

48 NEW ORLEANS CRESCENT, MAROUBRA

AFFORDABLE HOUSING DEVELOPMENT CIVIL ENGINEERING PLANS - D.A. STAGE






SITE LOCALITY PLAN

SOURCE : MAPS.SIX.NSW.GOV.AU (@2023)

DRAWING SCHEDULE	
DRG No.	DRAWING TITLE
DA01	COVER SHEET, DRAWING SCHEDULE AND SITE LOCALITY PLAN
DA02	CONCEPT EROSION AND SEDIMENT CONTROL PLAN
DA03	SITE CATCHMENT AREA PLAN
DA04	CONCEPT SITEWORKS, GRADING AND STORMWATER DRAINAGE PLAN

NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DESIGN	DRAWN	CHECKED	VERIFIED	DATE	CLIENT	ARCHITECT	ALL SETOUT TO ARCHITECT'S DRAWINGS. DIMENSIONS TO BE VERIFIED WITH THE ARCHITECT OR COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.	PROJECT	DRAWING TITLE	JOB NUMBER		
01	ISSUED FOR CO-ORDINATION	B.M.S.	L.M.	C.N.		15/11/23	 Homes NSW	 <div>© Integrated Design Group Pty Ltd ABN 64 115 006 329 Nominated Architect Simon Thorne reg. no. 7093 info@idgarchitects.com.au www.idgarchitects.com.au</div>	 <div>Wollongong Level 1, 57 Kembla Street, Wollongong NSW 2500 Ph (02) 4226 3333 Fax (02) 4226 3666 P.O. Box 863, Wollongong, NSW 2500 Email southcoast@northrop.com.au ABN 81 094 433 100</div>	RESIDENTIAL FLAT BUILDING 48 NEW ORLEANS CRESENT MAROUBRA	COVER SHEET, DRAWING SCHEDULE AND SITE LOCALITY PLAN	231039		
02	ISSUED FOR CO-ORDINATION	B.M.S.	L.S.M	R.S.	08/02/24	DRAWING NUMBER						REVISION		
03	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	B.M.S.	L.M.	R.S.	D.H.	07/03/24						DA01	03	
							DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD.						
												DRAWING SHEET SIZE = A1		

ANDWICK

NO. 50
REND. BRICK HOUSE
(TILE ROOF)

PREGOLA

CARPORT

LOBBY

BRICK HOUSE
(TILE ROOF)

NO. 90
BRICK HOUSE
(TILE ROOF)

2 - STOREY
BRICK UNITS
GARAGES UNDER
(TILE ROOF)

DRAWN: J. WINDWOOD-SMITH
DESIGNED: B. SAWYER
JOB MANAGER: B. SICKLING
VERIFIER:


REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR 50%	JWS		BMS	06.12.24
2	REVISED FOR 50%	JWS		RS	19.12.24



CLIENT


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ARCHITECT




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PLANS 1:100@A1



0 1 2 3 4 5m

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PROJECT

RESIDENTIAL FLAT BUILDING
LAHC - 48 NEW ORLEANS CRESCENT
MAROUBRA NSW 2035

DRAWING TITLE

EXTERNAL CIVIL WORKS
CONCEPT SEDIMENT & EROSION
PLAN


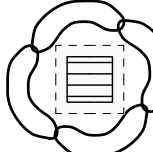

JOB NUMBER

231039

DRAWING NUMBER	REVISION
C102.01	2

DRAWING SHEET SIZE = A1

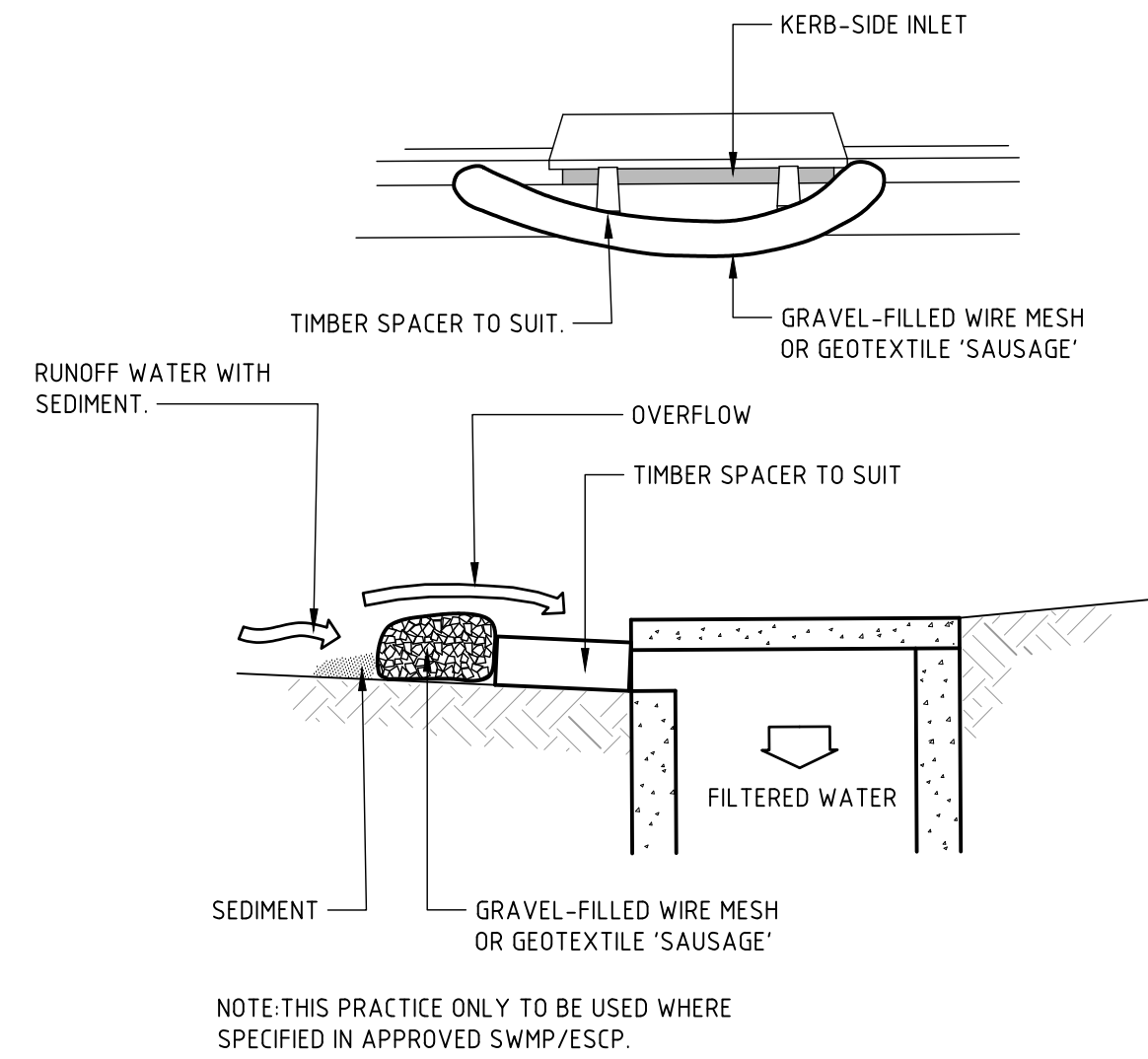
LEGEND

-  DENOTES SITE BOUNDARY LINE
-  INDICATES MESH & GRAVEL INLET FILTER
INSTALLED IN ACCORDANCE WITH DETAILS
SD6-11 OF THE BLUE BOOK
-  DENOTES SANDBAG or GEOTEXTILE SOCK FILLED WITH
NO FINES GRAVEL PLACED IN INVERT OF GUTTER OR
ALONG EDGE OF BITUMEN

SEDIMENT & EROSION CONTROL NOTES

- ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH RELEVANT ORDINANCES AND REGULATIONS. NOTE IN PARTICULAR THE REQUIREMENTS OF LANDCOMS MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION (THE 'BLUE BOOK').
- INSTALL SEDIMENT PROTECTION FILTERS ON ALL NEW AND EXISTING STORMWATER INLET PITS IN ACCORDANCE WITH EITHER THE MESH AND GRAVEL INLET FILTER DETAIL SD6-11 OR THE GEOTEXTILE INLET FILTER DETAIL SD6-12 OF THE 'BLUE BOOK'.
- ESTABLISH ALL REQUIRED SEDIMENT FENCES IN ACCORDANCE WITH DETAIL SD6-8 OF THE 'BLUE BOOK'.
- INSTALL SEDIMENT FENCING AROUND INDIVIDUAL BUILDING ZONES/AREAS AS REQUIRED AND AS DIRECTED BY THE SUPERINTENDENT.
- ALL TRENCHES INCLUDING ALL SERVICE TRENCHES AND SWALE EXCAVATION SHALL BE SIDE-CAST TO THE HIGH SIDE AND CLOSED AT THE END OF EACH DAYS WORK.
- THE CONTRACTOR SHALL ENSURE THAT ALL VEGETATION (TREE, SHRUB & GROUND COVER) WHICH IS TO BE RETAINED SHALL BE PROTECTED DURING THE DURATION OF CONSTRUCTION. REFER ARCHITECT'S PLANS FOR TREES TO BE KEPT.
- ALL VEGETATION TO BE REMOVED SHALL BE MULCHED ONSITE AND SPREAD/STOCKPILED AS DIRECTED BY THE SUPERINTENDENT.
- STRIP TOPSOIL IN AREAS DESIGNATED FOR STRIPPING AND STOCKPILE FOR RE-USE AS REQUIRED. ANY SURPLUS MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH EPA GUIDELINES.
- CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OFF SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW SIDE).
- ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. PROVIDE WIND AND RAIN EROSION PROTECTION AS REQUIRED IN ACCORDANCE WITH THE 'BLUE BOOK'.
- PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST.
- ONCE CUT/FILL OPERATIONS HAVE BEEN FINALIZED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS IS PRACTICAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION & SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL BE UPDATED ON A DAILY BASIS & SHALL CONTAIN DETAILS ON THE CONDITION OF CONTROLS AND ANY/ ALL MAINTENANCE, CLEANING & BREACHES. THIS RECORD SHALL BE KEPT ON-SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS.

THE CONTRACTOR SHALL ENSURE COUNCIL ASSETS AND THE UTILITIES ARE PROTECTED AT ALL TIMES. ANY AND ALL DAMAGES TO COUNCIL ASSETS AND/OR UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SPECIFICATION OF COUNCIL AND THE UTILITIES AUTHORITY AND AT NO COST TO THE PRINCIPAL OR NORTHROP CONSULTING ENGINEERS.



CONSTRUCTION NOTES

- INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
- FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
- FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
- PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
- FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
- SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

MESH AND GRAVEL INLET FILTER (SD 6-11)



NOTE THAT ORIGINAL DRAWING IS IN COLOUR

NOT FOR CONSTRUCTION

ANDWICK

NO. 50
REND. BRICK HOUSE
(TILE ROOF)

234
509.4 m²
D P 3 6 3 4 5

235
D P 3 6 3 4 5

NO. 90
BRICK HOUSE
(TILE ROOF)

2 - STOREY
BRICK UNITS
GARAGES UNDER
(TILE ROOF)

REFER TO INTERNAL CIVIL WORKS DRAWINGS FOR WORK
INTERNAL TO THE SITE BOUNDARY.

EXISTING VEHICULAR CROSSING TO
BE DEMOLISHED AND VERGE TO BE
REINSTATED IN ACCORDANCE WITH
COUNCIL STANDARDS.

PROPOSED VEHICULAR CROSSING TO
BE CONSTRUCTED IN ACCORDANCE
WITH COUNCIL STANDARDS.

200 x 100 RHS OUTLET TO KERB
TO BE PROVIDED IN ACCORDANCE
WITH COUNCIL STANDARDS.
ILu/s: 14.080
ILe/s: 14.040

LEGEND

- DENOTES SITE BOUNDARY LINE
- DENOTES PROPOSED RESIDENTIAL VEHICLE ACCESS CROSSING, REFER TO DETAILS
- DENOTES PROPOSED FOOTPATH PAVEMENT, REFER TO DETAIL
- DENOTES PROPOSED FINISHED SURFACE LEVEL
- DENOTES PROPOSED COVER LEVEL
- DENOTES EXISTING SURFACE LEVEL
- DENOTES STORMWATER LINE & SIZE. LAID @ 1% MIN LONGITUDINAL GRADE, 300mm MIN COVER.
- DENOTES TRAFFICABLE EXPANSION JOINT, REFER TO DETAIL
- DENOTES TRAFFICABLE DOWELED JOINT, REFER TO DETAIL
- DENOTES FOOTPATH DOWELED JOINT, REFER TO DETAIL
- DENOTES TRAFFICABLE SAWN/CONTRACTION JOINT, REFER TO DETAIL
- DENOTES BARRIER KERB & CHANNEL IN ACCORDANCE WITH COUNCIL GUIDELINES
- DENOTES EXISTING BARRIER KERB & CHANNEL TO BE RETAINED
- DENOTES PAVEMENT INTERFACE (& TYPE), REFER TO DETAIL
- DENOTES MATCH TO EXISTING LEVELS
- DENOTES APPROXIMATE LOCATION OF EXISTING (OVERHEAD) ELECTRICITY LINE
- DENOTES APPROXIMATE LOCATION OF EXISTING ELECTRICITY LINE
- DENOTES APPROXIMATE LOCATION OF EXISTING TELECOMMUNICATION LINE
- DENOTES APPROXIMATE LOCATION OF EXISTING WATER MAIN
- DENOTES APPROXIMATE LOCATION OF EXISTING SEWER MAIN

LOCATIONS OF EXISTING SERVICES ARE APPROXIMATE ONLY & MAY NOT BE COMPLETE. THE BUILDER IS RESPONSIBLE FOR LOCATING EXISTING INFRASTRUCTURE (CULVERTS, PITS, PIPES, SERVICES, INVERT & COVER LEVELS ETC) PRIOR TO COMMENCING CONSTRUCTION.

THE BUILDER SHALL ALLOW TO MODIFY ALL EXISTING SERVICE COVERS TO MATCH THE NEW PAVEMENTS, IN ACCORDANCE WITH THE RELEVANT AUTHORITIES REQUIREMENTS.

PROVIDE TEMPORARY TRAFFIC CONTROL IN ACCORDANCE WITH STATE & FEDERAL STATUTORY REQUIREMENTS AND LOCAL COUNCIL SPECIFICATIONS/REQUIREMENTS

NOTE: ALL LEVELS TO AUSTRALIAN HEIGHT DATUM (AHD). ORIGIN OF LEVELS SSM 35846, RL 12.222

NOTE THAT ORIGINAL DRAWING IS IN COLOUR



NOT FOR CONSTRUCTION

DRAWN: J WINWOOD-SMITH
DESIGNED: B SAWYER
JOB MANAGER: B SUCKLING
VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR 50%	JWS		BMS	06.12.24
2	REVISED FOR 50%	JWS		RS	19.12.24

CLIENT

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ARCHITECT

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PLANS 1:100@A1

0 1 2 3 4 5m

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LAHC - 48 NEW ORLEANS CRESCENT
MAROUBRA NSW 2035

DRAWING TITLE

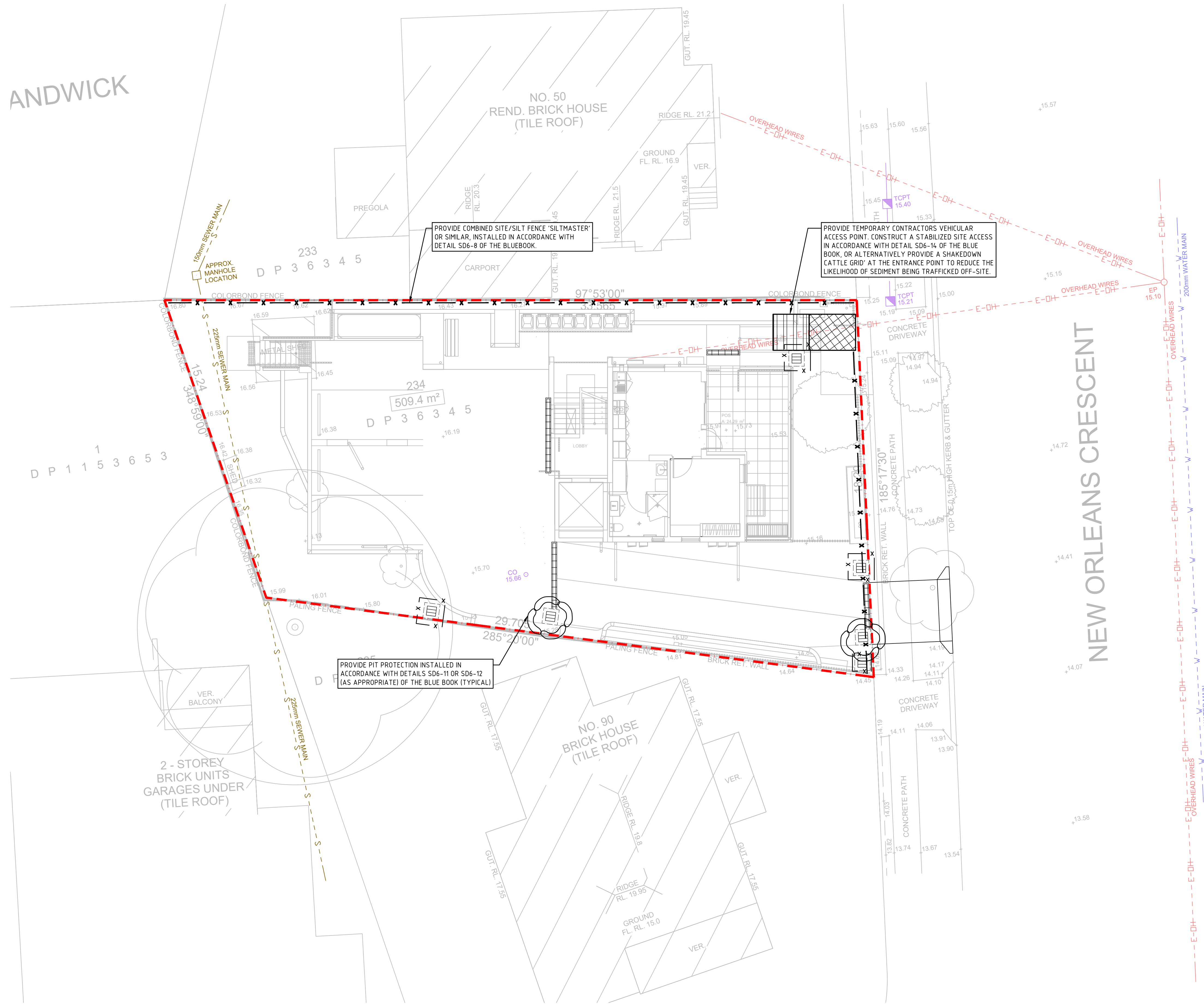
EXTERNAL CIVIL WORKS
STORMWATER MANAGEMENT
& LEVELS PLAN

JOB NUMBER
231039


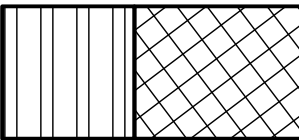
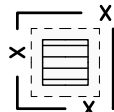


DRAWING NUMBER C103.01	REVISION 2
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DRAWING SHEET SIZE = A1

ANDWICK



LEGEND

- 
 DENOTES COMBINED SITE/SILT FENCE "SILT MATTER" OR SIMILAR, INSTALLED IN ACCORDANCE WITH DETAIL SD6-8 OF THE BLUEBOOK.
- 
 DENOTES TEMPORARY CONTRACTORS VEHICULAR ACCESS POINT. CONSTRUCT A STABILISED SITE ACCESS IN ACCORDANCE WITH DETAIL SD6-14 OF THE BLUE BOOK OR PROVIDE A SHAKEDOWN CATTLE GRID AT ENTRANCE POINT TO REDUCE LIKELIHOOD OF SEDIMENT BEING TRAFFICKED OFF-SITE
- 
 DENOTES GEOTEXTILE INLET FILTER INSTALLED IN ACCORDANCE WITH DETAIL SD6-12 OF THE BLUE BOOK
- 
 INDICATES MESH & GRAVEL INLET FILTER INSTALLED IN ACCORDANCE WITH DETAILS SD6-11 OF THE BLUE BOOK
- 
 DENOTES SANDBAG OR GEOTEXTILE SOCK FILLED WITH NO FINES GRAVEL PLACED IN INVERT OF GUTTER OR ALONG EDGE OF BITUMEN

SEDIMENT & EROSION CONTROL NOTES

1. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH RELEVANT ORDINANCES AND REGULATIONS, NOTE IN PARTICULAR THE REQUIREMENTS OF LANDSCAPES MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION' (THE 'BLUE BOOK').
2. INSTALL SEDIMENT PROTECTION FILTERS ON ALL NEW AND EXISTING STORMWATER INLET PITS IN ACCORDANCE WITH EITHER THE MESH AND GRAVEL INLET FILTER DETAIL SD6-11 OR THE GEOTEXTILE INLET FILTER DETAIL SD6-12 OF THE 'BLUE BOOK'.
3. ESTABLISH ALL REQUIRED SEDIMENT FENCES IN ACCORDANCE WITH DETAIL SD6-8 OF THE 'BLUE BOOK'.
4. INSTALL SEDIMENT FENCING AROUND INDIVIDUAL BUILDING ZONES/AREAS AS REQUIRED AND AS DIRECTED BY THE SUPERINTENDENT.
5. ALL TRENCHES INCLUDING ALL SERVICE TRENCHES AND SWALE EXCAVATION SHALL BE SIDE-CAST TO THE HIGH SIDE AND CLOSED AT THE END OF EACH DAYS WORK.
6. THE CONTRACTOR SHALL ENSURE THAT ALL VEGETATION (TREE, SHRUB & GROUND COVER) WHICH IS TO BE RETAINED SHALL BE PROTECTED DURING THE DURATION OF CONSTRUCTION. REFER ARCHITECTS PLANS FOR TREES TO BE KEPT.
7. ALL VEGETATION TO BE REMOVED SHALL BE MULCHED ON SITE AND SPREAD/STOCKPILED AS DIRECTED BY THE SUPERINTENDENT.
8. STRIP TOPSOIL IN AREAS DESIGNATED FOR STRIPPING AND STOCKPILE FOR RE-USE AS REQUIRED. ANY SURPLUS MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH EPA GUIDELINES.
9. CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OFF SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW SIDE).
10. ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. PROVIDE WIND AND RAIN EROSION PROTECTION AS REQUIRED IN ACCORDANCE WITH THE 'BLUE BOOK'.
11. PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST.
12. ONCE CUT/FILL OPERATIONS HAVE BEEN FINALIZED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS IS PRACTICAL.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION & SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL BE UPDATED ON A DAILY BASIS & SHALL CONTAIN DETAILS ON THE CONDITION OF ALL CONTROLS AND ANY MAINTENANCE, CLEANING & BREACHES. THIS RECORD SHALL BE KEPT ON SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS.

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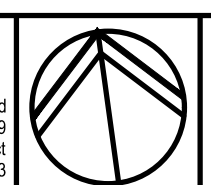
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JOB NUMBER	
231039	
DRAWING NUMBER	REVISION
C2.01	2
DRAWING SHEET SIZE = A1	

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR 50%	JWS		RS	06.12.24
2	REVISED FOR 50%	JWS		RS	19.12.24

CLIENT	
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<p>ARCHITECT</p> <div style="display: flex; align-items: center; justify-content: center; height: 100px;"> <div style="margin-left: 20px;"> <p>INTEGRATED DESIGN GROUP</p> <p><small>ARCHITECTS ENGINEERS INTERIORS</small></p> </div> </div>	<p>© Integrated Design Group Pty Ltd ABN 84-115 005 320 Nominated Architect Simon Thorne reg. no. 7095</p> <p>info@idgarchitects.com.au www.idgarchitects.com.au</p>
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PROJECT

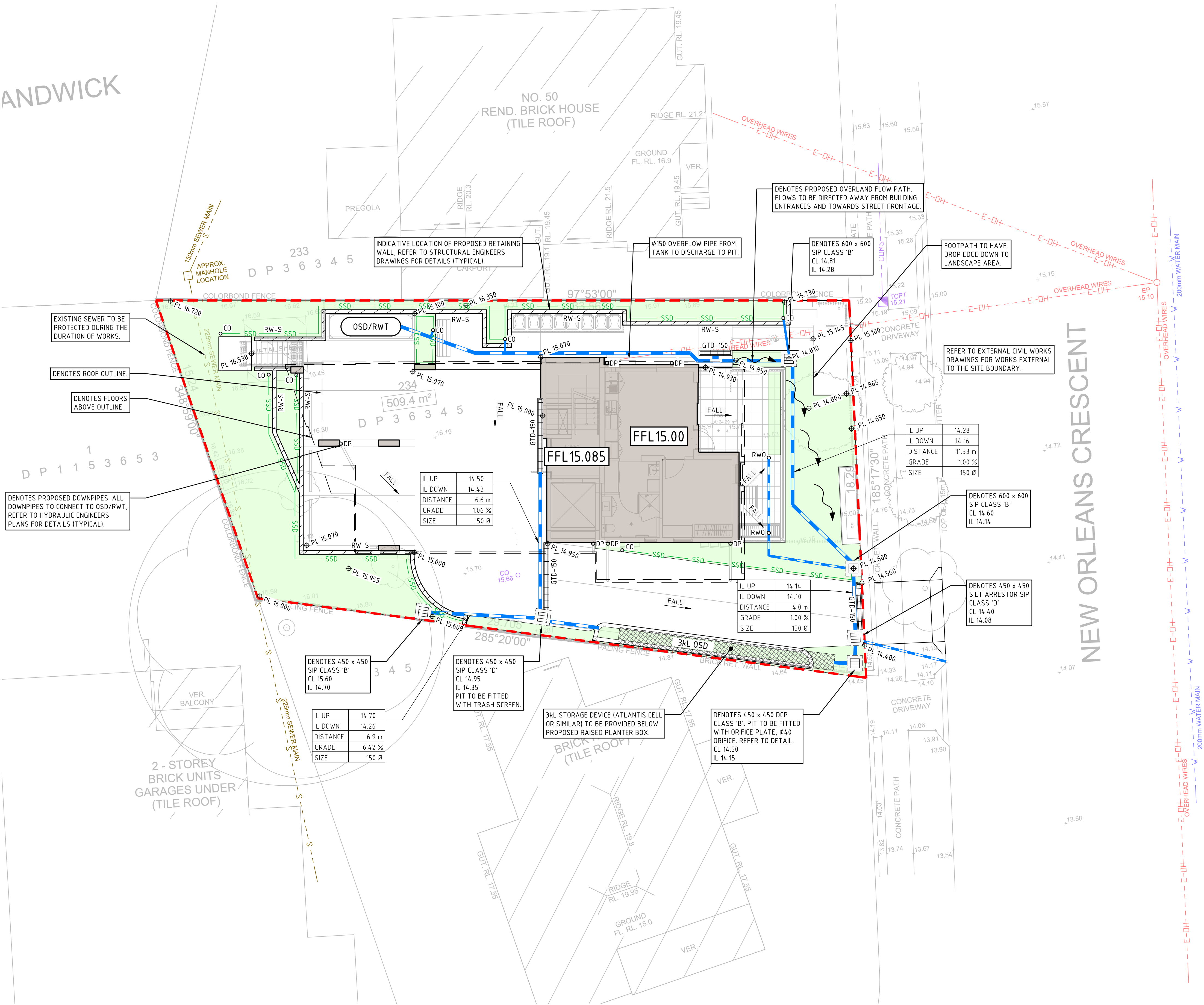
RESIDENTIAL FLAT BUILDING
LAHC - 48 NEW ORLEANS CRESCENT
MAROUBRA NSW 2035

DRAWING TITLE

**INTERNAL CIVIL WORKS
CONCEPT SEDIMENT & EROSION
PLAN**

ANDWICK

NO. 50
REND. BRICK HOUSE
(TILE ROOF)



LEGEND

- DENOTES SITE BOUNDARY LINE
- DENOTES PROPOSED BUILDING EXTENTS, REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR DETAILS
- DENOTES PROPOSED FINISHED FLOOR LEVEL
- DENOTES PROPOSED FINISHED SURFACE LEVEL
- DENOTES PROPOSED COVER LEVEL
- DENOTES EXISTING SURFACE LEVEL
- DENOTES STORMWATER PIT (NEW / EXISTING) NOTE: ON-GRADE PITS ARE TO HAVE GRATES SET ON-GRADE TO MATCH SURFACE GRADING.
- DENOTES GRATED TRENCH DRAIN & WIDTH
- DENOTES BELOW GROUND ON-SITE DETENTION TANK, REFER TO DETAIL
- DENOTES ABOVE GROUND REUSE/ ON-SITE DETENTION TANK, WITH 10kL COMBINED CAPACITY. HARVESTED RAINWATER TO BE USED FOR IRRIGATION, REFER TO DETAIL.
- DENOTES STORMWATER LINE & SIZE. LAID @ 1% MIN LONGITUDINAL GRADE, 300mm MIN COVER.
- DENOTES Ø100 SUBSOIL DRAINAGE LINE WITH NON-WOVEN GEOTEXTILE FILTER SOCK SURROUND LAID AT MIN 1% LONGITUDINAL GRADE & CONNECTED TO NEAREST STORMWATER PIT. PROVIDE uPVC S8 FOR SUBSOIL DRAINAGE LINES UNDER PAVEMENT
- DENOTES SUBSOIL DRAINAGE CLEAROUT, REFER TO DETAIL
- DENOTES APPROXIMATE DOWNPIPE LOCATION, REFER TO ARCHITECTURAL & HYDRAULIC ENGINEERS DRAWINGS TO CONFIRM LOCATIONS
- DENOTES OVERLAND FLOW PATH
- DENOTES RETAINING WALL TO STRUCTURAL ENGINEERS DETAILS
- DENOTES APPROXIMATE LOCATION OF EXISTING (OVERHEAD) ELECTRICITY LINE
- DENOTES APPROXIMATE LOCATION OF EXISTING TELECOMMUNICATION LINE
- DENOTES APPROXIMATE LOCATION OF EXISTING WATER MAIN
- DENOTES APPROXIMATE LOCATION OF EXISTING SEWER MAIN
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- PROVIDE TEMPORARY TRAFFIC CONTROL IN ACCORDANCE WITH STATE & FEDERAL STATUTORY REQUIREMENTS AND LOCAL COUNCIL SPECIFICATIONS/REQUIREMENTS
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INTEGRATED DESIGN GROUP

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PLANS 1:100@A1

0 1 2 3 4 5m

NORTHROP

Central Coast

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Ph. (02) 4365 1668
Email centralcoast@northrop.com.au ABN 81 094 433 100

PROJECT

RESIDENTIAL FLAT BUILDING
LAHC - 48 NEW ORLEANS CRESCENT
MAROUBRA NSW 2035

DRAWING TITLE

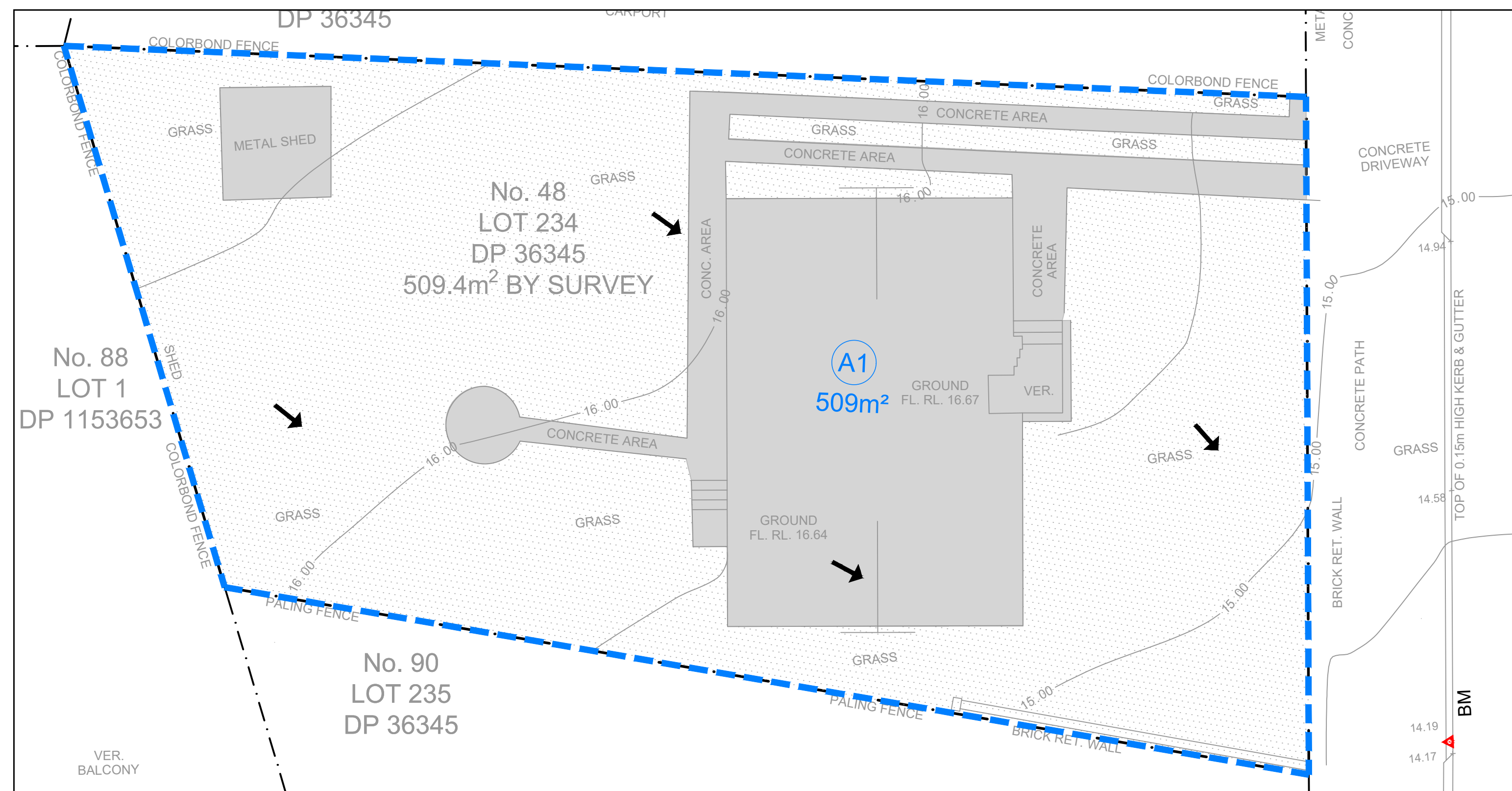
INTERNAL CIVIL WORKS
STORMWATER MANAGEMENT
& LEVELS PLAN

JOB NUMBER

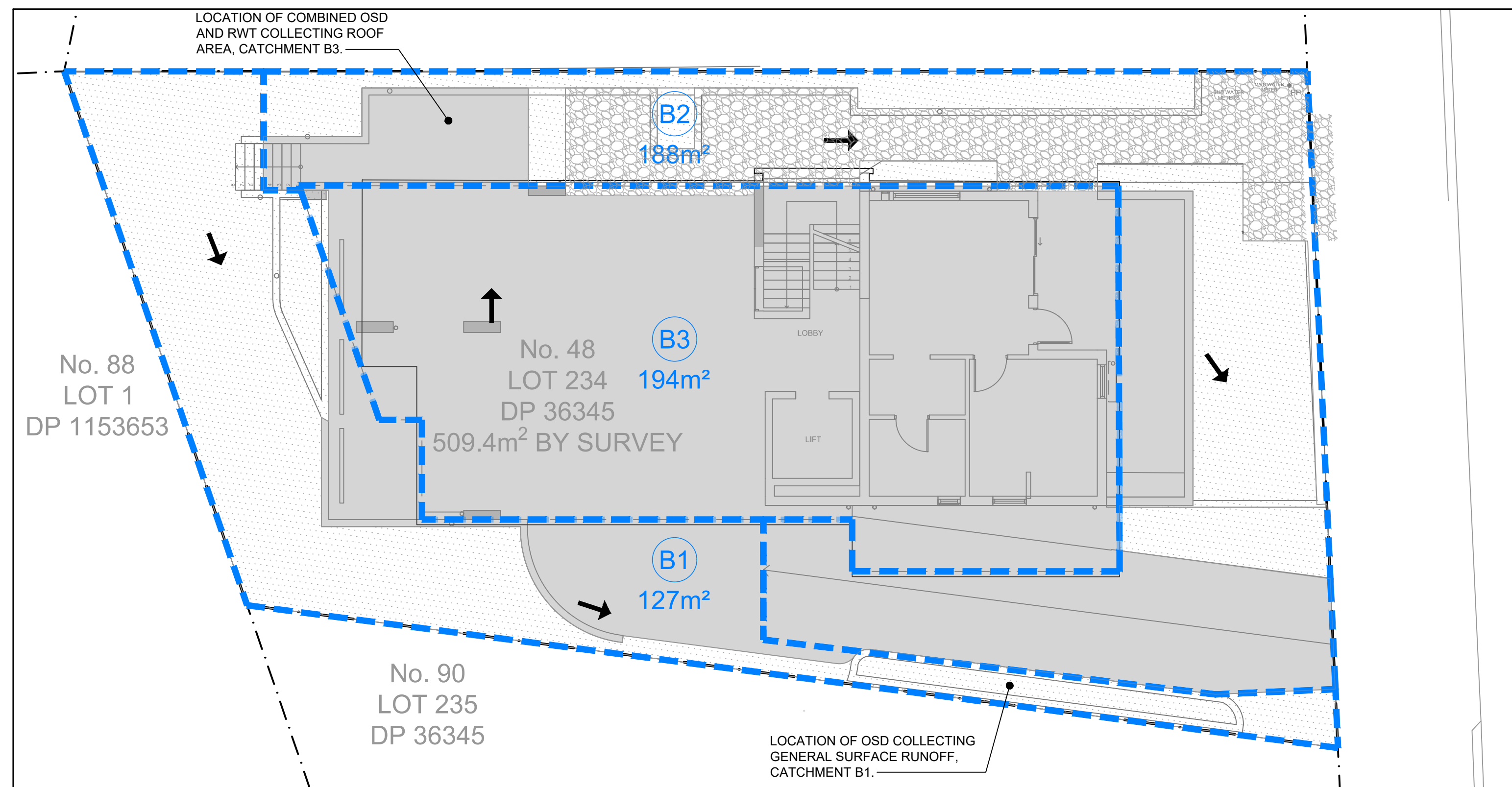
231039

DRAWING NUMBER	REVISION
C3.01	2

DRAWING SHEET SIZE = A1



Land use/surface type	Total area (m²)	Impervious Area (m²)		Pervious Area (m²)	
		(m²)	(%)	(m²)	(%)
Pre-development Scenario					
Residential Area	419	59	14%	360	86%
- Landscaped	360	0	0%	360	100%
- Impervious	59	59	100%	0	0%
Roof area	90	90	100%	0	0%
TOTAL	509	149	29%	360	71%
Post-development Scenario					
B1 To OSD	127	58	46%	69	54%
- Landscaped	69	0	0%	69	100%
- Impervious	58	58	100%	0	0%
B2 By-pass Area	188	106	57%	82	43%
- Residential Area	99	39	40%	60	60%
- Impervious	45	45	100%	0	0%
- Permeable Pavers	44	22	50%	22	50%
B3 Roof Area to OSD/RWT	194	194	100%	0	0%
TOTAL	509	359	70%	150	30%



Mass Curve Calculation for on-Site Detention (as per Randwick Council Requirements)




Site area	509 m2
Pre-development impervious area	149 m2
Post-development impervious area	359 m2
 Pre-development impervious %	 29.3 %
Post-development impervious %	70.5 %
 PSD Recurrence Interval (5/10)	 10 yr
 Predevelopment runoff coefficient	 0.692
Predevelopment rainfall intensity	63 mm/h
 Permissible Site Discharge	 8.91 L/s piped
 Volume Recurrence Interval (20/100)	 20 yr
 Postdevelopment runoff coefficient	 0.854

Duration min	Intensity mm/h	Discharge L/s	PSD L/s	Storage Volume m3
5	213	25.71	8.91	5.04
10	167	20.12	8.91	6.73
20	127	15.35	8.91	7.73
30	106	12.76	8.91	6.94
40	91.4	11.04	8.91	5.11
50	81.0	9.77	8.91	2.60
60	72.9	8.81	8.91	-0.37
70	66.5	8.03	8.91	-3.68
120	47.2	5.70	8.91	-23.11

Take required storage as **8 m³**

SUMMARY OF OSD AND PSD CALCULATION RESULTS USING MASS CURVE CALCULATION

NOT FOR CONSTRUCTION

REV.	DESCRIPTION	DESIGN	DRAWN	CHECKED	VERIFIED	DATE	CLIENT	ARCHITECT		PROJECT	DRAWING TITLE	JOB NUMBER
01	ISSUED FOR CO-ORDINATION	B.M.S.	L.M.	C.N.		15/11/23	 Homes NSW	 INTEGRATED DESIGN GROUP © Integrated Design Group Pty Ltd ABN 64 115 009 329 Notified Architect Simon Thorne reg. no. 70931 info@idgarchitects.com.au www.idgarchitects.com.au	 NORTHROP Wollongong Level 1, 57 Kembla Street, Wollongong NSW 2500 Ph (02) 4226 3333 Fax (02) 4226 3666 P.O. Box 963, Wollongong, NSW 2500 Email southcoast@northrop.com.au ABN 81 094 433 100	RESIDENTIAL FLAT BUILDING 48 NEW ORLEANS CRESENT MAROUBRA	SITE CATCHMENT AREA PLAN	JOB NUMBER 231039
02	ISSUED FOR CO-ORDINATION	B.M.S.	M.B.	R.S.	08/02/24	DRAWING NUMBER DA03						REVISION 03
03	ISSUED FOR DEVELOPMENT APPLICATION APPROVAL	B.M.S.	L.M.	R.S.	06/03/24							
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