
ANNEXURE 3

Traffic Report



Traffic Impact Assessment

82-90 Canterbury Road, Lewisham – S75W
Modification

Reference: 12.282r01v04

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Appendices

Appendix A:	Reduced Plans
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1. Introduction

Traffix has been commissioned by Meriton Group to undertake a traffic impact assessment in support of Section 75W Modification to the approved Concept Plan for 82-90 Old Canterbury Road, Lewisham. This report therefore documents the changes now proposed to the Concept Plan and should be read in conjunction with the previous Transport Management Accessibility Plan (TMAP) and subsequent addendum prepared for the approved concept plan application.

The report is structured as follows:

-  Section 2: Describes the changes to the concept plan application
-  Section 3: Parking provisions
-  Section 4: Discusses traffic impacts
-  Section 5: Discusses the access and design aspects
-  Section 6: Presents the overall study conclusions.

2. Concept Application Plan

2.1 Approved Concept Plan Application

The approved Concept Plan development related to the establishment of a mixed use development for residential, commercial and retail uses with associated car parking facilities and public domain improvements, as follows:

- Development of an internal road network to serve individual buildings, which will form part of the public road network;
- Creation of individual sites to be developed in stages, with a resulting development yield as follows:
 - A maximum of 430 residential units, including 19 SOHO units; and
 - 739m² of general (neighbourhood) retail area

2.2 Proposed Concept Plan

The proposal has been substantially reduced as a result of ongoing detailed design and now proposes the following components, with the relative change from the previously approved Concept Plan outlined in brackets () for ease of reference:

- Development of an internal road network to serve individual buildings, which will form part of the public road network. It is noted that basement access to the building is no longer proposed via William Street.
- Creation of individual sites to be developed in stages, with a resulting development yield as follows:
 - A total of 365 residential units, including 3 studio, 136 one bedroom, 213 two bedroom 13 three bedroom units. (a reduction of 65 units); and

- 226m² of general (neighbourhood) retail, including 125m² retail and 101m² cafe floor area (a reduction of 513m²)

The traffic implications associated with the now proposed development are discussed in more detail in Section 4. Reference should also be made to the reduced plans, included in **Appendix A**.

3. Car Parking

The approved concept plan requires car parking to be provided at the rates indicated in **Table 1**, below, which is based on the bedroom yields as indicated by the schedule of areas included in Appendix A.

Table 1: Approved Concept Parking Requirements

Type	Area / No.	Council Parking Rates	Spaces Required
<i>Residential</i>			
Studio & 1 Bedroom	139	1 / 4 units	35
2 Bedroom	213	1 / unit	213
3 Bedroom	13	1 / unit	13
Visitors	365	1 / 10 units	37
Retail & Restaurant (Cafe)	226m ²	1 / 45m ²	5
Totals			303

A total of 303 parking spaces are nominally required under the parking rates approved under the Concept Plan. Two basement levels are proposed which is expected to accommodate this required parking and therefore all necessary car parking can be readily accommodated with these basement levels with additional space available for accessible parking, bicycle parking and/or storage being available, as necessary.

Nevertheless, the proposed car parking layout is considered a detailed matter that can readily be addressed as part of a subsequent development application(s).

4. Traffic Implications

4.1 Proposed Traffic Generation

Residential

The 365 residential units proposed will generate in the order of 106 vehicle trips per hour during peak periods based on trip rate of 0.29 trips per unit, as recommended by the Roads & Maritime Services (RMS) *Guide to Traffic Generating Developments*. In this regard, the subject site is unique in that it has excellent access to bus, rail and future light rail services, with a restrained parking provision. The adoption of reduced parking in close proximity to excellent public transport services is also considered to be sound transport policy, aimed at reducing car travel, particularly for the journey to work.

Retail

The RMS's *Guide to Traffic Generating Developments* recommends a trip rate of 4.6 trips/100m² for secondary retail. However, a trip rate of 2.3 trips/100m² has been adopted for the purposes of this assessment (as per the original concept plan) which takes the following into consideration:

- Car parking for the proposed retail uses is limited and will be substantially less than that envisaged under the RMS's Guide; and
- The relatively small size of the retail area is expected to service a very localised market, including the subject site whereby many visitors will be able to walk to the site. Furthermore, any moderate use of private vehicles would be expected to occur as part of a 'linked trip' thereby reducing the effect of additional traffic associated with this use.

Having regard for the above, the retail uses will generate in the order of only 5 vehicles per hour, with the majority of these movements related to staff arrivals and departures.

Combined Traffic Generation

The proposed development will generate in the order of 111 vehicle trips per hour during peak periods.

4.2 Traffic Impacts

The previous modelling undertaken as part of the TMAP assessment prepared in support of the approved concept plan adopted a peak hour traffic generation of 200 vehicles per hour associated with the subject site. As such, it can be seen that the previous modelling significantly overstated the traffic volumes associated with the yields now envisaged for the development.

Furthermore, these significant reductions in traffic volumes are considered to off-set any potential implications associated with the redistribution of traffic associated with the removal of the previously proposed basement access to William Street. In this regard, additional modelling is not considered necessary as a result of the proposed modifications.

5. Access & Internal Design Aspects

Access to the site is proposed via a single basement ramp to Hudson Street along the western site boundary. This is generally consistent with the original application, with the following noteworthy exceptions:

- ② A secondary vehicle access to William Street is no longer proposed.
- ② The basement ramp to Hudson Street will now provide basement level service vehicle parking for up to 3 service vehicle spaces. The reduced driveway gradients permitted for commercial vehicle access has resulted in this drive structure commencing in a north-south direction along the western site boundary.

These access arrangements are generally considered supportable and will operate safely and efficiently. Reference should be made to the swept paths included in **Appendix B** which demonstrate access to the site and proposed loading area by up to 8.8m medium rigid vehicles. The availability of vehicles to this size to service the subject development, particularly in relation to garbage collection, shall be confirmed at detailed design stage, prior to construction.

The design of the basement car park is generally in accordance with AS2890.1 and AS2890.6 for accessible parking spaces and will be subject to further review at detailed design and development application stage.

6. Conclusions

In summary:

- Car parking is to be provided as per the car parking rate approved under the original Concept Plan approval and can be readily accommodated within the two (2) basement car parking levels proposed.
- The reduced development yield will result in traffic generation of up to 111 vehicles per hour during peak periods associated with the development. This equates to a net reduction of 89 vehicles per hour from the previous modelling undertaken in support of the previously approved Concept Plan which assessed the impacts of the development based on a site traffic generation of 200 vehicles per hour. As such, the now proposed development is also supportable on traffic planning grounds.
- The reduced traffic generation associated with the site is considered to off-set any redistribution of traffic resulting from the removal of the William Street site access driveway.

It is therefore concluded that the proposed development concept envisaged under the amended Concept Plan is supportable on traffic planning grounds and the proposed development will operate satisfactorily.

Appendix A

Reduced Plans

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NOTE FOR BIDDING WORK:

FIRE GRADE PLASTERBOARD WITH A PERIMETER SMOKE SEAL

- LIFT SHAFT - 240/120/120
- FIRE STAIRS - 120/120
- VENTILATION & GARBAGE SHAFTS - 120/120

COMMERCIAL & RETAIL LEVELS:

- LIFT SHAFT -160/120/120
- FIRE STAIRS -120/120
- VENTILATION & GARBAGE SHAFTS -120/120
- FIRE STAIR DOORS -60/30

- LIFT SHAFT - \$0.90/90
- FIRE STAIRS - \$0.90/90
- VENTILATION & GARBAGE SHAFTS - \$0.90/90
- FIRE STAIR DOORS - \$0.30
- GARBAGE ROOM DOORS - \$0.30
- FIRE STAIR DOORS - \$0.30

N.B.: ALL F.R.L.'S RELATE TO NON-LOADBEARING CONSTRUCTION AS APPLICABLE. CODE DEFINITION (STRUCTURAL ADEQUACY/INTEGRITY/INSULATION)

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PROJECT :

LEWIS & CLARK

LEVIATHAN
78-90 OLD CANTERBURY ROAD

LEWISHAM.

LOWER GROUND - ARCH

DATE:	SCALE	DRAWING NO.	REV:
11/10/2012	1:250	@A1	

AUG 2012	PROJECT NO:	A2003-#-GL
DRAWN BY:		

AUTHOR	864
DO NOT SCALE	
NORTH	

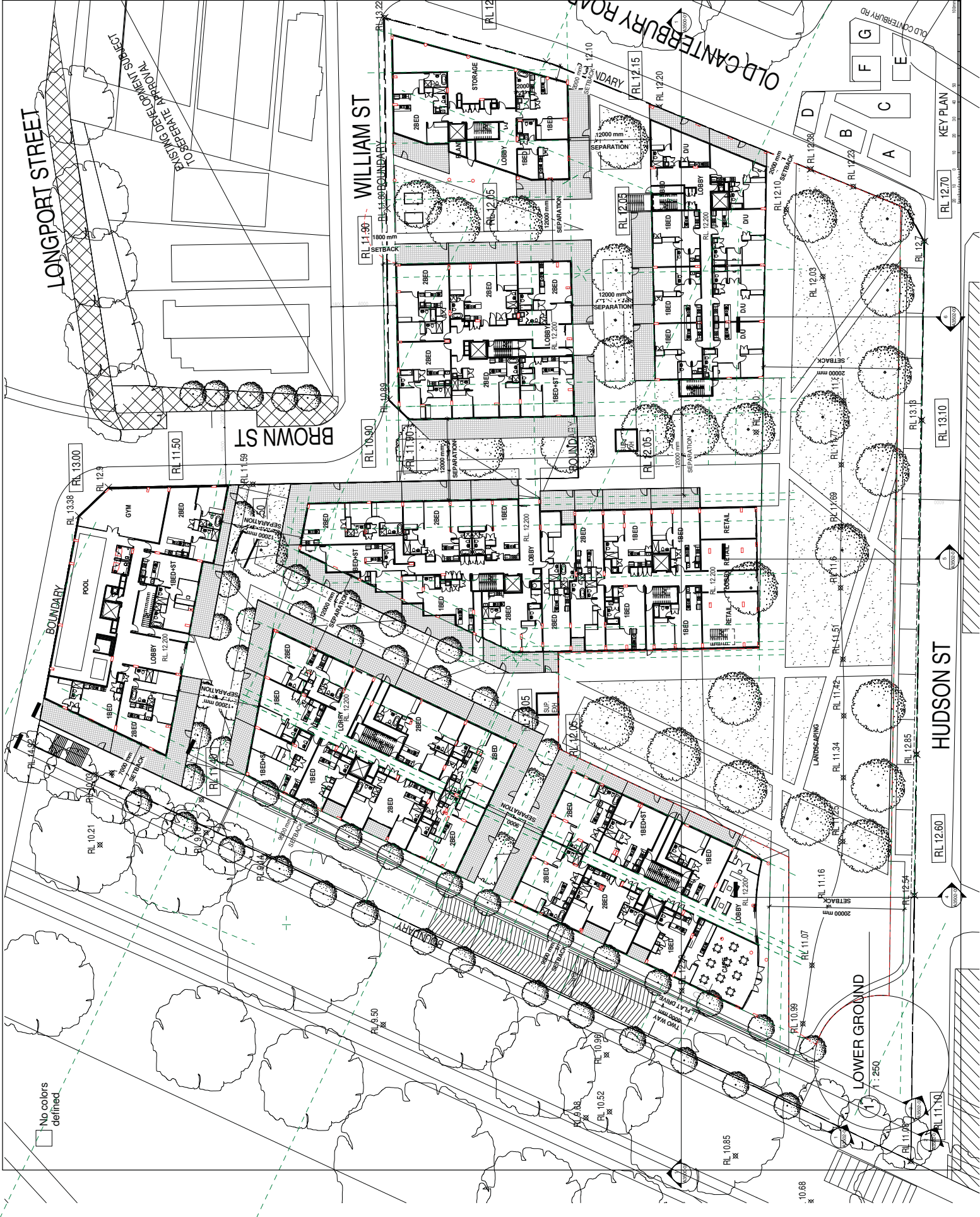
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THE FURNISHMENT OF THE EMBLEM OF THE ORDER OF THE UNITED STATES OF AMERICA SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL CHECK AND VERIFY ALL LEVELS, DATUMS AND DIMENSIONS ON SITE AND SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY UPON DISCOVERY.

REPORT WAS DISSEMINATED ON COMMISSION TO MERTON APARTMENTS PTY. LTD. PRIOR TO COMMENCEMENT OF WORK SAID IN BRIEF TITLE CHARACTERIZING SUBJECT

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Preliminary

Schedule of Areas

Project:		Lewisham		Project No.		884		Date:		04/12/12	
Project Address:		82-90 Old Cantebury Rd									
Site Area :		13,115 sqm									
Consent Authority:		Marrickville									
Current Design & Issue No:				3						Day	
Unit Total		0	0	0	0	3	23	9	1	36	36
										</	

Building G

LEVEL	Retail/Cafe	Studio	1 Bed	1 + Study	2 Bed (Sm)	2 Bed	3 Bed	Solar	K. Ventilation	N. Ventilation	Res. Total
Lower Ground			5					3	3	4	5
Ground Level			2	1	1	2		4		5	6
Level 1			2	1	1	2		4		5	6
Level 2			2	1	1	2		6		5	6
Level 3							1	1	1	1	1
Unit Total	0	0	11	3	3	6	1	18	4	20	24
			0%	13%	13%	25%	4%	75%	17%		83%
						38%	4%				

Buildings A, B, C, D, E, F and G

LEVEL	Retail/Cafe	Studio	1 Bed	1 + Study	2 Bed (Sm)	2 Bed	3 Bed	Solar	K. Ventilation	N. Ventilation	Res. Total
Lower Ground	4	0	18	9	1	18	0	27	8	29	49
Ground Level	0	0	22	2	16	21	1	45	12	48	62
Level 1	0	0	16	2	16	16	1	36	9	41	51
Level 2	0	0	16	2	16	23	1	49	10	46	58
Level 3	0	0	10	1	5	15	3	29	11	25	34
Level 4	0	0	11	1	3	21	2	33	14	29	38
Level 5	0	0	11	1	4	13	1	25	12	22	30
Level 6	0	0	7	0	1	9	2	13	9	13	19
Level 7	0	0	7	0	2	6	2	15	9	13	17
Level 8	0	0	0	0	0	7	0	7	4	7	7
Unit Total	4	0	118	18	64	149	13	279	98	273	365
Residential Unit Mix		1%	32%	5%	18%	41%	4%	76%	27%	75%	
			38%	137%		58%	4%				

Unit Total (including Retail, Cafe and Dual Use)	369
Solar Analysis (Min. 70% for 2 hours)	76%
Natural Ventilation (Min. 60%)	75%
Kitchen Ventilation (Min. 25%)	27%

Gross Floor Area

LEVEL	Block A	Block B	Block C	Block D	Block E	Block F	Block G	Total
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Preliminary

Schedule of Areas

Project:		Lewisham		Project No.		884		Date:		04/12/12	
Project Address:		82-90 Old Cantebury Rd									
Site Area :		13,115 sqm									
Consent Authority:		Marrickville									
Current Design & Issue No:		3									
Lower Ground		663	730	1151	666	547	544	400 sqm	4,701.00 sqm		
Ground Floor		678	679	1069	609	555	513	410 sqm	4,513.00 sqm		
Level 1		678	679	969	609	523	513	441 sqm	4,412.00 sqm		
Level 2		678	679	870	609	555	513	441 sqm	4,345.00 sqm		
Level 3		654	460	575	609	523	378	229 sqm	3,428.00 sqm		
Level 4		637	428	440	609	395		sqm	2,509.00 sqm		
Level 5		637	428	396	609	364		sqm	2,434.00 sqm		
Level 6		605	428		546			sqm	1,579.00 sqm		
Level 7		559	315		530			sqm	1,404.00 sqm		
Level 8		415	291					sqm	706.00 sqm		
Total GFA's		6204.00	5117.00	5470.00	5396.00	3462.00	2461.00	1921.00	30031.00	sqm	sqm

Site Area : 13115.00 sqm

2.29 :1

(Max. 39,896)
(Max. 3,04:1

CAR SPACES REQUIREMENTS

Unit Type	No. of Units	Required/Provided	Requirement
Studio + 1 bedroom	139	34.75	(1 PER 4 UNIT)
2 bedroom	213	213	(1 PER UNIT)
3 bedroom	13	13	(1 PER UNIT)
visitors		37	(1 PER 10 UNIT)
Residential Total	365	297	
Accessible	73	73	(1 PER UNIT)
Retail	125	3	(1 PER 45 sqm)
Cafe	101	2	(1 PER 45 sqm)
Accessible	0.69	1	(1 PER 4 RETAIL SPACES)
Commercial Total		5	
Total Requirement and Provided		302	

OTHER

Unit Type	No. of Units	Provided	Requirement
Motorcycle	302	15	(5% OF CAR SPACES)
Motorcycle Total		15	
Residential	365	183	(1 PER 2 UNITS)
Visitor	36.5	4	(1 PER 10 UNITS)
Retail	125	0	(1 PER 300 sqm)
Cafe	101	1	(1 PER100 sqm)

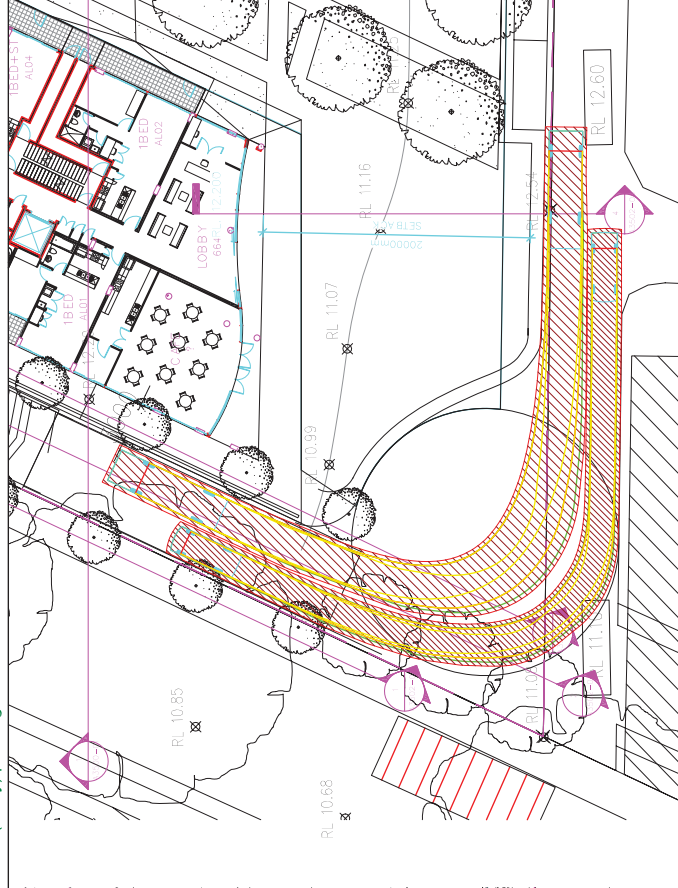
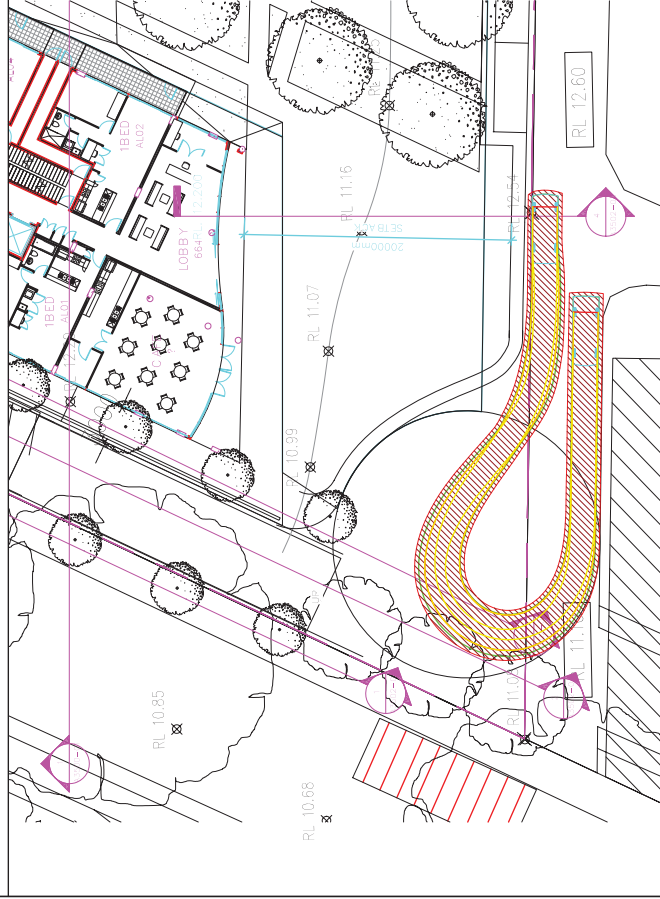
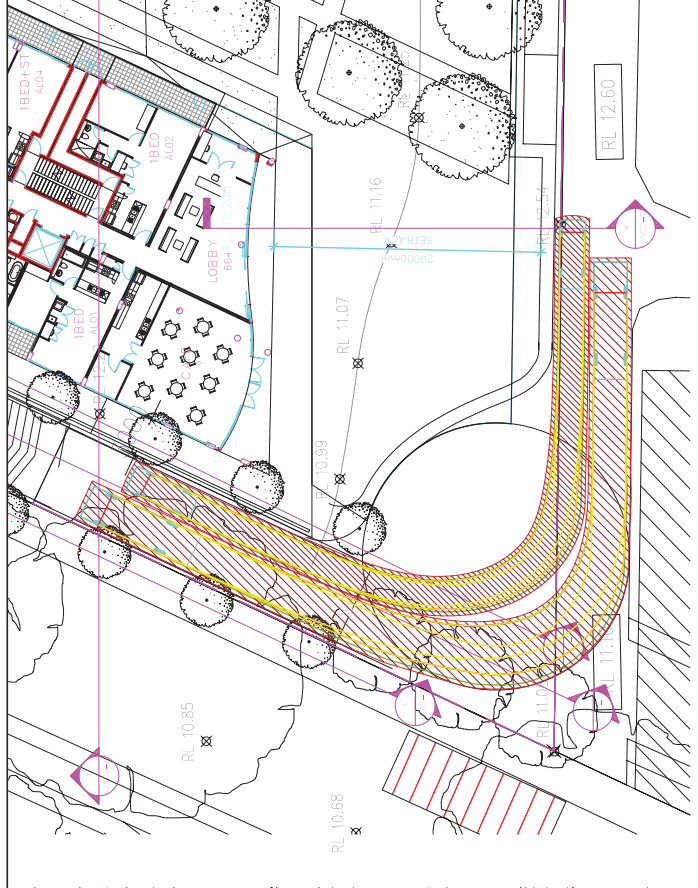
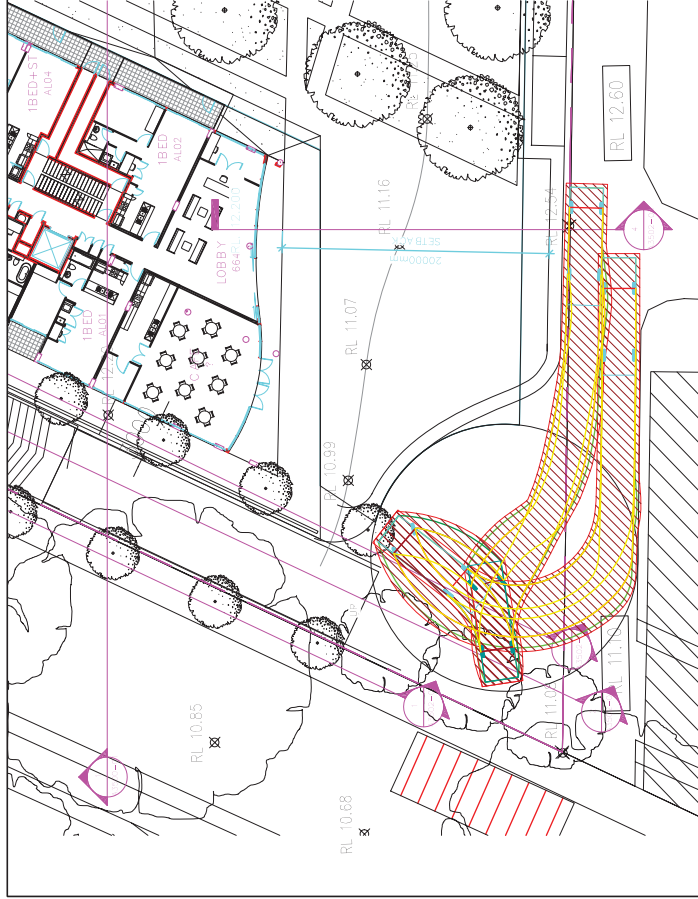
Preliminary

Schedule of Areas

Project:	Lewisham	Project No.	884	Date:	04/12/12
Project Address:	82-90 Old Canterbury Rd				
Site Area :	13,115 sqm				
Consent Authority:	Marrickville				
Current Design & Issue No:	3				
Bike Total				188	Day

Appendix B

Swept Paths

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