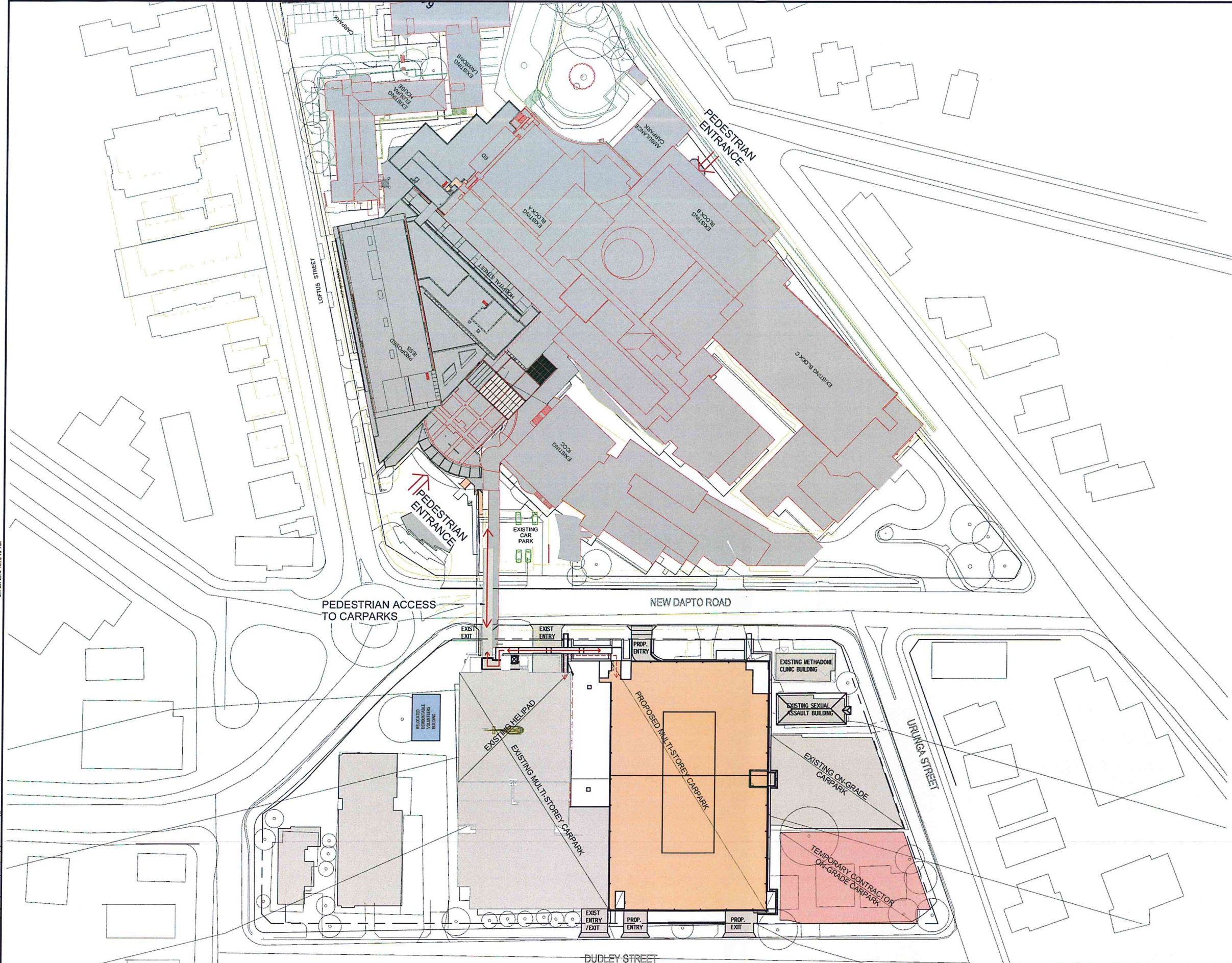


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PRELIMINARY NEW BUILDING PARKING SPACES		
LEVEL	DESCRIPTION	TOTAL
LEVEL 1b - 30.750	CLASS 3 SPACE	130
LEVEL 2b - 33.450	CLASS 3 SPACE	137
LEVEL 3b - 36.150	CLASS 3 SPACE	147
LEVEL 4b - 38.900	CLASS 3 SPACE	147
LEVEL 5b - 41.600	CLASS 3 SPACE	70
LEVEL 5b - 41.600	H/C SPACE	12
LEVEL 6b - 44.550	CLASS 3 SPACE	147
Grand total		790

NOTES ON NEW BUILDING PARKING SCHEDULE:-
1. NUMBERS INDICATED REFLECT CURRENT LAYOUT SHOWN ON PLANS
SUBJECT TO ALTERATION BASED ON CONSULTANT CO-ORDINATION

EXISTING BUILDING PARKING SPACES		
LEVEL	DESCRIPTION	TOTAL
LEVEL 1b - 30.750	EXISTING SPACE	68
LEVEL 1a	EXISTING SPACE	33
LEVEL 1a	EXISTING H/C SPACE	4
LEVEL 2b - 33.450	EXISTING SPACE	83
LEVEL 2b - 33.450	DELETED SPACE	-3
LEVEL 2a - 35.000	EXISTING SPACE	32
LEVEL 2a - 35.000	EXISTING H/C SPACE	4
LEVEL 3b - 36.150	EXISTING SPACE	83
LEVEL 3b - 36.150	DELETED SPACE	-3
LEVEL 3a - 37.700	EXISTING SPACE	32
LEVEL 3a - 37.700	EXISTING H/C SPACE	4
LEVEL 4b - 38.900	EXISTING SPACE	83
LEVEL 4b - 38.900	DELETED SPACE	-3
LEVEL 4a - 40.650	EXISTING SPACE	29
LEVEL 5b - 41.600	EXISTING SPACE	83
LEVEL 5a - 43.390	NEW SPACE	7
LEVEL 5a - 43.390	EXISTING SPACE	36
LEVEL 5a - 43.390	DELETED SPACE	-2
LEVEL 5a - 43.390	RELOCATED H/C SPACE RELOCATED TO NEW CARPARK	-4
Grand total		566

NOTES ON PARKING IN EXISTING BUILDING SCHEDULE:-
1. SCHEDULE ASSUMES EXISTING TOTAL OF 574 SPACES (INCLUDING
16 DRIVER IMPAIRED SPACES) BASED ON DRAWINGS OF PREVIOUS
CARPARK. CONFIRMATION OF CURRENT PARKING
LAYOUT TO BE ADVISED. THE NUMBER OF DRIVER IMPAIRED SPACES
TO BE REVIEWED FOR TOTAL COMBINED FACILITY.
2. SCHEDULE ACCOUNTS FOR SPACES DELETED/ADDED FOR CIRCULATION/LINKING
AS SHOWN IN FLOOR PLANS.

NET PARKING SPACE YIELD	
CIRCULATION LOSS IN EXISTING CARPARK	= -11
PARKING LOSS WITHIN NEW CARPARK FOOTPRINT	= -48
HOSPITAL ROAD LOSS AS NOTED BY TSA	= -26
LOADING DOCK OFF LOFTUS STREET AS NOTED BY TSA	= -3
NEW BUILDING YIELD (FROM SCHEDULE ABOVE)	= 754
TOTAL NET YIELD	= 666



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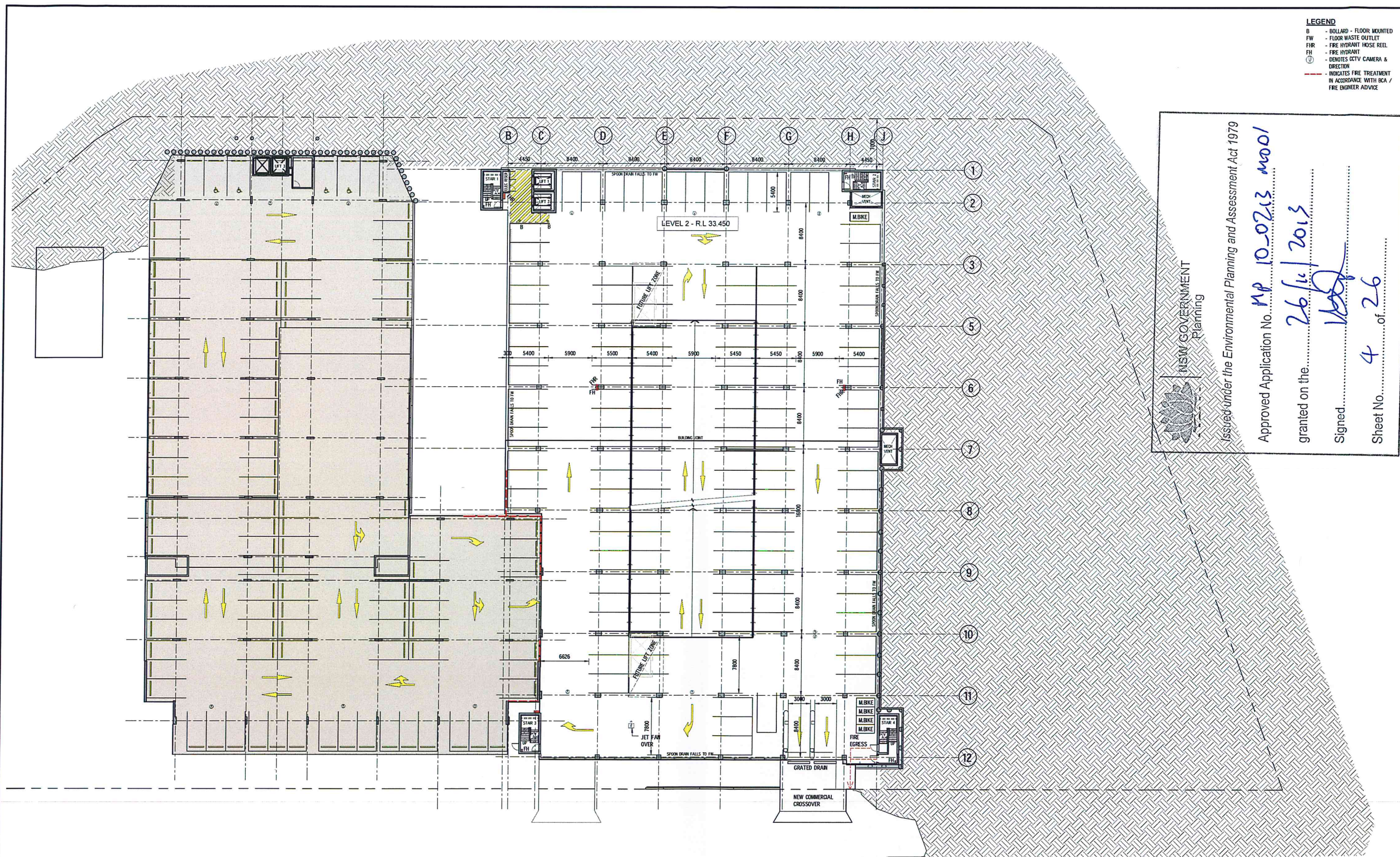
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Sheet No. **2** of **26**

SITE LAYOUT PLAN
SCALE: 1 : 500

 Health Infrastructure  TSA MANAGEMENT	 Cardno Shaping the Future ABN 95 001 145 035 Level 9, The Forum, 203 Pacific Highway, St Leonards NSW Australia 2066 Tel: (+61 2) 9496 7700 Fax: (+61 2) 9439 5170 Email: sydney@cardno.com.au Web: www.cardno.com.au	Client: HEALTH INFRASTRUCTURE Project: WOLLONGONG HOSPITAL PROPOSED MULTI STOREY CARPARK EXPANSION Title: SITE PLAN Drawn: S.T.H. Date: _____ Checked: P.N.W. Date: _____ Designed: C.F. Date: _____ Verified: _____ Date: _____ Approved: P.N.W. Date: _____	Scale: 1 : 500 Sheet: B1 Project Number: NA80813070DA-1000 Revision: D NOT TO BE USED FOR CONSTRUCTION PURPOSES
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LEGEND

- B - BOLLARD - FLOOR MOUNTED
- FW - FLOOR WASTE OUTLET
- FHR - FIRE HYDRANT HOSE REEL
- FH - FIRE HYDRANT
- 📹 - DENOTES CCTV CAMERA & DIRECTION
- - INDICATES FIRE TREATMENT IN ACCORDANCE WITH BCA / FIRE ENGINEER ADVICE



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LEVEL 2 GA PLAN
SCALE: 1 : 200

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Drawn S.T.H	Date	Client HEALTH INFRASTRUCTURE																	
Checked P.N.W	Date	Project WOLLONGONG HOSPITAL PROPOSED MULTI STOREY CARPARK EXPANSION	Status DEVELOPMENT APPLICATION NOT TO BE USED FOR CONSTRUCTION PURPOSES																
Designed C.F	Date		<table border="1"> <tr> <td>Drawn</td> <td>Register</td> <td>As indicated</td> <td>Scale</td> <td>B1</td> </tr> <tr> <td>Project Number</td> <td colspan="4">NA80813070 DA-1002</td> </tr> <tr> <td>Sheet number</td> <td colspan="4">Revision</td> </tr> </table>		Drawn	Register	As indicated	Scale	B1	Project Number	NA80813070 DA-1002				Sheet number	Revision			
Drawn	Register	As indicated	Scale	B1															
Project Number	NA80813070 DA-1002																		
Sheet number	Revision																		
Verified 065	Date	Title MULTI-STOREY CARPARK GA PLAN - LEVEL 2																	
Approved P.N.W	Date																		

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- LEGEND**
- B - BOLLARD - FLOOR MOUNTED
 - FW - FLOOR WASTE OUTLET
 - FHR - FIRE HYDRANT HOSE REEL
 - FH - FIRE HYDRANT
 - CCV - DENOTES CCTV CAMERA & DIRECTION
 - - - INDICATES FIRE TREATMENT IN ACCORDANCE WITH BCA / FIRE ENGINEER ADVICE

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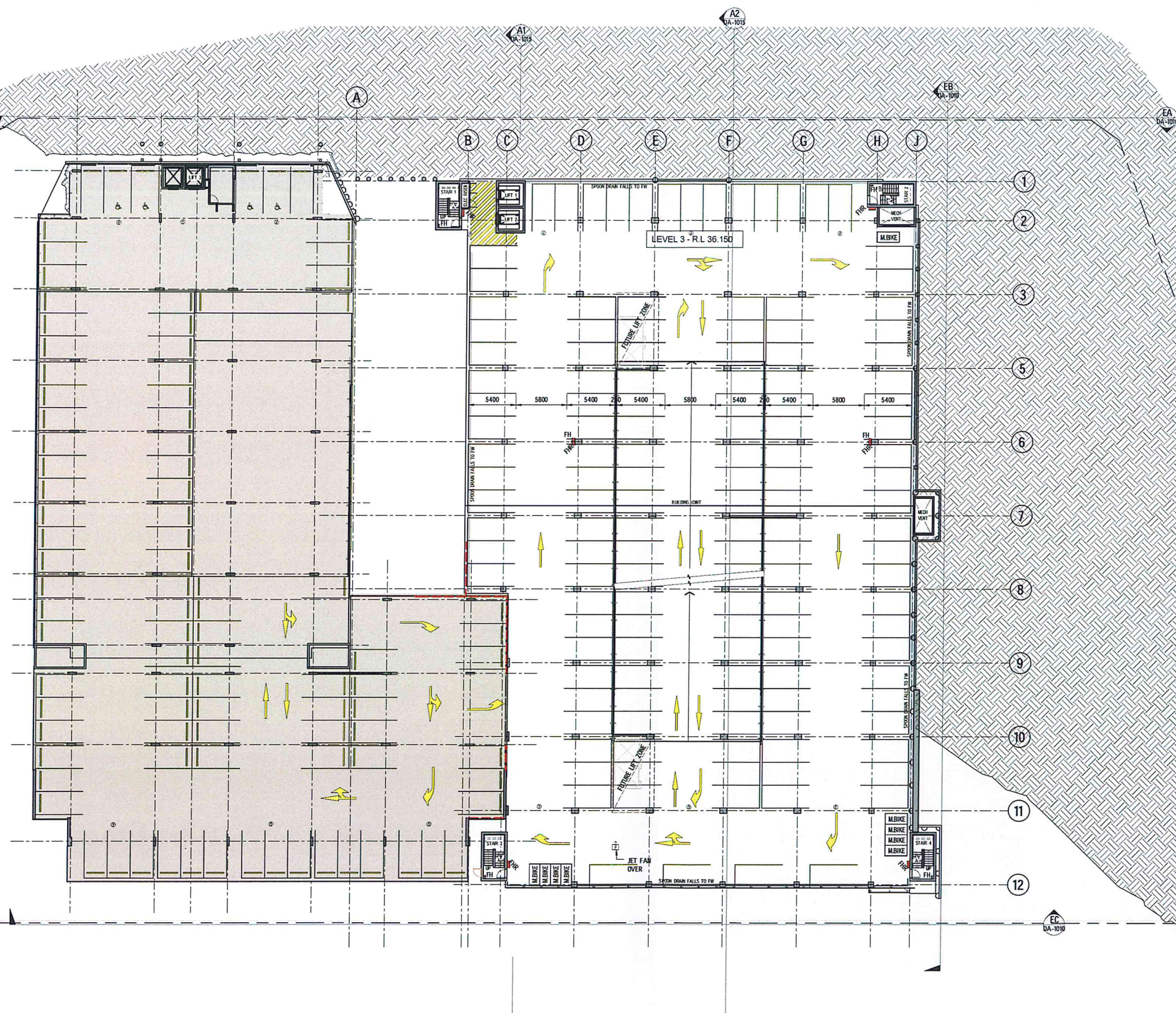
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Sheet No. **5** of **26**



LEVEL 3 GA PLAN
SCALE: 1:200

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Rev	Date	Description	Drn	Appr	Rev	Date	Description	Drn	Appr
D	27-09-2013	ISSUED FOR APPROVAL	STH	PNW					
C	09-09-2013	REVISED FOR DEVELOPMENT APPLICATION	STH	PNW					
B	02-08-2013	ISSUED FOR CO-ORDINATION	STH	PNW					
A	31-05-2013	DEVELOPMENT APPLICATION	STH	PNW					

Health Infrastructure

TSA MANAGEMENT

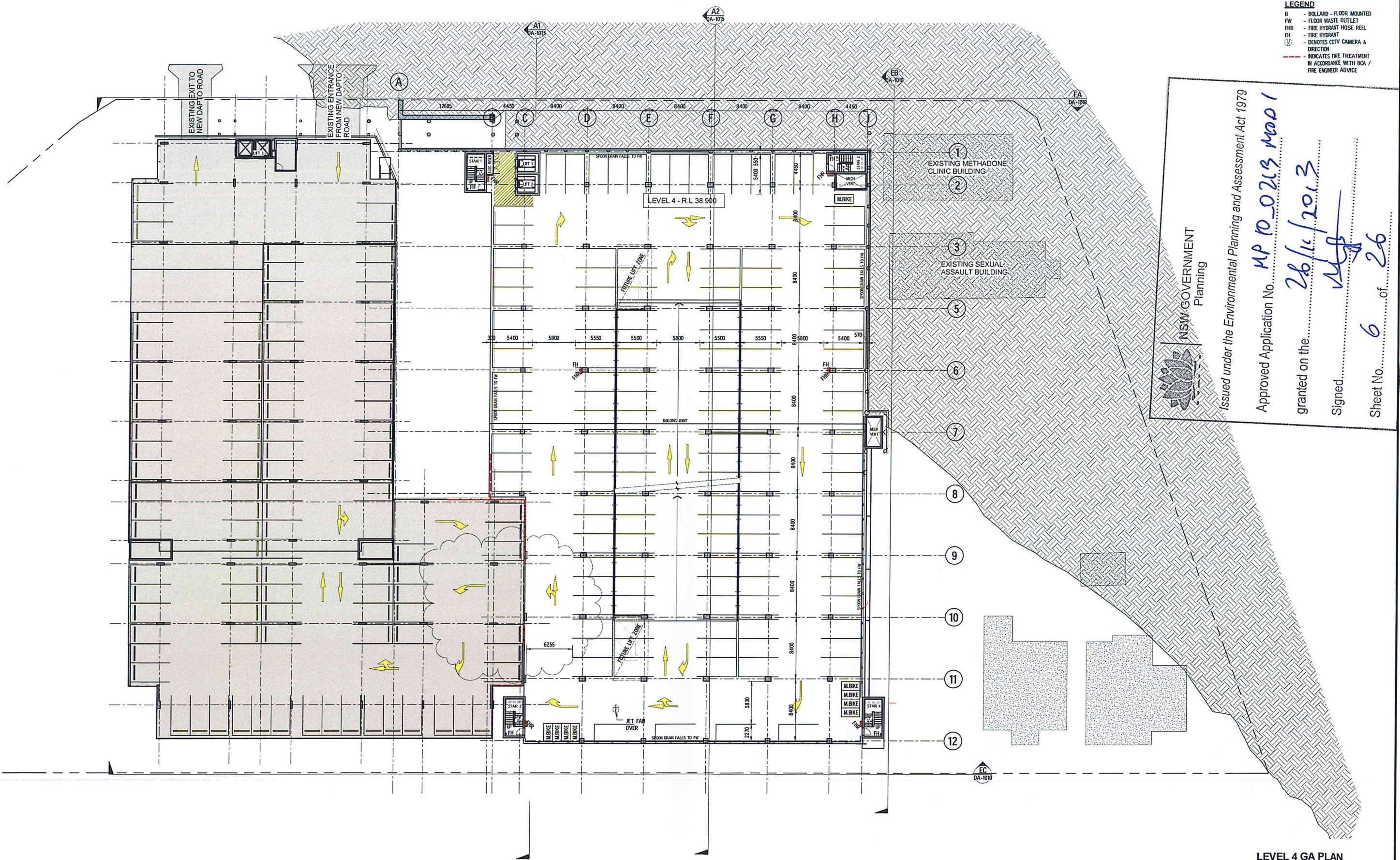
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LEVEL 4 GA PLAN
SCALE: 1:200

Rev	Date	Description	Des	Appr	Rev	Date	Description	Des	Appr
F	02-10-2013	LEVEL 4a ENTRY/EXIT CLARIFIED	STH	PNW					
E	01-10-2013	REVISED TRAFFIC CIRCULATION	STH	PNW					
D	27-09-2013	ISSUED FOR APPROVAL	STH	PNW					
C	09-09-2013	REVISED FOR DEVELOPMENT APPLICATION	STH	PNW					
B	02-08-2013	ISSUED FOR CO-ORDINATION	STH	PNW					
A	31-05-2013	DEVELOPMENT APPLICATION	STH	PNW					



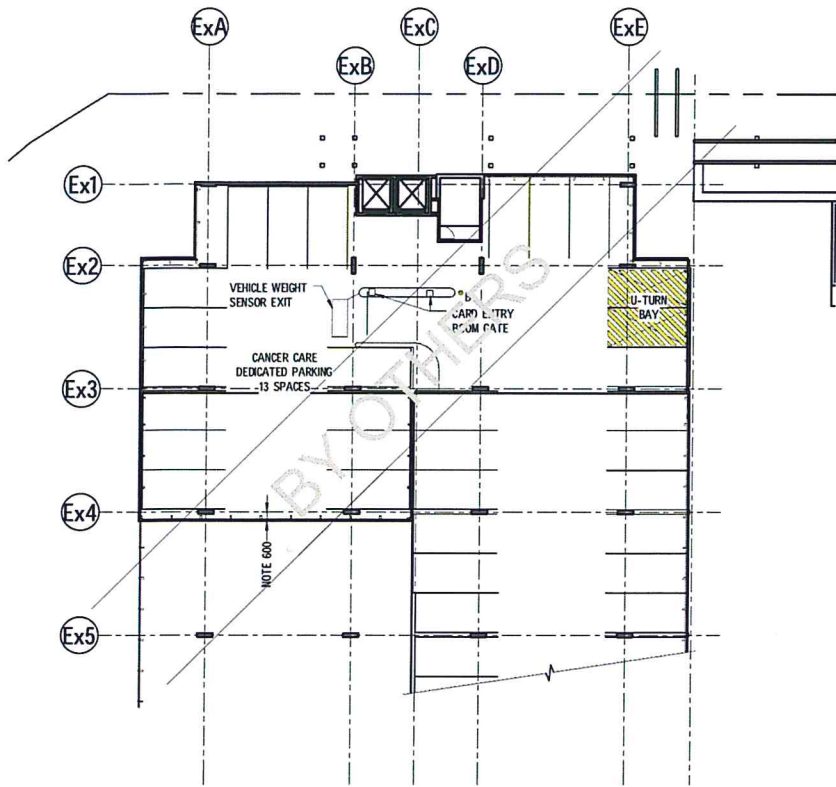
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Drawn	Date	Client	Project	Status
S.T.H		HEALTH INFRASTRUCTURE	WOLLONGONG HOSPITAL PROPOSED MULTI STOREY CARPARK EXPANSION	DEVELOPMENT APPLICATION
Checked				NOT TO BE USED FOR CONSTRUCTION PURPOSES
P.N.W				
Designed				
C.F				
Verified				
Approved				
P.N.W				

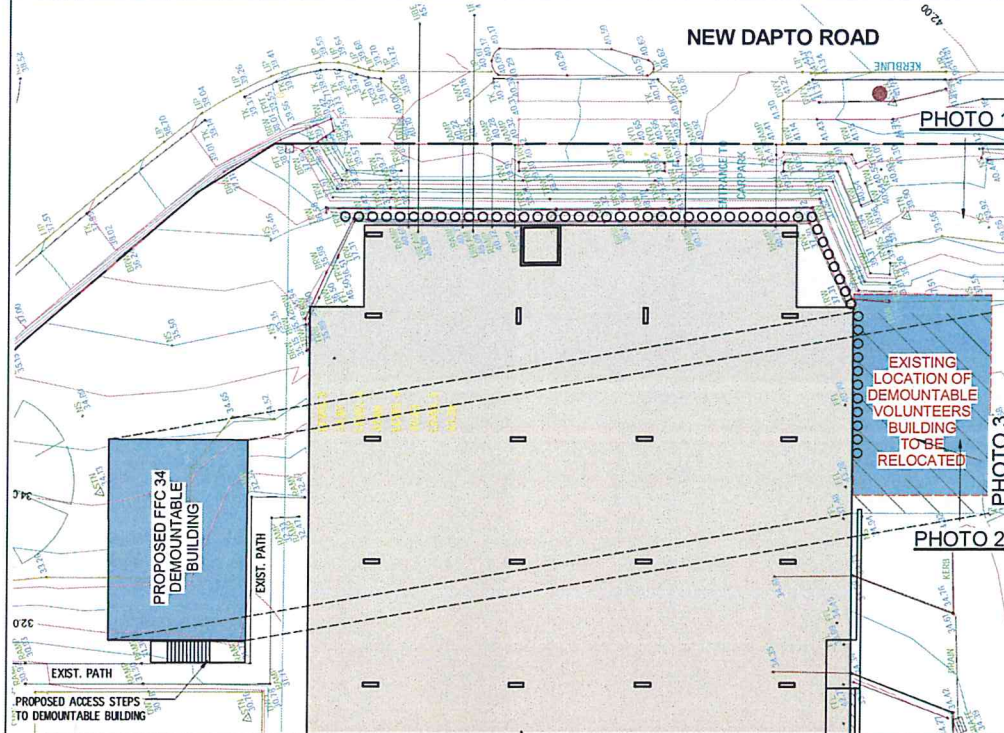
Project Number	Sheet Number	Revision
NA80813070DA-1004	B1	F

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EXISTING LEVEL 5a - GA PLAN

SCALE: 1:200
PLAN INDICATES NEW SECURED PARKING AREA FOR 13 VEHICLES DEDICATED TO CANCER CARE PATIENTS. ACCESS CONTROLLED BY BOOM GATE FROM REMAINING PARKING AREA.
NOTE: 4 EXISTING H/C SPACES DELETED (AND RELOCATED TO NEW CAR PARK BUILDING LEVEL 5) REPLACED WITH 3 SPACES IN THE DEDICATED CANCER CARE SECURED AREA AND 3 IN THE REMAINING AREA BETWEEN GRIDS Ex1 & Ex2.



DEMOUNTABLE VOLUNTEERS BUILDING RELOCATION

SCALE: 1:200

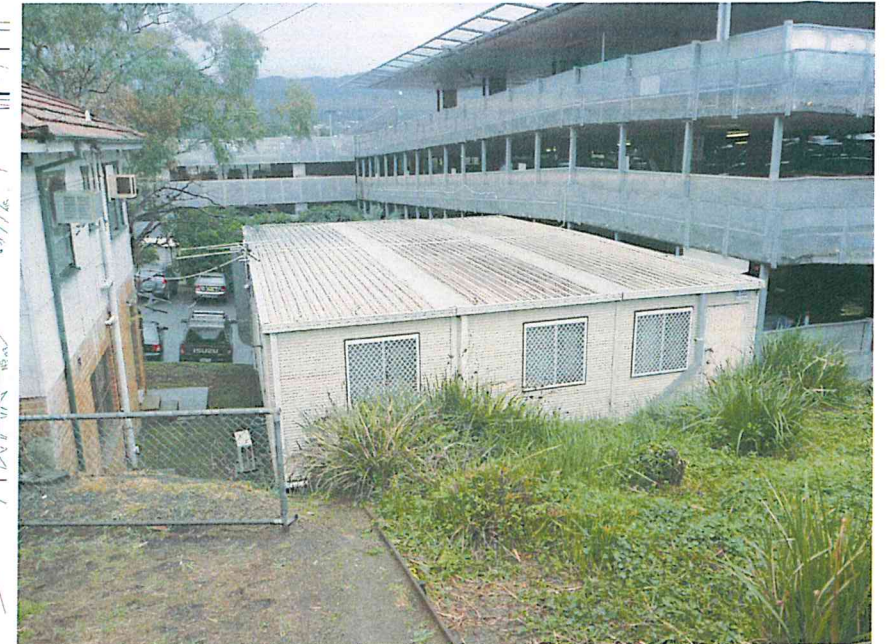


PHOTO 1 - EAST VIEW OF EXISTING DEMOUNTABLE BUILDING FROM NEW DAPTO ROAD



PHOTO 2 - WEST VIEW OF EXISTING DEMOUNTABLE BUILDING FROM ON-GRADE CARPARK

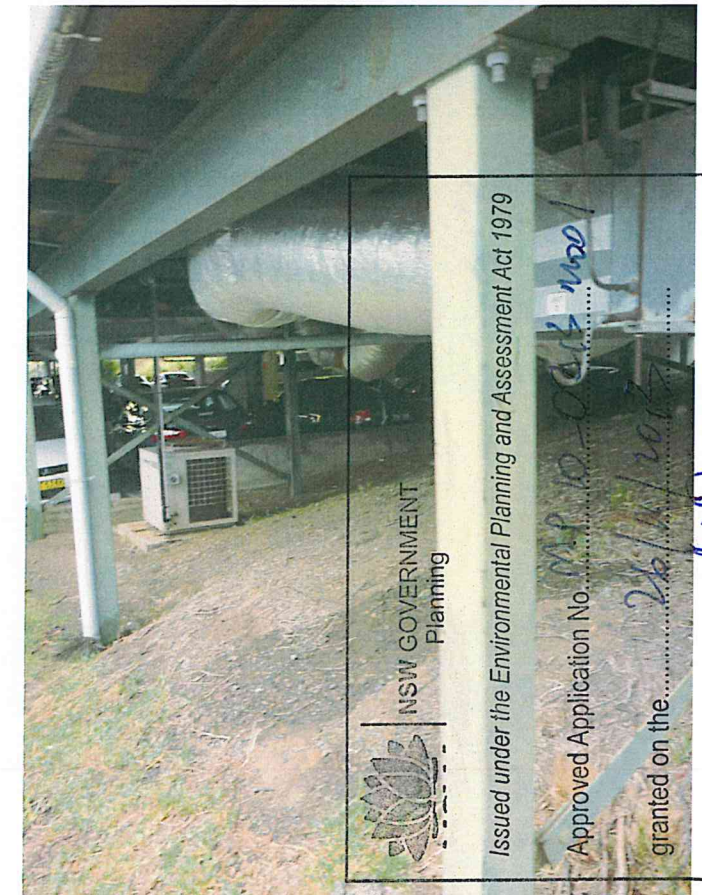


PHOTO 3 - DETAIL OF SUB STRUCTURE SUPPORTING DEMOUNTABLES

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D	27-09-2013	ISSUED FOR APPROVAL	STH	PNW					
C	02-08-2013	ISSUED FOR CO-ORDINATION	STH	PNW					
B	03-06-2013	PARKING DESCRIPTIONS REVISED	STH	PNW					
A	31-05-2013	DEVELOPMENT APPLICATION	STH	PNW					



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Checked: P.N.W.	Date:	Project: WOLLONGONG HOSPITAL PROPOSED MULTI STOREY CARPARK EXPANSION
Designed: S.T.H.	Date:	Title: EXISTING LEVEL 5a CANCER CARE PARKING & DEMOUNTABLE VOLUNTEERS BUILDING RELOCATION
Verified:	Date:	Scale: 1:200
Approved: P.N.W.	Date:	Sheet Number: NA80813070DA-1007
		Revision: D

DATE PLOTTED: 27 September 2013 9:34 AM BY: JEREMY HARRINGTON (SYDNEY)

REF: GRP-SHT-B1: SYD-LOGO-B1: X-Survey-003 13070 Complete Detail: X-Structural-Level: 1:130509: X-SWD-Drainage-Labels: X-Subsidiary-Drainage

CAD FILE: N-Projects-008-F113NA80813070 WOLLONGONG HOSPITAL CARPARK01 - Package 1014 - CivilDrawings\BuildDrawings\NA80813070-DA-1020C.dwg

STORMWATER DRAINAGE

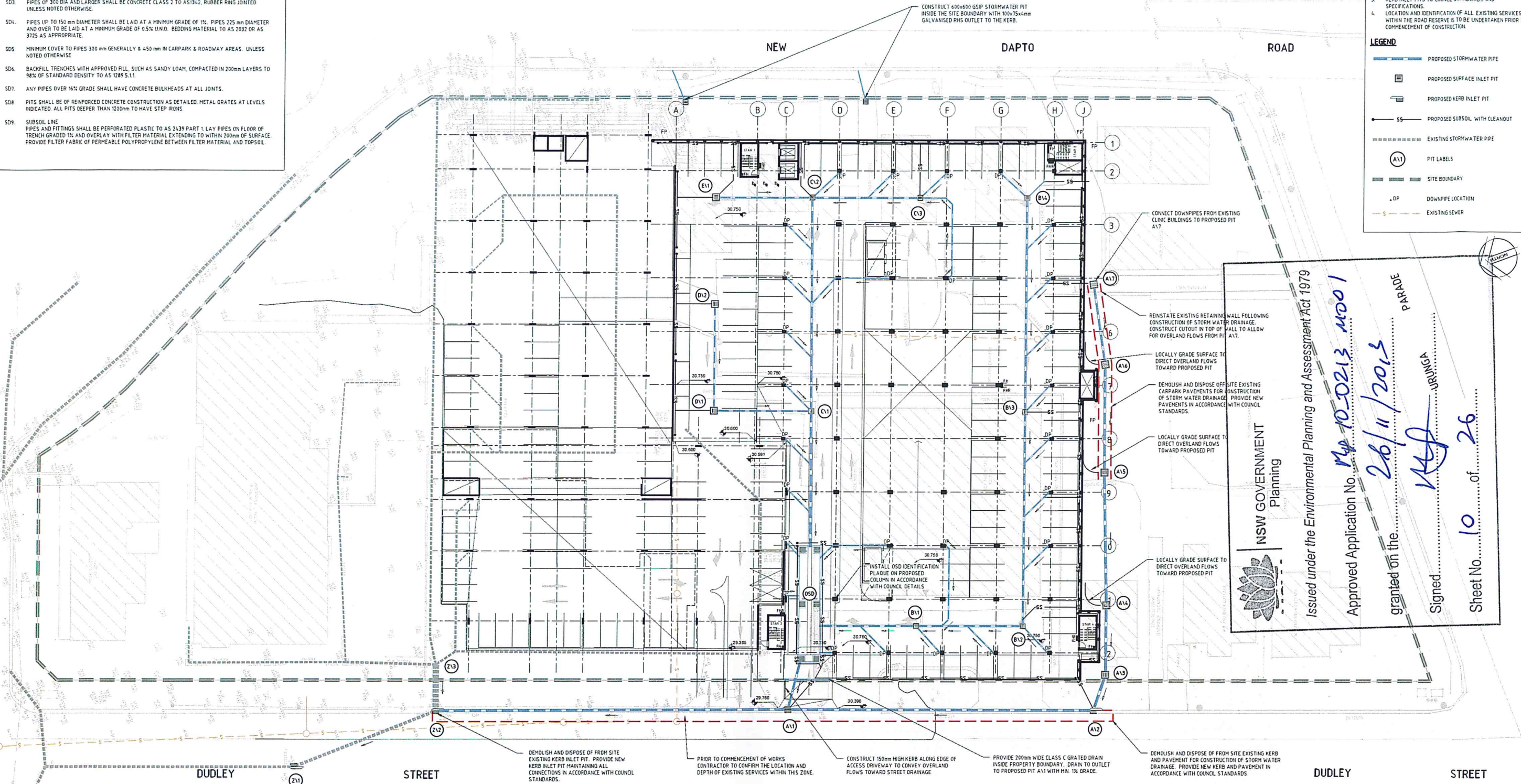
- SD1. STORMWATER DRAINAGE SHALL BE IN ACCORDANCE WITH AS 3502.3
- SD2. PIPES OF 100 TO 225 DIAMETER SHALL BE PVC TO AS 1254.
- SD3. PIPES OF 300 DIA AND LARGER SHALL BE CONCRETE CLASS 2 TO AS 1342, RUBBER RING JOINTED UNLESS NOTED OTHERWISE.
- SD4. PIPES UP TO 150 mm DIAMETER SHALL BE LAID AT A MINIMUM GRADE OF 1%. PIPES 225 mm DIAMETER AND OVER TO BE LAID AT A MINIMUM GRADE OF 0.5% UNID. BEDDING MATERIAL TO AS 2032 OR AS 3725 AS APPROPRIATE.
- SD5. MINIMUM COVER TO PIPES 300 mm GENERALLY & 450 mm IN CARPARK & ROADWAY AREAS. UNLESS NOTED OTHERWISE.
- SD6. BACKFILL TRENCHES WITH APPROVED FILL, SUCH AS SANDY LOAM, COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY TO AS 1289.5.1.1.
- SD7. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS.
- SD8. PITS SHALL BE OF REINFORCED CONCRETE CONSTRUCTION AS DETAILED. METAL GRATES AT LEVELS INDICATED. ALL PITS DEEPER THAN 1200mm TO HAVE STEP IRONS.
- SD9. SUBSOIL LINE
- PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO AS 2439 PART 1. LAY PIPES ON FLOOR OF TRENCH GRADED 1% AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL.

NOTES

- FOR DETAILS OF THE PROPOSED ON-SITE DETENTION TANK REFER DWG 1023
- INVERT LEVELS OF EXISTING STORMWATER ASSETS ARE SUBJECT TO CONFIRMATION ON SITE.
- KERB INLET PITS TO COUNCIL STANDARDS AND SPECIFICATIONS.
- LOCATION AND IDENTIFICATION OF ALL EXISTING SERVICES WITHIN THE ROAD RESERVE IS TO BE UNDERTAKEN PRIOR TO COMMENCEMENT OF CONSTRUCTION.

LEGEND

- PROPOSED STORMWATER PIPE
- PROPOSED SURFACE INLET PIT
- PROPOSED KERB INLET PIT
- PROPOSED SUBSOIL WITH CLEANOUT
- EXISTING STORMWATER PIPE
- PIT LABELS
- SITE BOUNDARY
- DOWNPIPE LOCATION
- EXISTING SEWER



PLAN
SCALE 1:250



Rev	Date	Description	Des	Verif	Appd	Rev	Date	Description	Des	Verif	Appd
C	27/05/2013	ISSUED FOR APPROVAL	JMH	CEV	CEV						
B	12/05/2013	PRELIMINARY DESIGN AND CONSTRUCT ISSUE	JMH	CEV	CEV						
A	31/05/2013	DEVELOPMENT APPLICATION	JMH	CEV	CEV						

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Verified	CEV	Date	13/05/2013
Approved	CEV	Date	13/05/2013

Client	HEALTH INFRASTRUCTURE
Project	WOLLONGONG HOSPITAL PROPOSED MULTI STORY CARPARK EXPANSION
Drawing Number	NA80813070-DA-1020
Revision	C

Status	DEVELOPMENT APPLICATION NOT TO BE USED FOR CONSTRUCTION PURPOSES
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Register	Scale
Scale	1:250
Sheet	B1

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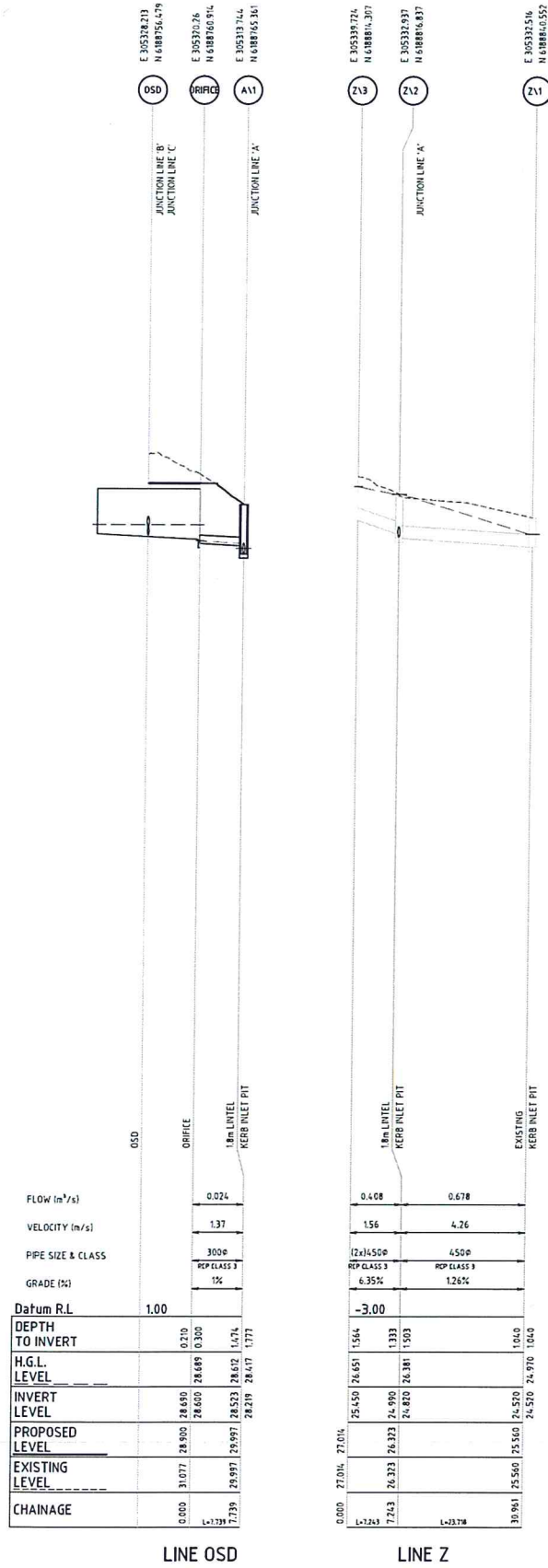
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JMH	13/05/2013
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JMH	13/05/2013
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CEV	13/05/2013
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CEV	13/05/2013

Client	HEALTH INFRASTRUCTURE
	WOLLONGONG HOSPITAL PROPOSED MULT I STORY CARPARK EXPANSION
	STORMWATER LONGSECTIONS SHEET 1

Status			
DEVELOPMENT APPLICATION			
NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Date	Register	Scale	Size
AHD	---	AS SHOWN	B1
Drawing Number			Revision
NA80813070-DA-1021			C



NOTE: HGL DEMONSTRATES 20 YEAR ARI FLOWS

Rev	Date	Description	Des	Verd	Appd	Rev	Date	Description	Des	Verd	Appd
C	27/05/2013	ISSUED FOR APPROVAL	JMH	CEV	CEV						
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Approved	CEV	Date	13/05/2013

Client	HEALTH INFRASTRUCTURE
WOLLONGONG HOSPITAL	PROPOSED MULTISTORY CARPARK EXPANSION
STORMWATER LONGSECTIONS	SHEET 2

Status	DEVELOPMENT APPLICATION
NOT TO BE USED FOR CONSTRUCTION PURPOSES	
Datum	AHD
Register	AS SHOWN
Scale	B1
Drawing Number	NA80813070-DA-1022
Revision	C

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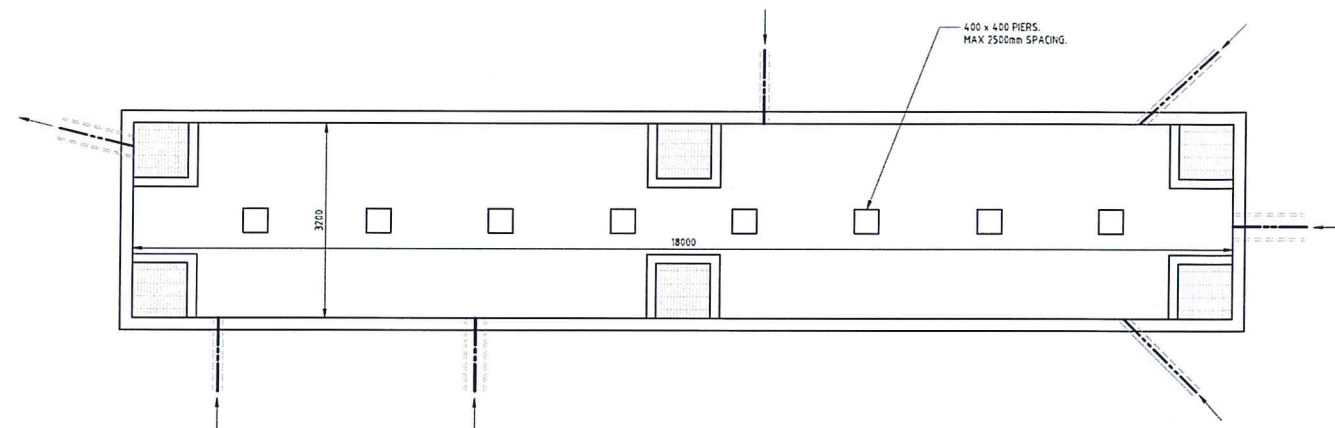
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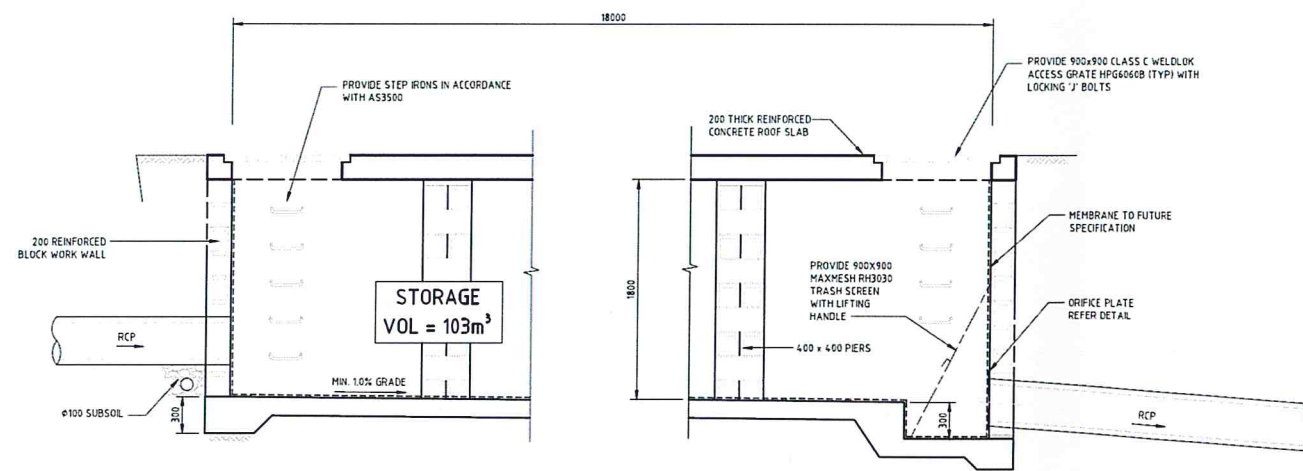
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Sheet No. **12** of **26**

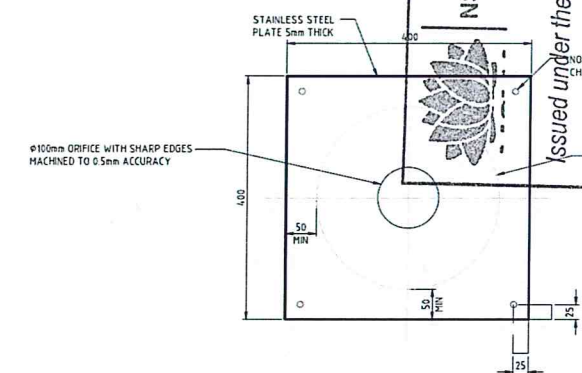


ON-SITE DETENTION TANK PLAN
SCALE 1:50

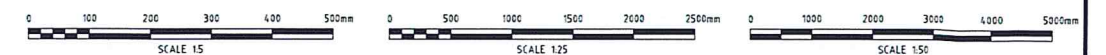


ON-SITE DETENTION TYPICAL SECTION
SCALE 1:25

Wollongong Hospital OSD Calcs		
Design Data		
Site Area (sq.m)	16,685	
Tributary Area (sq.m)	4,830	
Existing Impervious Area (sq.m)	2,415	50% Impervious
Proposed Impervious Area (sq.m)	4,830	100% Impervious
Graph Data		
F1(5)	1.204	From Appendix A3 of Chapter E14: Stormwater Management
F1(100)	1.159	From Appendix A3 of Chapter E14: Stormwater Management
F2	1.058	From Appendix A4 of Chapter E14: Stormwater Management
F3	0.18	From Appendix A5 of Chapter E14: Stormwater Management
F4	0.833	From Appendix A6 of Chapter E14: Stormwater Management
I(50)	100	From Appendix A2 of Chapter E14: Stormwater Management
OSD Requirements		
PSD(5)	164.26	litres/sec
PSD(100)	276.52	litres/sec
SSR(5)	52.40	cubic metres
SSR(100)	88.21	cubic metres



ORIFICE PLATE DETAIL
SCALE 1:5



Rev	Date	Description	Des	Verif	Appd	Rev	Date	Description	Des	Verif	Appd
C	27/09/2013	ISSUED FOR APPROVAL	JMH	CEV	CEV						
B	12/05/2013	PRELIMINARY DESIGN AND CONSTRUCT ISSUE	JMH	CEV	CEV						
A	31/05/2013	DEVELOPMENT APPLICATION	JMH	CEV	CEV						

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Designed	JMH	Date	13/05/2013
Verified	CEV	Date	13/05/2013
Approved	CEV	Date	13/05/2013

Client: **HEALTH INFRASTRUCTURE**
WOLLONGONG HOSPITAL
PROPOSED MULT I STORY CARPARK EXPANSION

Status	DEVELOPMENT APPLICATION NOT TO BE USED FOR CONSTRUCTION PURPOSES			
Datum	AHD	Register	AS SHOWN	Size B1
Drawing Number	NA80813070-DA-1023			
Revision	C			