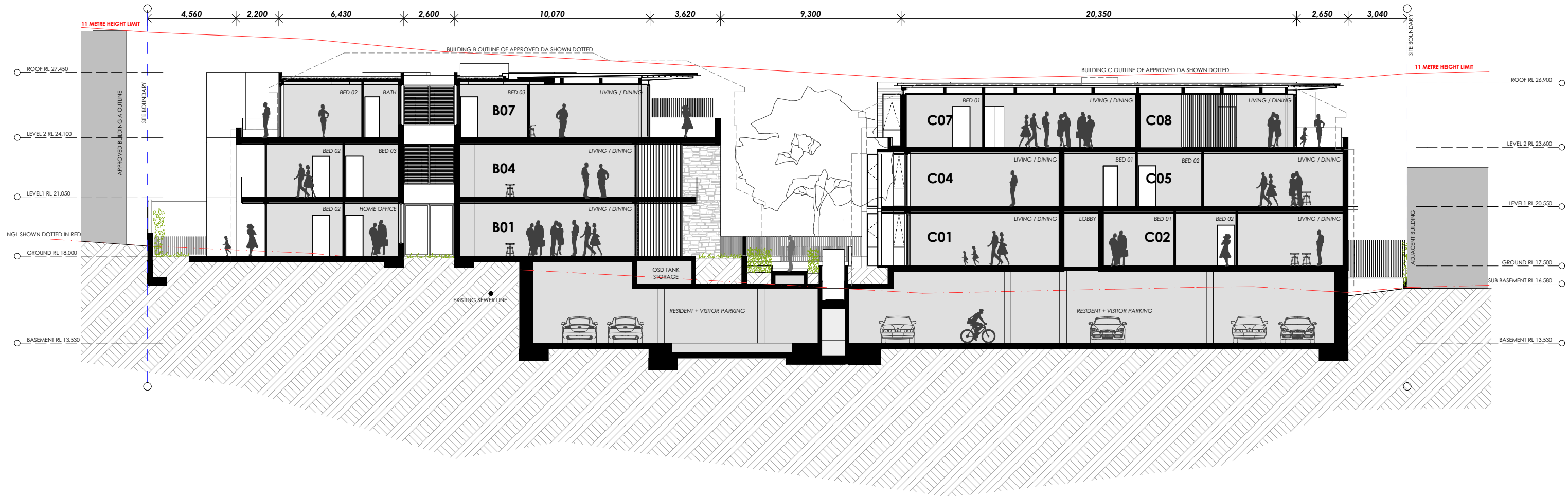
ARCHITECT  
**benson mccormack**  
abr: 74 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
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## SECTION 96AA







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Manly NSW 2095

PROJECT DETAILS  
Marmora  
18 Marmora Street  
Freshwater NSW 2096



SCALE  
1:200 @ A3

PROJECT NO.  
1353A

DRAWING  
SECTION A

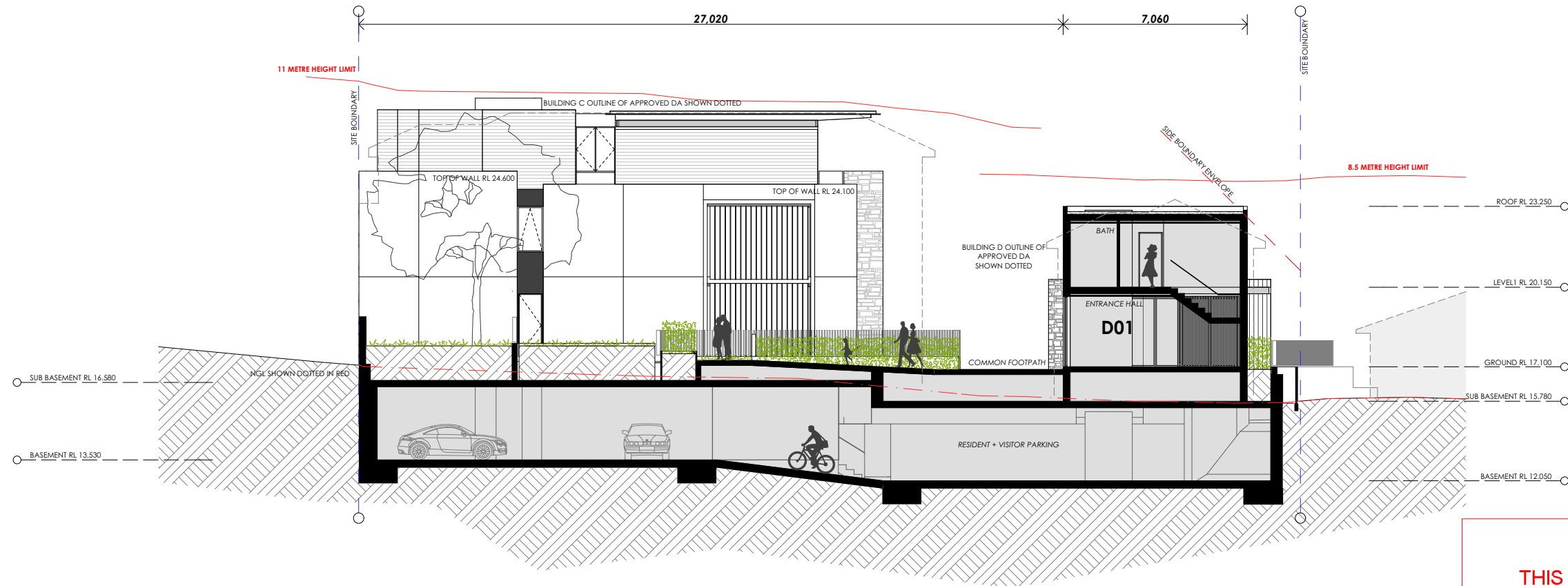
DRAWING NO.  
A-0221

ISSUE  
B

ARCHITECT  
benson mccormack  
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studio 5, 505 balmain rd lilyfield NSW  
p: 61 2 9818 0777 f: 61 2 9818 0778  
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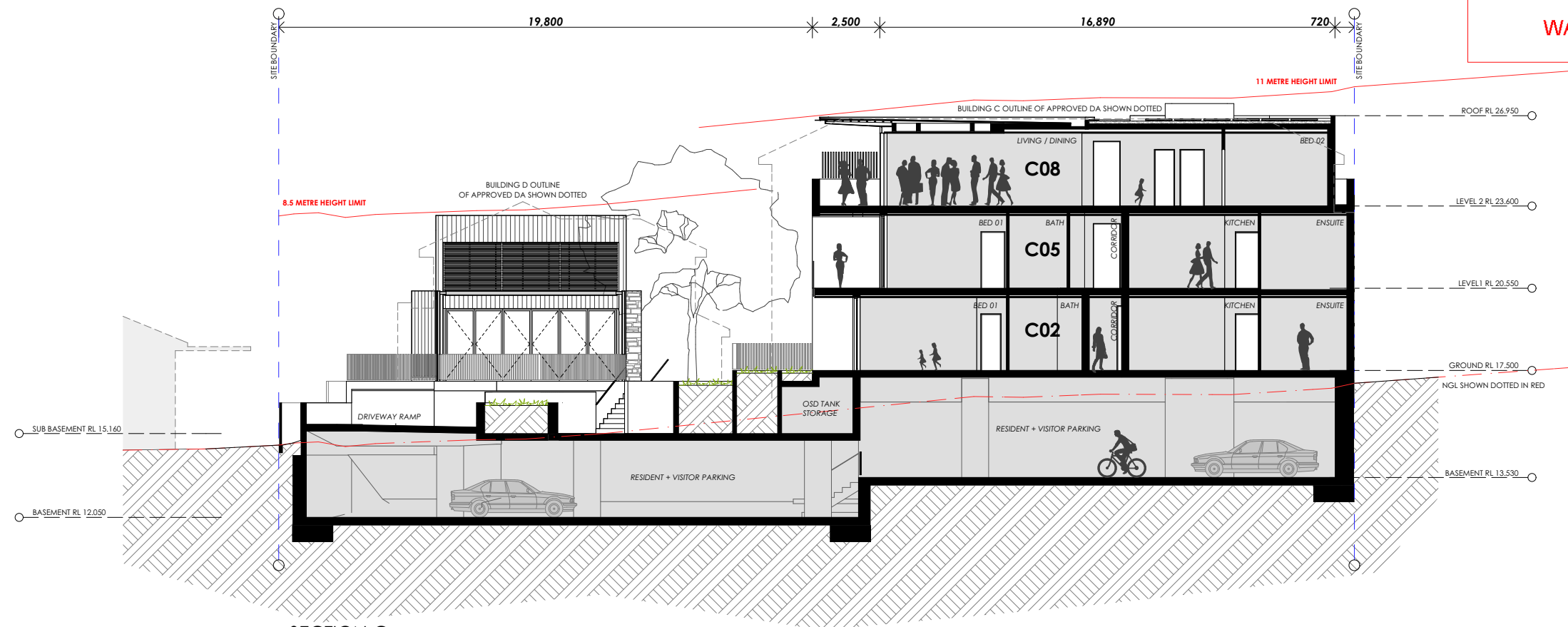


# SECTION 96AA



SECTION B

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SECTION C

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CLIENT  
**Moorgate Property**  
Suite 1, 38 East Esplanade  
Manly NSW 2095

PROJECT DETAILS  
**Marmora**  
18 Marmora Street  
Freshwater NSW 2096

PROJECT NORTH



SCALE  
1:200 @ A3

PROJECT NO.  
**1353A**

DRAWING  
**SECTION B + C**

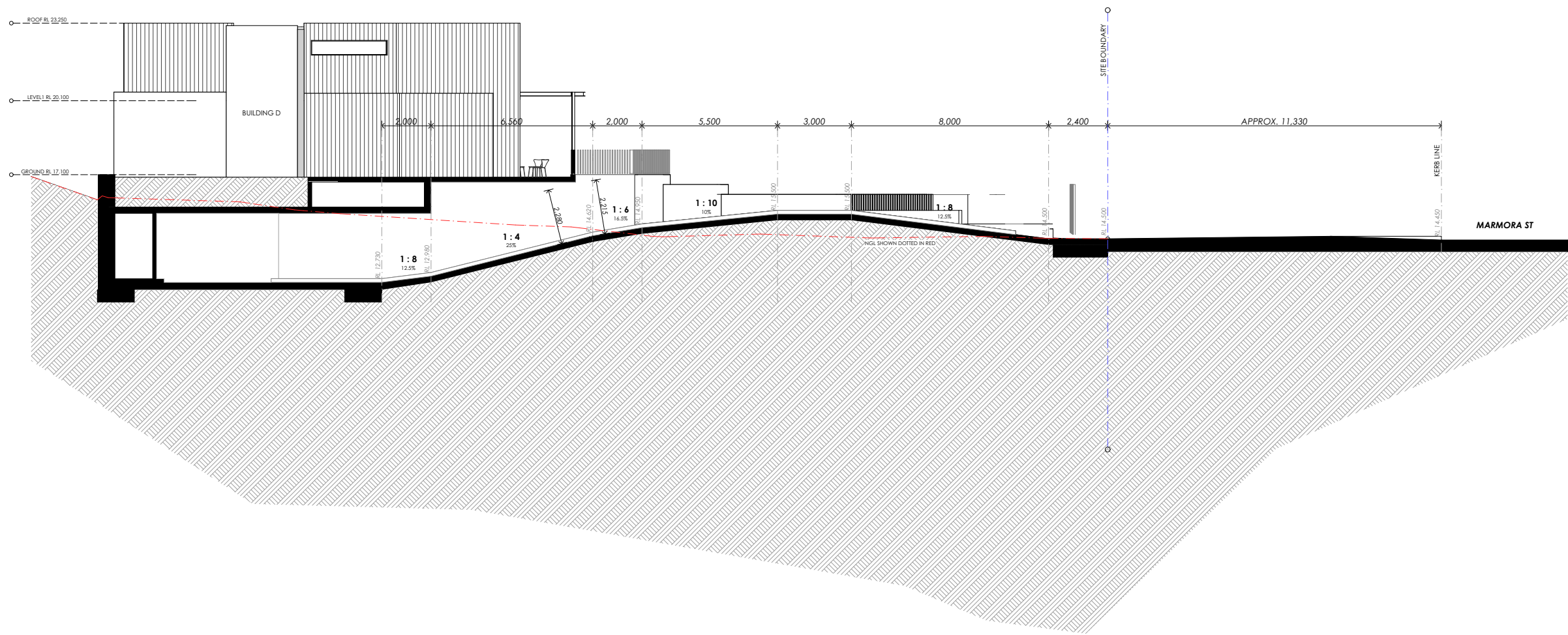
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ISSUE  
**B**

ARCHITECT  
**benson mccormack**  
abn: 76 129 130 285  
studio 5, 505 balmain rd lilyfield NSW  
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## SECTION 96AA



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MARMORA

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B	JUN 14	S96 AA

CLIENT  
Moorgate Property  
Suite 1, 38 East Esplanade  
Manly NSW 2095

PROJECT DETAILS  
Marmora  
18 Marmora Street  
Freshwater NSW 2096



SCALE  
1:200 @ A3

PROJECT NO.  
1353A

DRAWING  
DRIVEWAY SECTION

DRAWING NO.  
A-1600

ISSUE  
B

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benson mccormack  
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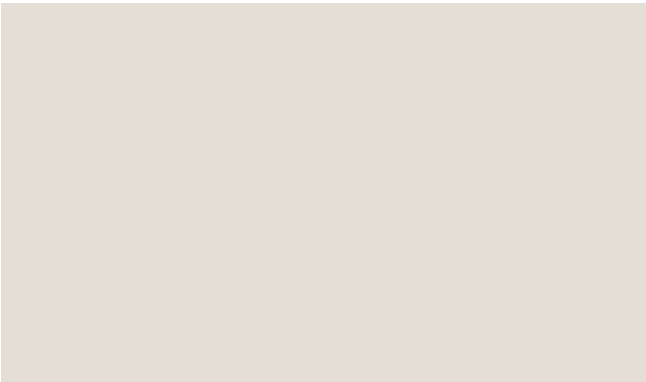
SECTION 96AA

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WALLS



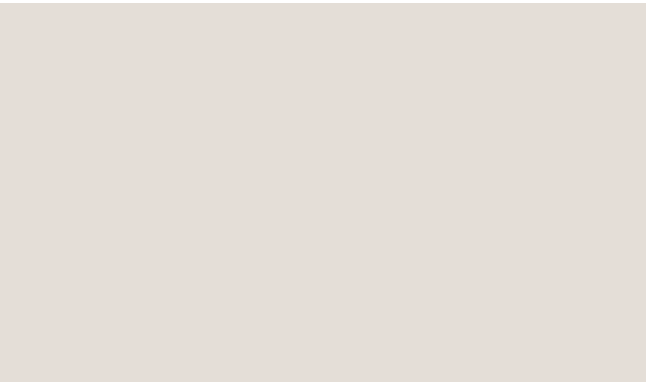
STONE FACING TO PORTALS  
SANDSTONE WALL CLADDING



RENDERED MASONRY 01  
PAINT FINISH SIM/EQ TO DULUX 'SHOJI WHITE' MATT



RENDERED MASONRY 02  
PAINT FINISH SIM/EQ TO DULUX 'OOLONG' MATT



WEATHERBOARD CLADDING 01  
PAINT FINISH SIM/EQ TO DULUX 'SHOJI WHITE' MATT



WEATHERBOARD CLADDING 02  
PAINT FINISH SIM/EQ TO DULUX 'NIGHT SKY'

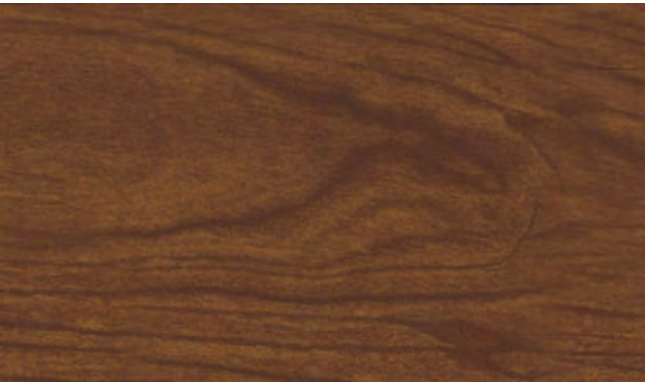


FLAT STONE FACING  
SLATE WALL TILE CLADDING

ROOF



SHEET METAL ROOFING  
POWDERCOAT FINISH SIM/EQ TO DULUX 'NIGHT SKY'



SOFFIT  
INNOWOOD DECKING SYSTEM IN 'SPOTTED GUM'

WALL OPENINGS

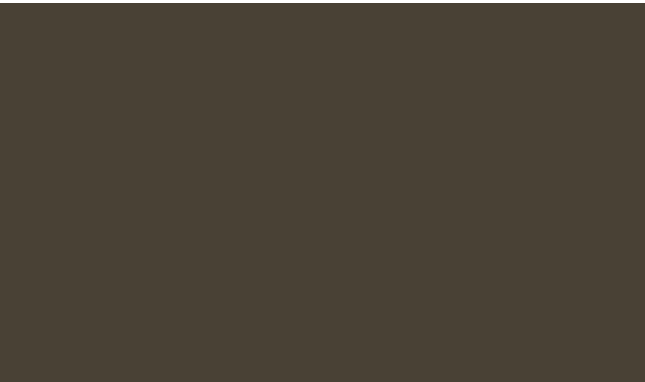


ALUMINIUM WINDOW FRAME  
POWDERCOATED FINISH SIM/EQ TO  
DULUX 'ANOTEC DARK GREY'

SCREEN



LANDSCAPE FENCING  
TIMBER, COLOUR SIM/EQ TO MERBAU



LOUVRE / PERGOLA  
POWDERCOATED FINISH SIM/EQ TO DULUX 'BRONZE PEARL'

ARTICULATION



EXPOSED STEEL CHANNEL  
POWDERCOATED FINISH SIM/EQ TO DULUX 'GHETTO BLACK'

MARMORA



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**WARNING**

BEWARE OF UNDERGROUND SERVICES  
THE LOCATIONS OF UNDERGROUND  
SERVICES ARE APPROXIMATE ONLY AND  
THEIR EXACT POSITION SHOULD BE PROVEN  
ON SITE. NO GUARANTEE IS GIVEN THAT  
ALL EXISTING SERVICES ARE SHOWN

THE CONTRACTOR SHALL COMPLY WITH THE CURRENT EDITIONS OF THE FOLLOWING VICROADS AND AUSTRALIAN STANDARDS

AUSTRALIAN STANDARDS

AS 1289 TESTING SOILS FOR ENGINEERING PURPOSES

AS 3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS

VICROADS SPECIFICATION - SECTION 201 SITE CLEARING

E2

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT ALL CONTROL AND COMPLIANCE EXAMINATION AND TESTING OF MATERIALS AND WORK

UNLESS OTHERWISE SPECIFIED, ALL TESTS SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE APPROPRIATE AUSTRALIAN STANDARD TEST METHOD. WHERE THERE IS NO RELEVANT AUSTRALIAN STANDARD TEST METHOD THEN THE CURRENT APPROPRIATE VICROADS TEST METHOD OR OTHER SPECIFIED TEST METHOD SHALL BE USED. ALL TESTS SHALL BE CONDUCTED BY EXPERIENCED TESTING OFFICERS IN A LABORATORY ACCREDITED BY THE NATIONAL ASSOCIATION OF TESTING AUTHORITIES (NATA)

E3

DETERMINATION OF THE NATURE AND QUANTITY(IES) OF THE EXISTING SITE MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. WHERE INCLUDED IN THE DOCUMENTS, GEOTECHNICAL REPORTS ARE INCLUDED FOR INFORMATION ONLY. INTERPRETATION OF THE REPORTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR

THE CONTRACTOR SHALL BE DEEMED TO HAVE ALLOWED IN THE CONTRACT SUM FOR EXCAVATION IN ALL MATERIAL. NO ADDITIONAL PAVEMENT SHALL BE MADE FOR EXCAVATION IN ROCK NOR ANY HARD OR SOFT MATERIAL

USE OF ON-SITE MATERIAL WITHIN THE WORKS SHALL ONLY BE PERMITTED WHERE THE MATERIAL EITHER

I. IS SPECIALLY STATED WITHIN THE DOCUMENTS AS BEING USED IN THE WORKS, OR

II. IS PERMITTED BY THE SUPERINTENDENT

IMPORTED FILL SHALL BE APPROVED MATERIALS COMPRISING GRAULIAR IGNEOUS WEATHERED ROCK OR QUARRY WASTE (SUCH AS RMS D65d0 OR EQUIVALENT), SANDY CLAY OR WEATHERED SEDIMENTARY ROCK. THE FILL MATERIAL SHALL BE SUCH THAT THE PARTICLE SIZE AFTER COMPACTION SHALL NOT EXCEED 40MM, NOT LESS THAN 50% OF THE MATERIAL SHALL BE LESS THAN 75 MICRON AND IT SHALL HAVE A LIQUID LIMIT NOT EXCEEDING 35% GRANULAR MATERIAL SHALL BE WELL SORTED

UNDESIRABLE MATERIAL SHALL MEAN ANY MATERIAL WHICH CONTAINS VEGETABLE MATTER, ROOTS, STUMPS AND OR ANY OTHER PERISHABLE, FOREIGN OR DELETERIOUS MATTER, OR CONTAINS CLAY HAVING A LIQUID LIMIT EXCEEDING 80% AND OR A PLASTICITY INDEX EXCEEDING 50% OR CONTAINS ROCK, GRAVEL OR OTHER PIECES WHOSE LEAST DIMENSION EXCEEDS 100MM, OR IS SILTY MATERIAL OR IS OTHERWISE CONSIDERED AS BEING UNSUITABLE

E4

IF A SURFACE IS UNABLE TO SUPPORT CONSTRUCTION EQUIPMENT OR IT IS NOT POSSIBLE TO COMPACT THE OVERLYING MATERIALS BECAUSE OF HIGH MOISTURE CONTENT, THEN ONE OR MORE OF THE FOLLOWING ALTERNATIVE ACTIONS MAY BE TAKEN

(I) ALLOW THE MATERIAL TO DRY TO A MOISTURE CONTENT WHICH ALLOW IT TO BE COMPACTED AND ALLOW THE PLACEMENT AND COMPACTION OF OVERLYING MATERIAL

(II) SCARIFY THE MATERIAL TO A DEPTH OF 200MM AND WORK AS NECESSARY TO ACCELERATE DRYING. RECOMPACT AS SPECIFIED WHEN MOISTURE CONTENT APPROXIMATES OPTIMUM

(III) EXCAVATE AND REPLACE THE SOFT MATERIAL

THE ACTION TO BE ADOPTED SHALL BE AT THE CONTRACTOR'S DISCRETION AND EXPENSE, BUT SHALL BE ADVISED TO THE SUPERINTENDENT BEFORE ACTION COMMENCES

IF THE CONTRACTOR ELECTS PURSUANT TO (I) ABOVE TO ALLOW THE MATERIAL TO DRY, RESULTING DELAYS, IF ANY, SHALL NOT CONSTITUTE GROUNDS FOR AN EXTENSION OF CONTRACT PERIOD OR DATE OF PRACTICAL COMPLETION

E5

THE FINISHED SUBGRADE SHALL NOT BE DISTURBED BY TRAFFIC OR OTHER OPERATIONS, AND SHALL BE PROTECTED AND MAINTAINED BY THE CONTRACTOR UNTIL THE FIRST LAYER OF FILL OR SUB-BASE IS PLACED THEREON. THE SUBGRADE SHALL BE KEPT DRAINED AND COMPLETELY FREE OF STANDING WATER AT ALL TIMES

THE CONTRACTOR SHALL PLAN AND CARRY OUT THE WHOLE OF THE WORKS TO MINIMISE THE EFFECTS OF RUN-OFF AND EROSION ON THE SITE AND ON DOWNSTREAM AREAS. HE SHALL AVOID ANY NECESSARY GROUND DISTURBANCE AND PROVIDE AS NECESSARY FOR THE PROPER CONTROL OF STORMWATER RUN-OFF AT EVERY STAGE OF THE WORKS

E6

PRIOR TO THE COMMENCEMENT OF EARTHWORKS TOPSOIL IS TO BE STRIPPED WITHIN THE LIMITS OF THE EARTHWORKS AND FROM ANY AREAS TO BE COVERED BY PAVING, STRUCTURES OR FILL, AND ALL AREAS WHICH ARE TO SUPPORT PAVEMENTS, EMBANKMENTS, STRUCTURES AND THE LIKE OR FILLING UNDER SUCH WORKS, SHALL BE STRIPPED CLEAR OF ALL TREES, LOGS, STUMPS, SCRUB, GRASS, ROOT GROWTH, CULTIVATED SOIL, WET OR SPONGY NATURAL SOIL, DECAYED VEGETABLE MATTER AND ANY OTHER DELETERIOUS SUBSTANCE. THE CONTRACTOR SHALL BREAK UP AND REMOVE ALL ASPHALT AND CONCRETE MATERIAL UPON WHICH FILL OR PAVEMENT SHALL BE PLACED

ALL MATERIAL WITHIN THE LIMIT OF THE EARTHWORKS SHALL BE WHOLLY REMOVED

FILL ALL HOLES WITH APPROVED MATERIAL, IN MAXIMUM 150MM COMPACTED THICKNESS LAYERS COMPACTED TO THE DENSITY TO THE ADJOINING UNDISTURBED SOIL AND TO THE APPROVAL OF THE SUPERINTENDENT

E7

MOISTURE CONDITION THE NATURAL SUBGRADE TO WITHIN THE RANGE 97% TO 103% OF STANDARD OPTIMUM MOISTURE CONTENT AND COMPACT TO ACHIEVE A MINIMUM STANDARD DRY DENSITY RATIO TO A MINIMUM DEPTH OF 200MM. IF REQUIRED THE AREA SHOULD BE TYNEED AND SCARIFIED FULL DEPTH TO FACILITATE THIS PROCESS

IF THE SOFT WEAK OR UNSTABLE AREAS EXPOSED BY THE COMPACTION PROCESS, OR DURING TEST ROLLING, AND WHICH DO NOT RESPOND TO FURTHER COMPACTION OR MOISTURE CONDITIONING SHALL BE EXCAVATED AND REPLACED

THE CONTRACTOR SHALL BE DEEMED TO HAVE ASSESSED THE EXTENT OF UNSTABLE AREAS AND SHALL BE DEEMED TO HAVE INCLUDED IN THE CONTRACT SUM FOR ALL ACTIVITIES REQUIRED FOR UNSTABLE AREA RECTIFICATION INCLUDING THE DELIVERY, PLACING AND COMPACTING OF APPROVED MATERIAL AS WELL AS THE EXCAVATION AND DISPOSAL OF REPLACED MATERIAL

E8

EXCAVATION TO THE LINES, LEVELS AND GRADES AS REQUIRED FOR UNDERGROUND SERVICES SPECIFIED IN THE RELEVANT SERVICES SECTIONS, INCLUDING DRAINAGE, HYDRAULIC, ELECTRICAL AND THE LIKE. UNLESS OTHERWISE SPECIFIED MAKE THE TRENCHES STRAIGHT BETWEEN MANHOLES, INSPECTION POINTS, JUNCTIONS AND THE LIKE, WITH VERTICAL SIDES AND UNIFORM GRADES

DEPTH SHALL BE AS REQUIRED BY THE RELEVANT SERVICES AND ITS BEDDING

CUT BACK ROOTS ENCOUNTERED IN TRENCHES TO LESS THAN 600MM CLEAR OF THE RELEVANT SERVICE. REMOVE SUCH OTHER OBSTRUCTIONS INCLUDING ROOTS, STUMPS, BouldERS AND THE LIKE WHICH MAY, IN THE OPINION OF THE SUPERINTENDENT, INTERFERE WITH THE PROPER FUNCTIONING OF THE SERVICE

LAY AND BED SERVICES IN ACCORDANCE WITH THE RELEVANT SERVICES SPECIFICATION SECTION

E9

BACKFILL AND COMPACT SERVICE TRENCHES AS SOON AS POSSIBLE AFTER APPROVAL OF LAID AND BEDDED SERVICE. COMPACT BACKFILL IN PIPE TRENCHES SO THAT THE PIPE IS BUTTRESSED BY THE WALLS OF THE TRENCH

E10

WHERE FILLING IS DESIGNATED BY THE CONTRACT OR IS SHOWN ON THE DRAWINGS AS STRUCTURAL OR CONTROLLED FILL, THE CONTRACTOR SHALL ENGAGE AN INDEPENDENT GEOTECHNICAL TESTING AUTHORITY TO SUPERVISE SUBGRADE PREPARATION, FILL PLACEMENT, COMPACTION AND TO UNDERTAKE SAMPLING AND TESTING AND REPORTING TO SATISFY THE REQUIREMENTS OF THIS SPECIFICATION AND THOSE OF AS 2870 AND AS 3798, FOR CONTROLLED FILL

E11

NO FILL SHALL BE PLACED OVER LAYERS NOT TESTED AND HAVING SATISFACTORY RESULTS

WHERE EXCAVATED MATERIAL IS NOT SUITABLE FOR FILLING, FILL MATERIAL, AS SPECIFIED IN THIS SPECIFICATION SECTION, "IMPORTED FILL" SHALL BE USED

SUITABLE MATERIAL EXCAVATED FROM THE SITE MAY BE USED AS FILL ONLY WHERE APPROVED IN WRITING BY THE SUPERINTENDENT, AND WHERE SHOWN ON THE DRAWINGS

COMPACT IMPORTED BULK FILL IN LAYERS OF 150MM MAXIMUM COMPACTED DEPTH AND AT OPTIMUM MOISTURE CONTENT

THE CONTRACTOR SHALL CARRY OUT TESTING AT A FREQUENCY WHICH IS SUFFICIENT TO ENSURE THAT THE MATERIALS AND WORK SUPPLIED UNDER THE CONTRACT COMPLIES WITH THE SPECIFIED REQUIREMENTS AND CONFORMING TO THE "MINIMUM FREQUENCY OF TESTING FOR MATERIAL DESCRIPTIONS" TABLE AND "GUIDELINES FOR MINIMUM FREQUENCY OF FILL DENSITY TEST", TABLE OF AS 3798

E12  
UNLESS OTHERWISE PERMITTED, NO FILLING SHALL BE PLACED AGAINST ANY STRUCTURES, WING WALLS OR RETAINING WALLS WITHIN FOURTEEN DAYS OF CASTING. STRUT WALLS AS NECESSARY TO PREVENT MOVEMENT DURING PLACING AND COMPACTION.  
PLACE AND COMPACT FILLING OVER AND AROUND PIPES, CULVERTS, BRIDGES AND OTHER STRUCTURES SO AS TO AVOID UNBALANCED LOADING OR MOVEMENT  
UNLESS OTHERWISE DETAILED BACKFILL AT STRUCTURES SHALL BE FILLED AS FOLLOWS  
WHERE THE GAP BETWEEN THE STRUCTURE AND UNDISTURBED GROUND EXCEEDS 2M, BACKFILL THE ZONE WITHIN 2M OF THE STRUCTURE WITH CLASS 3 FINE CRUSHED ROCK AND BACKFILL IN THE ZONE BEYOND 2M OF THE STRUCTURE WITH SELECT FILL TO THE APPROVAL OF THE SUPERINTENDENT OR CLASS 3 FINE CRUSHED ROCK.  
UNLESS OTHERWISE DETAILED, MATERIAL WITHIN 300MM OF WEEPHOLES SHALL BE AN APPROVED GRANULAR FILTER MEDIUM OF COARSE SAND OR CRUSHED STONE WRAPPED AND SURROUNDED WITH AN APPROVED GEOTEXTILE SEPARATION LAYER

E13  
HORIZONTAL  
NO POINT SHALL BE GREATER THAN + OR - 100MM FROM THE DESIGN LOCATION.  
VERTICAL  
SUBGRADE LEVEL -0, ±25MM  
PAVEMENT DESIGN SUBGRADE  
LEVEL -0, ±25MM  
OTHER -50, ±50MM  
STRAIGHTNESS (EXCLUDES ROCK): MAXIMUM 20MM DEPARTURE FROM 3M STRAIGHT EDGE LAID  
- PARALLEL TO ROAD CENTRE LINE  
- NORMAL TO INTENDED CONTOURS

E14  
AREAS UPON WHICH FILLS ARE TO BE CONSTRUCTED, ALL LAYERS OF FILLING, AND MATERIALS LESS THAN 150MM BELOW PERMANENT SUBGRADE LEVEL, IN CUTTINGS, SHALL BE COMPACTED SO AS TO BE CAPABLE OF WITHSTANDING TEST ROLLING, WITHOUT VISIBLE DEFORMATION OR SPRINGING, WITH A PNEUMATIC TYRED ROLLER OR HIGHWAY TRUCK BALLASTED TO COMPLY WITH THE FOLLOWING  
PNEUMATIC TYRED - NOT LESS THAN 3 TIER TYRE WITH TYRES INFLATED TO 550 KPA  
HIGHWAY TRUCK - WITH REAR AXLE OR AXLES LOADED TO NOT LESS THAN 8 T EACH WITH TYRES INFLATED TO 550 KPA  
TEST ROLLING SHALL BE CARRIED OUT IMMEDIATELY BEFORE OVERLYING LAYERS ARE PLACED  
WHERE TEST ROLLING IS REQUIRED AT SOME LATER DATE, THE SURFACE SHALL BE MOISTURE CONDITIONED AS REQUIRED AND GIVEN NOT LESS THAN FOUR COVERAGES OF THE TEST ROLLER BEFORE TEST ROLLING COMMENCES

E15  
THE WORK SHALL NOT BE ACCEPTED AS COMPLETE UNLESS ALL TEST RESULTS ARE PROVIDED TO THE SUPERINTENDENT THE CONTRACTOR SHALL PROVIDE ALL MATERIAL PROPERTY AND QUALITY TEST RESULTS TO THE SUPERINTENDENT

THE CONTRACTOR SHALL LAISE DIRECTLY WITH ALL SERVICE AUTHORITIES INVOLVED AND SHALL COMPLY WITH ALL THEIR REGULATIONS AND REQUIREMENTS

C2  
ALL LEVELS SHOWN ARE TO AUSTRALIAN HEIGHT DATUM, UNLESS STATED OTHERWISE. ALL COORDINATES SHOWN ARE TO AUSTRALIAN MAP GRID, UNLESS STATED OTHERWISE

C3  
SERVICE INFORMATION SHOWN IS BASED ON PLANS SUPPLIED AND IS APPROXIMATE ONLY. ACTUAL LOCATION CAN ONLY BE DETERMINED BY EXCAVATION. THE CONTRACTOR SHALL LAISE WITH SERVICE AUTHORITIES FOR SERVICE LOCATIONS. THE CONTRACTOR SHALL PROTECT ALL SERVICES AND SHALL RECTIFY ANY DAMAGE AT HIS EXPENSE

C4  
ALL WORKS IN PUBLIC LANDS SHALL BE TO THE APPROVAL AND SATISFACTION OF THE RELEVANT AUTHORITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND OBTAINING RELEVANT AUTHORITY WRITTEN APPROVAL OF THE WORKS

C5  
EXISTING SURFACE CONTOURS SHOWN ARE INTERPOLATED FROM SPOT HEIGHTS AND ARE APPROXIMATE ONLY

C6  
UNLESS OTHERWISE NOTED, ALL VEGETATION SHALL BE STRIPPED TO A MINIMUM DEPTH OF 75MM UNDER ALL PAVEMENT AND BUILDING AREAS

C7  
PRIOR TO PLACEMENT OF ANY FILLS, PAVEMENT OR BUILDINGS, THE EXPOSED SUB-GRADE SHALL BE COMPACTED TO THE SPECIFIED STANDARD MAXIMUM DRY DENSITY FOR THE DEPTH SPECIFIED, ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH APPROVED FILL AND COMPACTED AS SPECIFIED. SUBGRADE SHALL BE PROOF ROLLED, AS SPECIFIED

C8  
ALL FILL REQUIRED SHALL BE APPROVED FILL MATERIAL AND SHALL BE COMPACTED IN 150MM MAXIMUM COMPACTED THICKNESS LAYERS TO THE DENSITIES SPECIFIED, UNLESS SHOWN OTHERWISE ON THE DRAWINGS

C9  
THE CONTRACTOR SHALL KEEP THE SITE WELL DRAINED AND COMPLETELY FREE OF STANDING WATER AT ALL TIMES

C10  
GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. (FINISHED SURFACE CONTOURS ARE SHOWN FOR CLARITY ONLY.) WHERE FINISHED SURFACE SPOT LEVELS ARE NOT SHOWN THE SURFACE SHALL BE GRADED SMOOTHLY SO THAT IT WILL DRAIN FREELY, AND TO MATCH THE LEVELS OF ADJACENT SURFACES OR STRUCTURES

C11  
DOWNPIPES SHALL BE CONNECTED TO PITS OR STORMWATER PIPES WITH EARTHENWARE OR SEWER CLASS PVC PIPES (DIAMETER AS INDICATED BY DOWNPIPE SIZE ON ARCHITECTURAL OR ENGINEERING DRAWINGS) AT A MINIMUM GRADE OF 1:100. MINIMUM 300MM COVER, UNLESS OTHERWISE SHOWN.

C12  
ALL CONCRETE STORMWATER PIPES SHALL BE CLASS 2 WITH RUBBER RING JOINTS IN ACCORDANCE WITH A S 4058, OR A S 4139

C13  
ALL PVC STORMWATER PIPES SHALL BE SEWER GRADE IN ACCORDANCE WITH A S 1260.

C14  
ALL DIMENSIONS AND SET OUTS SHOWN ARE EITHER TO FACE OF BUILDING, GRID LINES OR FACE OF KERB (IN LINE OF KERB), UNLESS SHOWN OTHERWISE

C15  
CONTRACTOR SHALL BE ISSUED AN ELECTRONIC COPY OF THE CIVIL DETAIL PLANS IN AUTOCAD DWG FORMAT FOR SET OUT PURPOSES. ALL DIMENSIONS SHOWN ON PLAN SHALL OVER RIDE SET OUT POINTS SELECTED FROM ELECTRONIC FILE PROVIDED

C16  
ALL CUT BATTERS TO BE 1V:1N H UNLESS OTHERWISE NOTED

C17  
ALL FILL BATTERS TO BE 1V:1N H UNLESS OTHERWISE NOTED

C18  
ALL SURFACE DAMAGED DUE TO CONSTRUCTION WORK SHALL BE REINSTATED TO THE SATISFACTION OF THE SUPERINTENDENT

C19  
SAWCUT EXISTING KERB/KERB & CHANNEL AND PAVING WHERE NEW WORKS ARE TO MATCH EXISTING WORKS

C20  
BUILDING AND SITE MAINTENANCE PROGRAM IS TO INCORPORATE REGULAR FLUSHING OF ALL STORMWATER PITS, PIPES, DOWNSPIES, SUB-SOIL DRAINS AND ASSOCIATED FITTINGS TO AVOID BLOCKAGES WITHIN THE SYSTEM.

A DETAILED LEVEL AND FEATURE SURVEY HAS BEEN UNDERTAKEN FOR THIS SITE  
BY: KIPROVICH & ASSOCIATES PTY LTD

REF NO. 07\_113A  
DATE: 07/05/2002

109865-00-MIE000	COVER SHEET, GENERAL NOTES & INDEX
109865-00-MIE100	STORMWATER MANAGEMENT PLAN
109865-00-MIE150	OSD TANK 2 AND DETAILS
109865-00-MIE151	OSD TANK 3 AND DETAILS

ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE CURRENT EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS

AS 1260 UNPLASTICISED PVC (UPVC) PIPES AND FITTINGS FOR SEWERAGE APPLICATIONS

AS 1597 PRECAST REINFORCED CONCRETE BOX CULVERTS

PART 1 - SMALL CULVERTS (NOT EXCEEDING 1200MM WIDTH AND 900MM DEPTH)

AS 1631 CAST IRON NON-PRESSURE PIPES AND PIPE FITTINGS

AS 1650 GALVANISED COATINGS

AS 1657 SAA CODE FOR FIXED PLATFORMS, WALKWAYS, STAIRWAYS AND LADDERS

AS 2032 CODE OF PRACTICE FOR INSTALLATION OF UPVC PIPE SYSTEMS

AS 2439 PERFORATED PLASTICS DRAINAGE AND EFFLUENT PIPE FITTINGS

PART 1 - PERFORATED DRAINAGE PIPE AND ASSOCIATED FITTINGS

AS 3503 NATIONAL PLUMBING AND DRAINAGE CODE, PART 3, STORMWATER DRAINAGE

AS 3725 LOADS ON BURIED CONCRETE PIPES

AS 3996 METAL ACCESS COVERS, ROAD GRATES AND FRAMES

AS 4058 PRECAST CONCRETE PIPES (PRESSURE AND NON-PRESSURE)

AS 4139 FIBRE REINFORCED CONCRETE PIPES AND FITTINGS

D2

THE CONTRACTOR SHALL COMPLY WITH THE 'MINES (TRENCHES) REGULATIONS 1982' FOR ALL SHORING, SUPPORTS OF TRENCHES, QUALIFICATIONS OF PERSONNEL AND NOTIFICATION TO THE RESPONSIBLE AUTHORITY

D3

TRENCHES MUST BE KEPT CLEAR OF WATER AT ALL TIMES AND TIMBERED WHERE NECESSARY TO PREVENT COLLAPSE

D4

SUITABLE SAFETY BARRIERS SHALL BE PROVIDED AROUND THE EXCAVATION AT ALL TIMES. THE BARRIERS SHALL BE SUITABLY DEFINED BY APPROVED LIGHTING DURING THE APPROPRIATE LIGHT UP TIME FOR THE AREA

D5

PIPES SHALL BEAR EVENLY ON THE BED PREPARED AS SPECIFIED ABOVE AND LAID WITH THE SOCKETS POINTED UPWARDS. ALL PIPES SHALL BE LAID IN STRAIGHT LINES, TO TRUE INVERT LEVELS AND GRADES AS SHOWN ON PLANS. EACH PIPE SHALL BE SEPARATELY ROBED BETWEEN ACCURATELY ESTABLISHED GRADE POINTS. THE CONTRACTOR SHALL ADHERE TO THE DRAWINGS AND SHALL NOT BE PERMITTED TO VARY THE LINE, LEVELS OR LOCATION OF THE DRAIN WITHOUT THE SUPERINTENDENT'S WRITTEN APPROVAL

D6

ALL PIPE JOINTING SHALL BE CARRIED OUT IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS FOR THE TYPE OF PIPE BEING USED

D7

WHERE ANY PIPE IS CUT INTO A LARGER PIPE, SUCH CONNECTION SHALL BE NEATLY MADE AND NO PART OF THE PIPE OR DOWNPIPE SHALL BE ALLOWED TO PROJECT. ANY CUT-IN JUNCTION SHALL BE MADE IN THE TOP HALF OF THE LARGER PIPE. SUCH JOINTS TO CONCRETE PIPES SHALL BE SURROUNDED WITH A NEAT COLLAR OF CEMENT MORTAR AS DIRECTED OR AS DETAILED ON THE DRAWINGS. JUNCTIONS BETWEEN PVC PIPES SHALL USE PROPRIETARY FITTINGS INTENDED FOR THE PURPOSE

D8

THE ENDS OF PIPES WHICH CONNECT WITH SIDE ENTRY, JUNCTION OR OTHER PITS SHALL BE NEATLY CUT TO FIT THE INNER FACE OF THE CONCRETE. WHERE UPVC PIPES ENTER/LEAVE PITS A RUBBER RING JOINT MANHOLE COUPLING SHALL BE CAST INTO THE PIT WALL

BEDDING, HAUNCH AND OVERLAY MATERIALS SHALL CONFORM TO THE DETAILS SHOWN ON THE DRAWINGS

D9

ALL PITS AND ENDWALLS SHALL BE CONSTRUCTED IN THE POSITIONS AND TO THE LEVELS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE SUPERINTENDENT

PIT COVERS SHALL BE PLACED IN ACCORDANCE WITH THE DETAIL SITE PLANS AND PIT SCHEDULE (IF PROVIDED) IN REGARD TO TYPE, SIZE, LOCATION AND LEVEL

THE BASE OF EACH PIT SHALL BE INFILLED AND SHAPED WITH CONCRETE OR CEMENT MORTAR TO PROVIDE A SMOOTH FLOW PATH

D10

ALL DOWNPIPES SHALL BE CONNECTED TO AT THE END OF A PIPE OR ELBOW AND WHICH THEY SHALL ENTER CENTRALLY

WHERE PVC DOWNPIPES AND UNDERGROUND DRAINAGE ARE USED, THE DOWNPIPES SHALL BE CONNECTED TO THE UNDERGROUND DRAINS WITH SUITABLE STANDARD FITTINGS, BENDS ETC AND WITH SOLVENT JOINTS

THE CONTRACTOR SHALL LAY AND GRADE DRAINS FROM DOWNPIPES TO COMPLY WITH THE REQUIREMENTS FOR PIPE MATERIAL AND COVER REQUIRED BY AS3500.3 WHERE THE REQUIREMENTS OF AS3500.3 CANNOT BE MET THE CONTRACTOR SHALL REFER THE MATTER TO THE SUPERINTENDENT

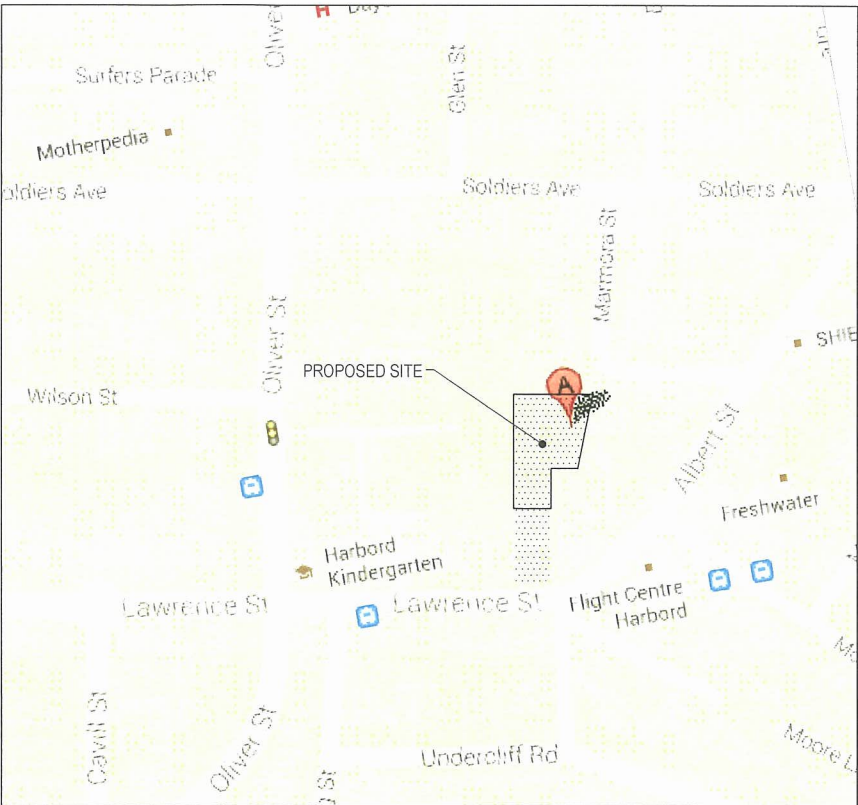
D11

SUPPLY APPARATUS AND MATERIALS NECESSARY FOR, AND CARRY OUT THE TESTS REQUIRED BY THE SPECIFICATION OR REGULATORY AUTHORITIES, IN THE PRESENCE OF THE SUPERINTENDENT AND THE RELEVANT AUTHORITY. LEAVE PIPE JOINTS EXPOSED TO ENABLE OBSERVATION DURING THE TESTS

ENSURE SAA SOLVENT CEMENT JOINTS HAVE BEEN CURED FOR AT LEAST 24 HOURS BEFORE TESTING

D12

THE CONTRACTOR SHALL PRESSURE TEST WITH WATER, ALL STORMWATER PIPEWORK IN OR UNDER THE STRUCTURE, IN ACCORDANCE WITH AS 3500.3



LOCALITY PLAN  
NOT TO SCALE

THIS PLAN TO BE READ IN  
CONJUNCTION WITH  
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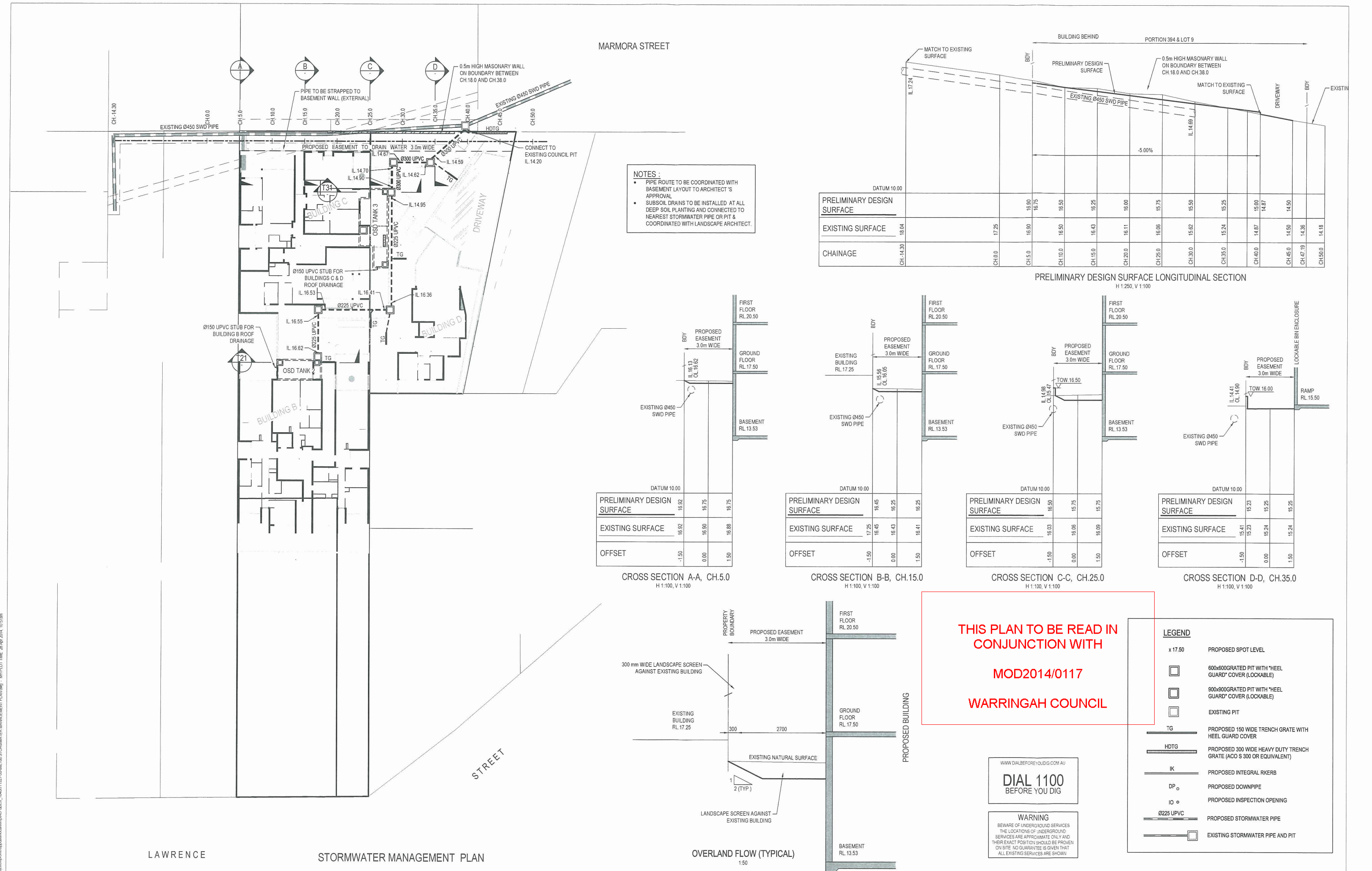
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MAC	QD	MAC	1:250
STATUS: FOR DA APPROVAL NOT FOR CONSTRUCTION			

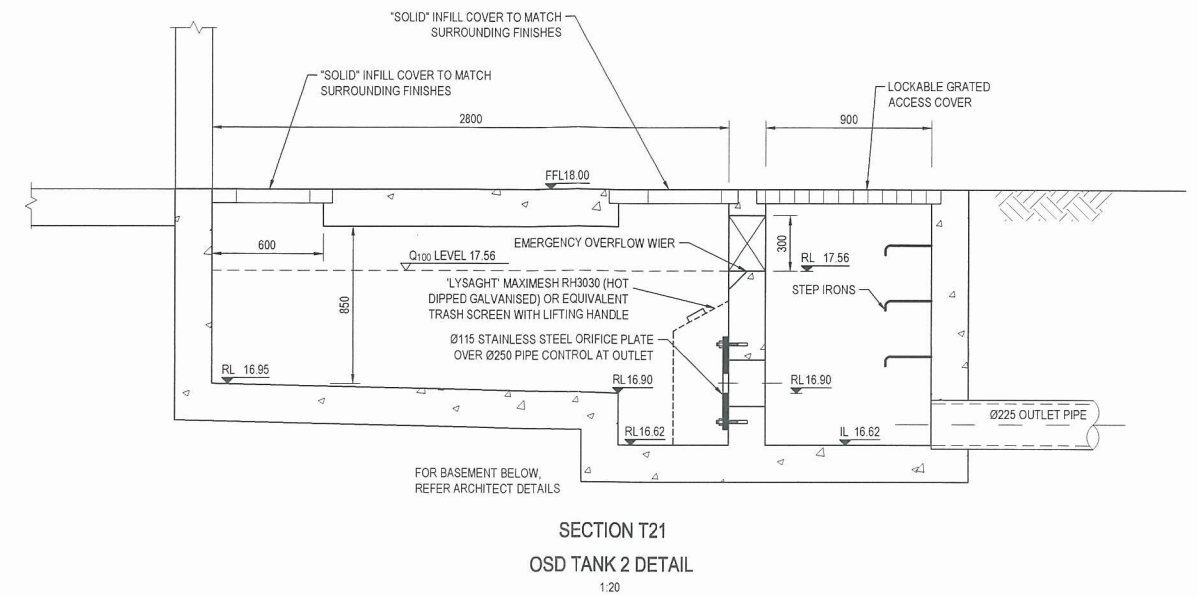
PROJECT	HARBORD 18 MARMORA STREET HARBORD, NSW		NORTH 
TITLE	COVER SHEET, GENERAL NOTES & INDEX	PROJECT No 111927-00-MIE000	DRAWING No REV 00



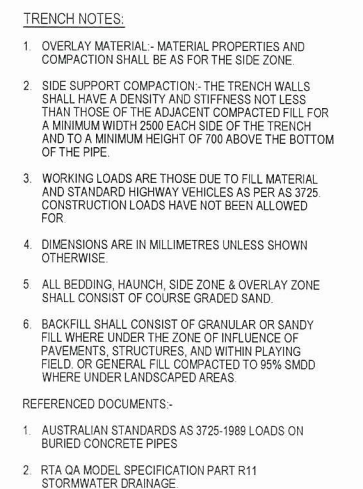
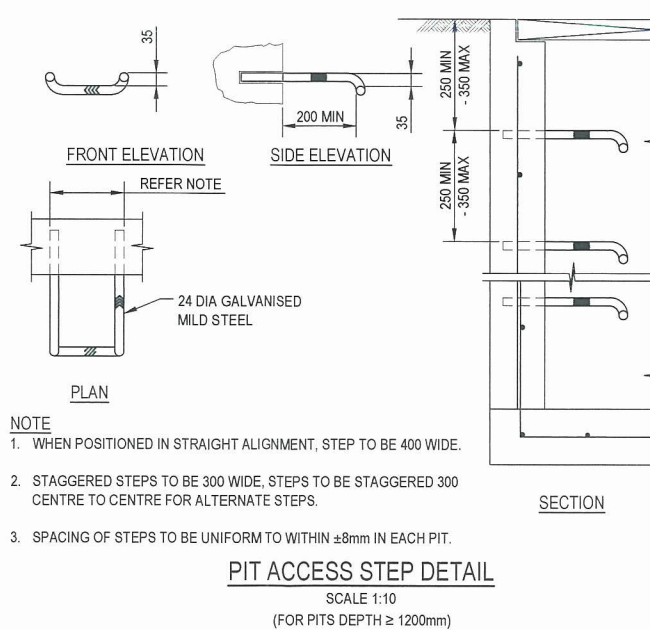
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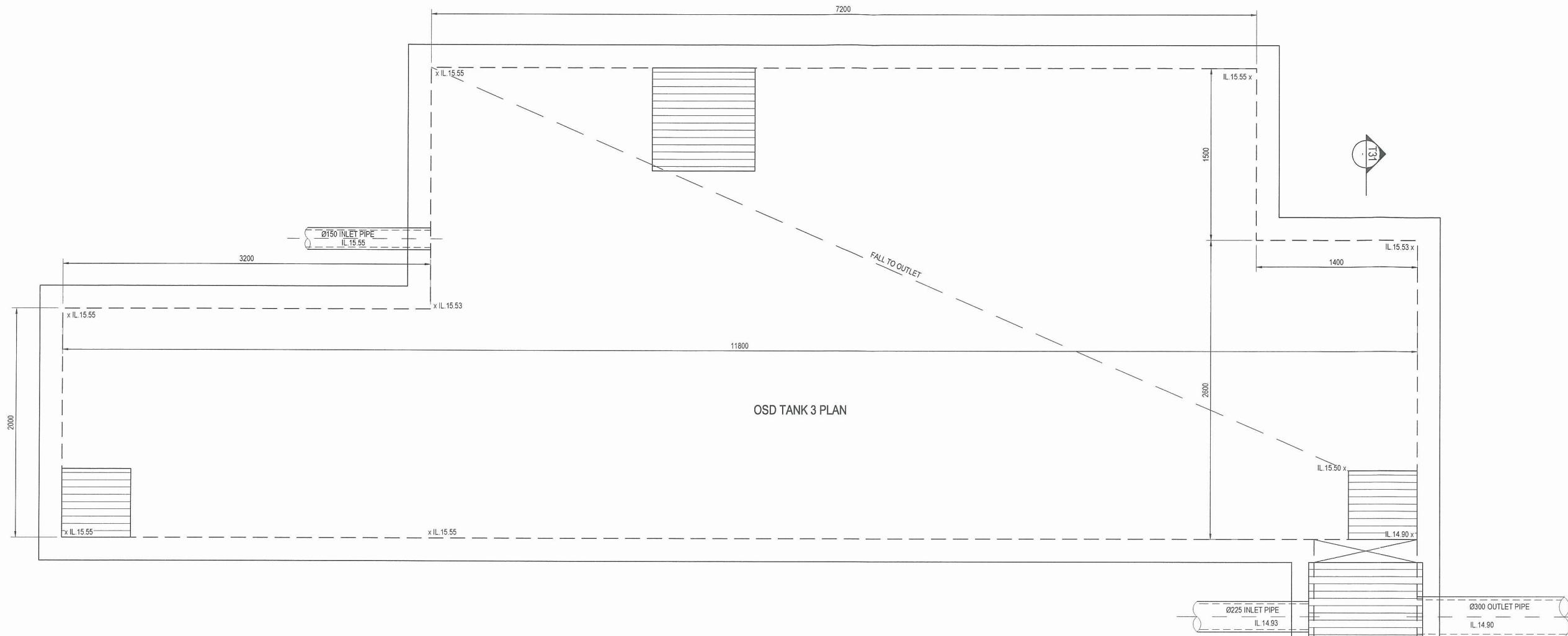




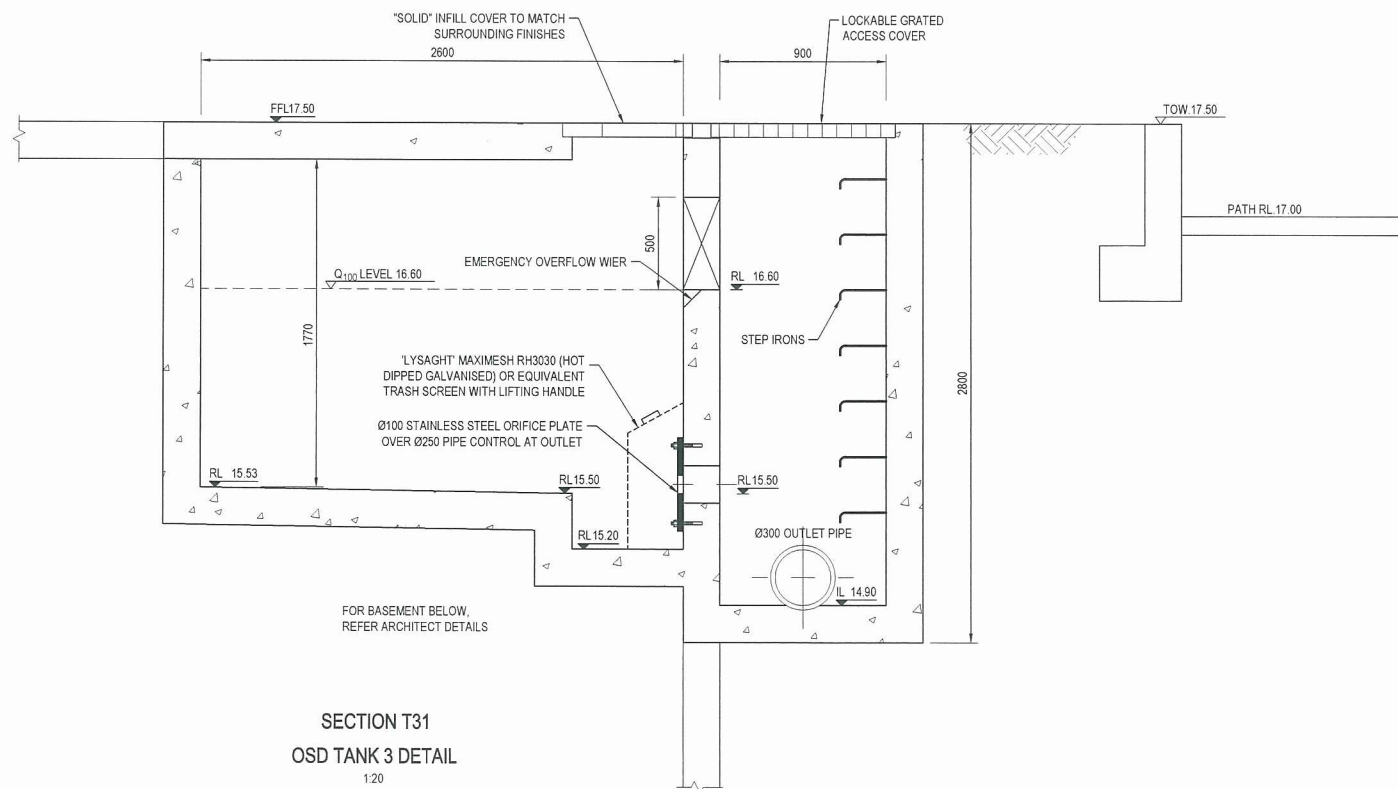


- **OSD TANK 2 DESIGN PARAMETERS**
  - CATCHMENT AREA (BUILDING B ROOF AND SURROUNDING) = 650 m<sup>2</sup>
  - 100 YEAR OSD TANK STORAGE VOLUME = 12.0 m<sup>3</sup>
  - MAX OSD TANK DISCHARGE RATE = 27 L/s
  - ORIFICE PLATE = Ø115 mm
- **OSD TANK 3 DESIGN PARAMETERS**
  - CATCHMENT AREA (BUILDING C & D ROOF AND SURROUNDING) = 1063 m<sup>2</sup>
  - 100 YEAR OSD TANK STORAGE VOLUME = 43.5 m<sup>3</sup>
  - MAX OSD TANK DISCHARGE RATE = 32 L/s
  - ORIFICE PLATE = Ø100 mm
- **LANDSCAPE AREA (BYPASS FLOW)**
  - CATCHMENT AREA = 340 m<sup>2</sup>
  - MAX 100 YEAR DISCHARGE = 23 L/s
- PREDEVELOPMENT 5 YEAR FLOW = 88 L/s
- POST DEVELOPMENT 100 YEAR FLOW = 84 L/s

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OSD TANK 3 PLAN

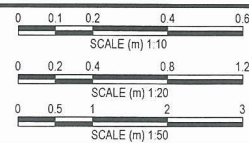


SECTION T31  
OSD TANK 3 DETAIL  
1:20

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CONJUNCTION WITH  
  
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- OSD TANK 2 DESIGN PARAMETERS**
- CATCHMENT AREA (BUILDING B ROOF AND SURROUNDING) = 650 m<sup>2</sup>
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- CATCHMENT AREA = 340 m<sup>2</sup>
  - MAX 100 YEAR DISCHARGE = 23 L/s
- PREDEVELOPMENT 5 YEAR FLOW** = 88 L/s  
**POST DEVELOPMENT 100 YEAR FLOW** = 84 L/s

REV	DESCRIPTION	BY	APP	DATE
00	ISSUED FOR DA APPROVAL	OD	MAC	10/04/14



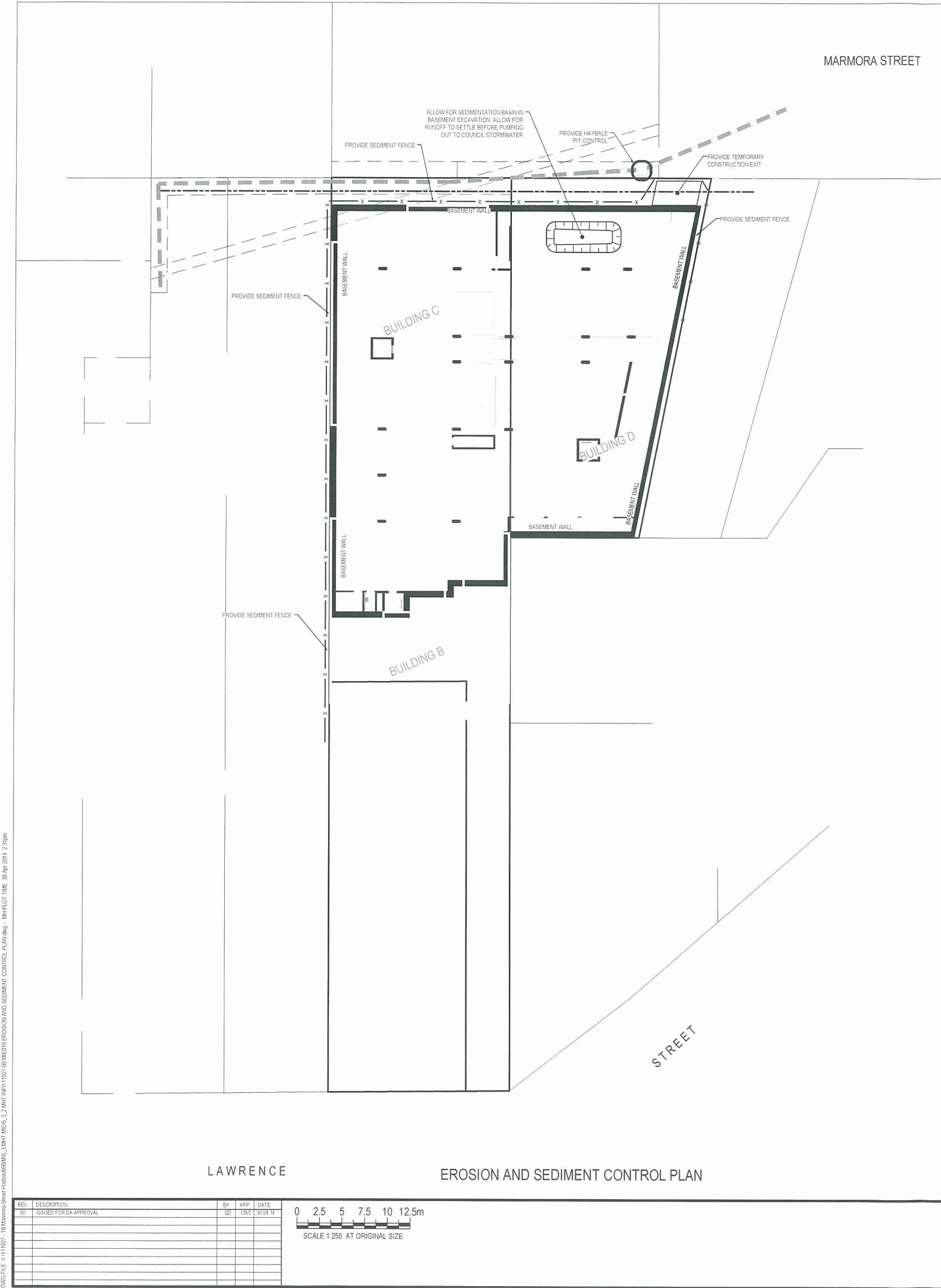
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PROJECT	HARBORD 18 MARMORA STREET HARBORD, NSW			NORTH
TITLE	OSD TANK 3 AND DETAILS			REV
PROJECT No	111927-00-MIE151			00
DRAWING No				

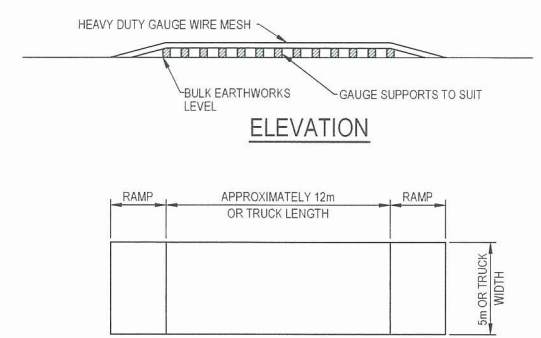


DWG FILE: X:\11927\_18 Marmora Street\Hatch\00 EROSION AND SEDIMENT CONTROL PLAN.dwg - 18M PLOT TIME: 30 Apr 2014, 2:30pm



**LEGEND**

- HAYBALE FILTER (SD 6-7)
- SEDIMENT FENCE (SD 6-8)
- TEMPORARY CONSTRUCTION EXIT



**TEMPORARY CONSTRUCTION EXIT  
(WASH DOWN DETAIL)**

SCALE 1:200

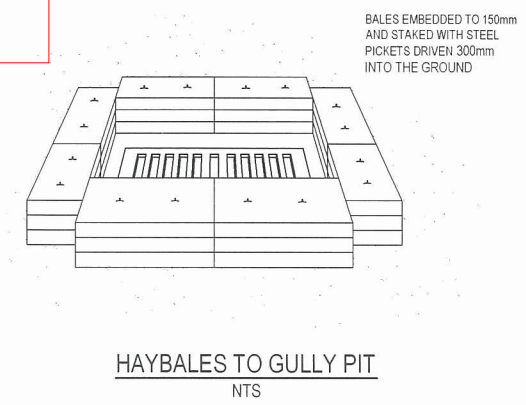
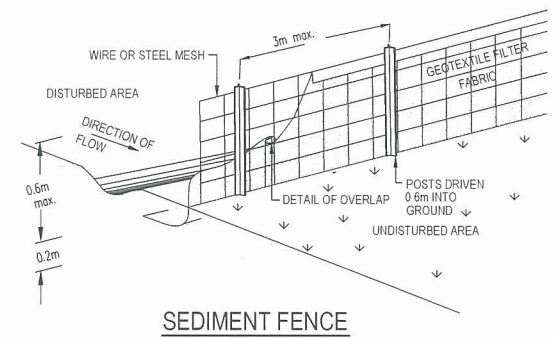
THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY. THIS MAY REQUIRE REPAIR AND OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY MUST BE REMOVED IMMEDIATELY.

**THIS PLAN TO BE READ IN  
CONJUNCTION WITH**

**MOD2014/0117**

**WARRINGAH COUNCIL**

- EROSION AND SEDIMENT CONTROLS**
- ES1 ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS
  - (B) APPLICABLE - POLLUTION CONTROL MANUAL FOR URBAN STORMWATER
  - (C) DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT MANUAL - "URBAN EROSION & SEDIMENT CONTROL"
  - (D) NSW PROTECTION OF THE ENVIRONMENT ACT 1997
  - ES2 THE CONTRACTOR SHALL PREPARE EROSION AND SEDIMENT CONTROL DRAWINGS AND NOTES FOR THE WHOLE OF THE WORKS. SHOULD THE CONTRACTOR STAGE THESE WORKS THEN THE DESIGN MAY REQUIRE TO BE MODIFIED. VARIATION TO THESE DETAILS MAY REQUIRE TO BE APPROVED BY THE RELEVANT AUTHORITIES. THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE IMPLEMENTED AND ADOPTED TO MEET THE VARYING SITUATIONS AS WORK ON SITE PROGRESSES
  - ES3 MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY AS APPROPRIATE (IE PRIVATE / PUBLIC LAND)
  - ES4 AS STORMWATER PITS ARE CONSTRUCTED PREVENT SITE RUNOFF ENTERING. ERECT SILT FENCES AROUND PITS
  - ES5 MINIMISE THE AREA OF SITE DISTURBED AT ANY ONE TIME
  - ES6 PROTECT ALL STOCKPILES OF MATERIALS FROM SCOUR AND EROSION. DO NOT STOCKPILE LOOSE MATERIAL IN ROADWAYS, NEAR DRAINAGE PITS OR IN WATERCOURSES.
  - ES7 ALL SOIL AND WATER CONTROL MEASURES ARE TO BE PUT BACK IN PLACE AT THE END OF EACH WORKING DAY, AND MODIFIED TO BEST SUIT SITE CONDITIONS
  - ES8 CONTROL WATER FROM UPSTREAM OF THE SITE SO THAT IT DOES NOT ENTER THE DISTURBED SITE
  - ES9 ALL CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE SITE VIA THE AGREED TEMPORARY CONSTRUCTION ENTRY/EXIT
  - ES10 ALL VEHICLES ASSOCIATED WITH CIVIL WORKS SHALL BE CLEANED AND INSPECTED BY THE CONTRACTOR BEFORE LEAVING THE SITE
  - ES11 MAINTAIN ALL STORMWATER PIPES AND PITS CLEAR OF DEBRIS AND SEDIMENT. THE CONTRACTOR SHALL INSPECT STORMWATER SYSTEM AND CLEAN OUT AFTER EACH STORM EVENT AND / OR WHEN DIRECTED
  - ES12 THE CONTRACTOR SHALL CLEAN OUT ALL EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH STORM EVENT
  - ES13 SETTLEMENT OF DISPERSED FINES IN WET BASIN. AFTER EVERY STORM EVENT THE COLLECTED RUNOFF IS TO BE TREATED WITH AN APPROVED FLOCCULANT TO REDUCE THE SUSPENDED SOLIDS TO LESS THAN 50mg/L AND PUMPED TO AN APPROVED OUTLET AS DIRECTED BY THE SUPERINTENDENT



REV	DESCRIPTION	BY	APP	DATE
00	ISSUED FOR DA APPROVAL	QD	MAC	30/04/14



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STATUS	FOR DA APPROVAL NOT FOR CONSTRUCTION

PROJECT	HARBORD 18 MARMORA STREET HARBORD, NSW
TITLE	EROSION AND SEDIMENT CONTROL PLAN
PROJECT No	111927-00-MIE010
DRAWING No	00
REV	00