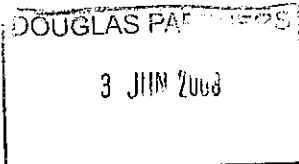

APPENDIX D
WorkCover Licence Search Records



Our Ref: D08/050362
Your Ref: Lindsay Rockett



30 May 2008

Attention: Lindsay Rockett
Douglas Partners
PO Box 472
WEST RYDE NSW 2114

Dear Lindsay,

RE SITE: 185 Fox Valley Rd, Wahroonga

I refer to your search request of 22nd May 2008 requesting information on a Licence to Keep Dangerous Goods on the above site.

Enclosed are copies of the documents, which WorkCover holds on Dangerous Goods Licence **35/014066** relating to the storage of dangerous goods at the above premises as listed on the Stored Chemical Information Database (SCID).

If you have any further queries, please contact WorkCover's Dangerous Goods Licensing staff on (02) 4321 5500.


Naomi James
A/Senior Licensing Officer
Dangerous Goods

WorkCover. **Watching out for you.**

WorkCover NSW ABN 77 682 742 966 92-100 Donnison Street Gosford NSW 2250 Locked Bag 2906 Lisarow NSW 2252
Telephone 02 4321 5000 Facsimile 02 4325 4145 WorkCover Assistance Service **13 10 50**
DX 731 Sydney Website www.workcover.nsw.gov.au

35/014066

- SEPARATION DISTANCE
- DEPOT 1 TO 2 80M
 - DEPOT 2 TO 3 50M
 - DEPOT 3 TO 4 5 M
 - DEPOT 4 TO 5 40 M
 - DEPOT 5 TO 6 25M
 - DEPOT 7 TO 8 150M
 - DEPOT 8 TO 9 15M
 - DEPOT 10 TO 11 80M
 - DEPOT 11 TO 12 20M
 - DEPOT 13 TO 14 70M
 - DEPOT 14 TO 15 30M
 - DEPOT 15 TO 16 60M
 - DEPOT 16 TO 17 130M
 - DEPOT 17 TO 18 5M
 - DEPOT 18 TO 19 15M
 - DEPOT 19 TO 20 30M
 - DEPOT 20 TO 21 5M

CREEK & BUSHLAND

DEPOT 1
CLASS 2.2
CAPACITY 12,500 L

DEPOT 2
CLASS 2.1
CAP. 108 KG

DEPOT 3
CLASS 8
CAP 4,400 L

DEPOT 4
CLASS 5.1
CAP 800 L

DEPOT 21
CLASS 6.1
CAP 120 L

DEPOT 20
CLASS 3
CAP 250 L

DEPOT 5
CLASS 8
CAP 240 L

DEPOT 6
CLASS C1
CAP 20,000L

DEPOT 7
CLASS C1
CAP 15,000L

DEPOT 18
CLASS 2.1
CAP 90 KG

DEPOT 17
CLASS 2.2
CAP 35 M3

DEPOT 19
CLASS 2.2
CAP 20 M3

DEPOT 15
CLASS C1
UNDERGROUND TANK
CAP 12,000 L

DEPOT 14
CLASS 2.2
CAP 500 M3

DEPOT 12
CLASS 2.1
CAP 120 KG

DEPOT 16
CLASS 3
CAP 160L
LEVEL 4

DEPOT 11
CLASS 3
CAP 500 L
LEVEL 5

DEPOT 10
CLASS 2.2
CAP. 2,500 L

DEPOT 9
CLASS 2.2
CAP. 180 L

DEPOT 8
CLASS 8
CAP. 100L

DEPOT 13
CLASS 2.2
CAP 7.3 M3

DEPOT 13
CLASS 2.2
CAP 7.3 M3

DEPOT 13
CLASS 2.2
CAP 7.3 M3

DEPOT 13
CLASS 2.2
CAP 7.3 M3

DEPOT 13
CLASS 2.2
CAP 7.3 M3

DEPOT 13
CLASS 2.2
CAP 7.3 M3

CREEK & BUSHLAND



- FIRE APPLIANCE LEGEND
- H HYDRANT
 - P POWDER TYPE EXTINGUISHER
 - C CO2 TYPE EXTINGUISHER

SITE SKETCH
SYDNEY ADVENTIST HOSPITAL
185 FOX VALLEY ROAD WAHROONGA 2076

Scale 1:2000 on A4 Draw. No SANJ01 Date 16/8/00.

PRIVATE HOUSES

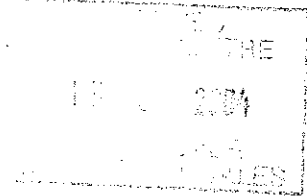
PRIVATE HOUSES
 COOMENARRA
 PARKWAY

337



SYDNEY
ADVENTIST
HOSPITAL

11th June 2004



Licensing Coordinator
Dangerous Goods Licensing
WorkCover
Locked Bag 2906
Lisarow NSW 2252

Dear Coordinator

RE: LICENSE NO. ~~35/014066~~

Changes in the last twelve months are:

Depot 3 and 4 no longer holds any chemicals due to the closure of our laundry late last year.

The chemicals were collected by the supplier on closure of the laundry.

Yours sincerely

Ian Thomson
Hospital Engineer

Licence No. 35/014066

APPLICATION FOR RENEWAL OF LICENCE TO KEEP DANGEROUS GOODS

ISSUED UNDER AND SUBJECT TO THE PROVISIONS OF THE DANGEROUS GOODS ACT, 1975 AND REGULATION THEREUNDER

DECLARATION: Please renew licence number 35/014066 to 16/07/2005. I confirm that all the licence details shown below are correct (amend if necessary).


.....
(Signature)

for: SYDNEY ADVENTIST HOSPITAL

Ian Thomson
.....
(Please print name)

11/6/04
.....
(Date signed)

THIS SIGNED DECLARATION SHOULD BE RETURNED TO:

WorkCover New South Wales
Dangerous Goods Licensing Section
LOCKED BAG 2906
LISAROW NSW 2252

Enquiries: ph (02) 43215500
fax (02) 92875500

Details of licence on 28 May 2004

Licence Number 35/014066

Expiry Date 16/07/2004

Licensee SYDNEY ADVENTIST HOSPITAL

Postal Address: 185 FOX VALLEY RD WAHROONGA NSW 2076

Licensee Contact IAN THOMSON Ph. 02 9487 9070 Fax. 02 9489 7715

Premises Licensed to Keep Dangerous Goods

SYDNEY ADVENTIST HOSPITAL
185 FOX VALLEY RD WAHROONGA 2076

Nature of Site HOSPITALS (EXCEPT PSYCHIATRIC HOSPITALS)

Major Supplier of Dangerous Goods UNKNOWN OR OTHER

Emergency Contact for this Site SECURITY SERVICE Ph. 02 9487 9111

Site staffing 24 HRS 7 DAYS

Details of Depots

Depot No.	Depot Type	Goods Stored in Depot	Qty
1	EXEMPT - A/G TANK	Class 2.2	12500 L
	UN 1073 OXYGEN, REFRIGERATED LIQUID		10000 L
10	EXEMPT - A/G TANK	Class 2.2	2500 L
	UN 1073 OXYGEN, REFRIGERATED LIQUID		2000 L
11	ROOFED STORE	Class 3	500 L
	UN 1170 ETHANOL (ETHYL ALCOHOL)		300 L
12	EXEMPT - STORAGE AREA	Class 2.1	120 KG
	UN 1075 PETROLEUM GASES, LIQUEFIED		80 KG
13	EXEMPT - STORAGE AREA	Class 2.2	7 M3
	UN 1046 HELIUM, COMPRESSED		6 M3
14	EXEMPT - STORAGE AREA	Class 2.2	500 M3
	UN 1002 AIR, COMPRESSED		150 M3
	UN 1013 CARBON DIOXIDE		120 M3
	UN 1046 HELIUM, COMPRESSED		6 M3
	UN 1066 NITROGEN, COMPRESSED		20 M3
	UN 1070 NITROUS OXIDE		140 M3
	UN 1072 OXYGEN, COMPRESSED		20 M3
15	EXEMPT - U/G TANK	Class C1	12000 L
	UN 00C1 DIESEL		10000 L

APPLICATION FOR RENEWAL OF LICENCE TO KEEP DANGEROUS GOODS

ISSUED UNDER AND SUBJECT TO THE PROVISIONS OF THE DANGEROUS GOODS ACT, 1975 AND REGULATION
THEREUNDER

	UN 1170 ETHANOL (ETHYL ALCOHOL)		100 L
17	EXEMPT - STORAGE AREA	Class 2.2	35 M3
	UN 1013 CARBON DIOXIDE		15 KG
	UN 1072 OXYGEN, COMPRESSED		20 M3
18	EXEMPT - STORAGE AREA	Class 2.1	90 KG
	UN 1075 PETROLEUM GASES, LIQUEFIED		60 KG
19	EXEMPT - STORAGE AREA	Class 2.2	20 M3
	UN 1006 ARGON, COMPRESSED		20 M3
2	EXEMPT - STORAGE AREA	Class 2.1	108 KG
	UN 1075 PETROLEUM GASES, LIQUEFIED		70 KG
20	FLAMMABLE LIQUIDS CABINET	Class 3	250 L
	UN 1203 MOTOR SPIRIT		100 L
21	TOXICS CABINET	Class 6.1	120 L
	UN 3010 COPPER BASED PESTICIDE, LIQUID, TOXIC		5 L
	UN 3017 ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FL		5 L
	UN 3017 ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FL		20 L
	UN 3017 ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FL		10 L
	UN 3017 ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FL		5 L
3	ABOVE-GROUND TANK	Class 8	4400 L
	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S.		2000 L
	UN 1791 HYPOCHLORITE SOLUTION		1500 L
4	ABOVE-GROUND TANK	Class 5.1	800 L
	UN 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION		600 L
5	EXEMPT - STORAGE AREA	Class 8	240 L
	UN 1789 HYDROCHLORIC ACID		30 L
	UN 1791 HYPOCHLORITE SOLUTION		180 L
6	EXEMPT - A/G TANK	Class C1	20000 L
	UN 00C1 HEATING OIL		7000 L
7	EXEMPT - A/G TANK	Class C1	15000 L
	UN 00C1 HEATING OIL		5000 L
8	EXEMPT - A/G TANK	Class 8	100 L
	UN 1791 HYPOCHLORITE SOLUTION		70 L
9	EXEMPT - A/G TANK	Class 2.2	180 L
	UN 1013 CARBON DIOXIDE		100 L

DeLere ax.
+ Add

Dangerous Goods Depots
Sydney Adventist Hospital - 185 Fox Valley Road, Wahroonga 2076

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
1	Above Ground Tank	2.2		12,500 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1073	Oxygen	2.2		Liquid Oxygen-Medical	10,000	L

Plan Rec'd

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Yard located at north east of Jacaranda Lodge.

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
2	Cylinder Store	2.1		108 Kg		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1075	Propane	2.1		LP Gas	70	Kg

Plan Rec'd

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located on the east side of laundry store.

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
3	Above Ground Tank	8		4,400 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1719	Sodium Hydroxide Solution	8	II	Control Conquer	2,000	L
1791	Hypochlorite Solution	8	II	Dairy - Chlor	1,500	L

Plan Rec'd

Located on the south side of the laundry.

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
4	Above Ground Tank	5.1		800 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
2014	Hydrogen Peroxide	5.1	II	Interox 50 T	600	L

Plan Rec'd

Located on the south side of the laundry.

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
5	Roofed Store	8		240 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1791	Sodium Hypochlorite	8	II	Liquid Chlorine	180	L
1789	Hydrochloric Acid	8	II	Hydrochloric Pool Acid	30	L

Plan Rec'd

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located south of the staff swimming pool.

Dangerous Goods Depots
Sydney Adventist Hospital. 185 Fox Valley Road, Wahroonga 2076

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
6	Above Ground Tank	C1		20,000 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
	Boiler Oil	C1		Fuel Oil	7,000	L

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located west of the boilerhouse.

Plan Red'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
7	Above Ground Tank	C1		15,000 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
	Oil	C1	*	Oil	5,000	L

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located west of the boiler house.

Plan Red'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
8	Above Ground Tank	8		100 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1791	Sodium Hypochlorite	8	II	Liquid Chlorine	70	L

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located in basement of maternity building.

Plan Red'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
9	Above Ground Tank	2.2		180 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1013	Carbon Dioxide	2.2		Liquid Carbon Dioxide-CO2 Gasmatic	100	L

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located in basement of maternity building.

Plan Red'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
10	Above Ground Tank	2.2		2,500 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1073	Oxygen	2.2		Liquid Oxygen-Medical	2,000	L

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located south east of maternity building.

Plan Red'd

Dangerous Goods Depots
Sydney Adventist Hospital. 185 Fox Valley Road, Wahroonga 2076

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
11	Roofed Store	3		500 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1170	Ethanol	3	II	Ethanol	300	L

Located in Pathology Section, Level 5 Services Building.

Plan Rec'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
12	Cylinder Store	2.1		120 Kg		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1075	Propane	2.1		LP Gas	80	Kg

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located west side ground main building.

Plan Rec'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
13	Cylinder Store	2.2		7.3 M3		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1046	Helium	2.2		Helium	6	M3

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located west side ground main building.

Plan Rec'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
14	Cylinder Store	2.2		500 M3		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1046	Helium	2.2		Helium	6	M3
1070	Nitrous Oxide	2.2		Nitrous Oxide-Medical Grade	140	M3
1066	Nitrogen	2.2		Nitrogen – Industrial	20	M3
1002	Medical Air	2.2		Medical Air- Dry	150	M3
1013	Carbon Dioxide	2.2		Carbon Dioxide	120	M3
1072	Oxygen	2.2		Medical Oxygen	20	M3
2156	Enterox	2.2		Enterox	3	M3

EXEMPT DEPOT. FOR SCID PURPOSE ONLY. Located level 3 main building.

Plan Rec'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
15	Underground tank	C1		12,000 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
	Diesel	C1		Diesel	10,000	L

EXEMPT DEPOT. FOR SCID PUPOSES ONLY. Located west of main building.

Plan Rec'd

Dangerous Goods Depots
Sydney Adventist Hospital, 185 Fox Valley Road, Wahroonga 2076

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
16	Flammable Liquids Cabinet	3		160 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
170	Ethanol	3	II	Ethanol	100	L

Located in Pharmacy Section, level 4 main building.

Plan Rec'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
17	Cylinder Store	2.2		35 M3		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1072	Oxygen	2.2		Oxygen	20	M3
1013	Carbon Dioxide	2.2		Carbon Dioxide	15	Kg

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located east of boiler house.

Plan Rec'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
18	Cylinder Store	2.1		90 Kg		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1075	Propane	2.1		Propane	60	Kg

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located east of boiler house.

Plan Rec'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
19	Cylinder Store	2.2		20 M3		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1980	Argon	2.2		Argon	20	M3

EXEMPT DEPOT. FOR SCID PURPOSES ONLY. Located in workshop.

Plan Rec'd

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
20	Flammable Liquids Cabinet	3		250 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
1203	Motor Spirit	3	II	Petrol	100	L

Located in Gardeners room, maintenance building.

Plan Rec'd

1006

Dangerous Goods Depots
Sydney Adventist Hospital. 185 Fox Valley Road, Wahroonga 2076

Depot Number	Type of Depot	Depot Class		Maximum Storage Capacity		
21	Toxic Liquids Cabinet	6.1		120 L		
UN Number	Proper Shipping Name	Class	PG	Product or Common Name	Typical Quantity	Unit
3017	Glyco-phosphate	6.1	III	Roundup	20	L
3017	Pesticide-Organophosphorous.	6.1	III	Rogor	10	L
3010	Copper Oxochloride	6.1	II	Copper Oxochloride.	5	L
3017	Bromoxymil	6.1	III	Bindi Killer	5	L
3017	Pesticide Organophosphorous.	6.1	III	Chloral Pyrophos.	5	L

Handwritten:
 Han
 rec'd

Located in Gardeners room, maintenance building.



INCORPORATED IN NSW

ADVANCED POWER

PRODUCTS (NSW)
PTY LIMITED

33 Shepherd Street, Liverpool, NSW 2170
Telephone: (02) 600 6555 Facsimile: (02) 821 1936

ACN: 002 880 024

AJW
Australian
Design Award
1988



April 4, 1995

Work Cover Authority,
Dangerous Goods Section,
Lot Bag 10,
Clarence Street Post Office,
SYDNEY NSW 2001

Attention : Mr. Phil Butt, Chief Inspector

Dear Sir,

RE: SYDNEY ADVENTIST HOSPITAL
185 FOX VALLEY ROAD, WAHROONGA.

000633

RECEIVED

- 5 APR 1995

SCIENTIFIC SERVICES
BRANCH

We have been contracted to supply and install a Diesel Generator System at the above premises. Part of this system, is the installation of a 10,000 litre capacity inground bulk distillate fuel tank.


On behalf of the owners "Adventist Hospital" and the builder "Fletcher Constructions", we wish to submit an application for approval, to install an inground bulk fuel tank, as detailed on the enclosed drawing JE 346-09A.

The installation will comply with the requirements of AS 1940, as well as being provided with remote contents indication and cathodic protection of inground tank.

We trust the enclosed drawings contains sufficient information for your requirements. However, should you require any additional information, please advise the undersigned.

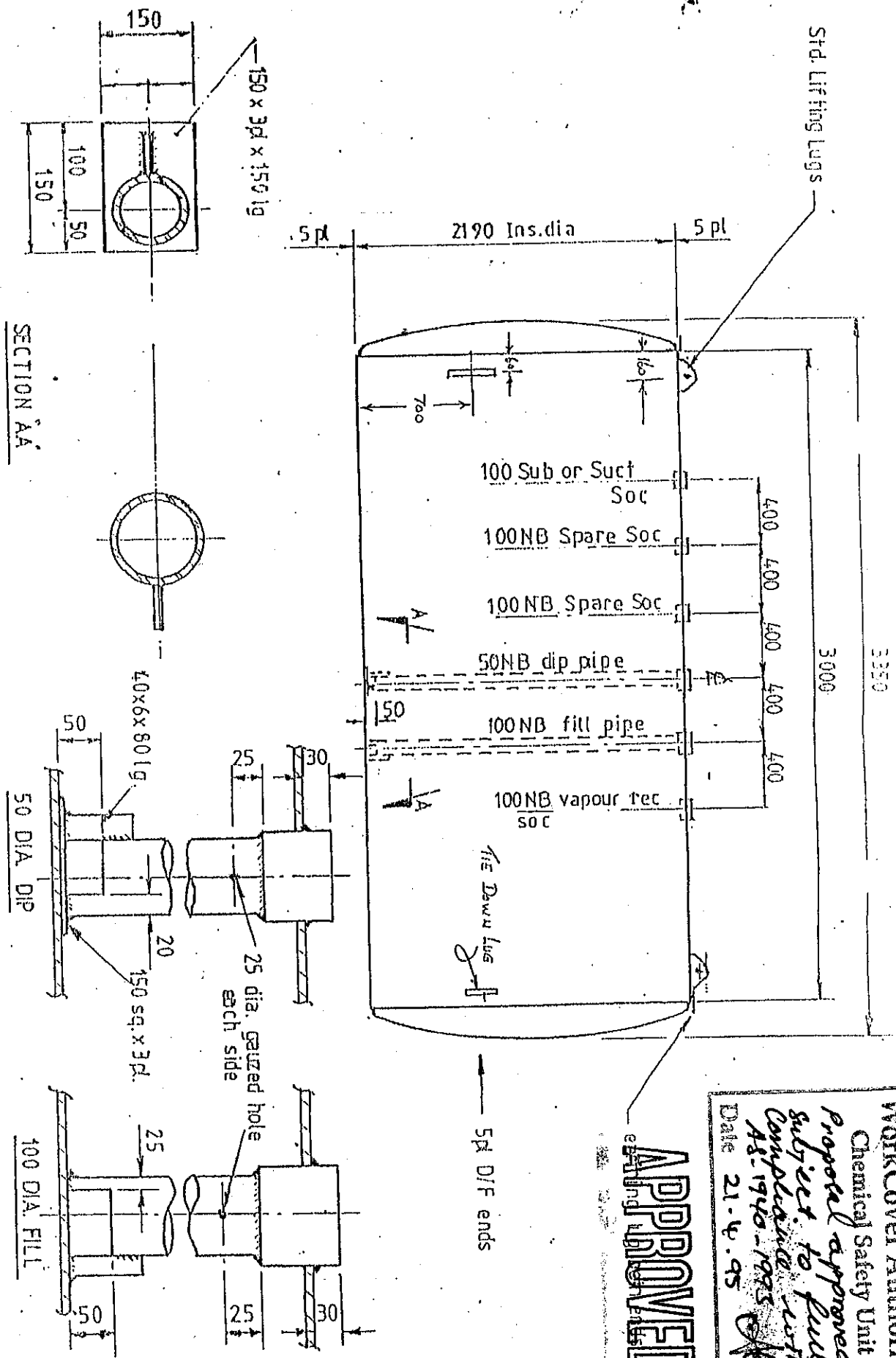
Thanking you for your assistance and advice,

Yours faithfully,
ADVANCED POWER PRODUCTS (NSW) PTY.LTD.


A.J. WALKER
ASST. GENERAL MANAGER

Please attach to
35/014066.
Thank you.
Amadeo.

TYPICAL DRAWING ONLY



AMPOL PETROLEUM PTY. LTD.

TYPE 10 U/G TANK

REF. H.O. 7065
DRWGS. H.O. 7059

STEEL TANK & PIPE CONSOLIDATED PTY. LTD. NEWCASTLE, N.S.W.

Date 26.2.92
Drw No E 4191

APPROVED

Work Cover Authority
Chemical Safety Unit
Proposed approved
subject to full
compliance with
AS 1940-1995
Date 21.4.95
[Signature]

7
DANGEROUS GOODS ACT, 1975

DG 8207 0001 - - 83

APPLICATION FOR LICENCE (or AMENDMENT or TRANSFER of LICENCE)
FOR THE KEEPING OF DANGEROUS GOODS

Application is hereby made for—
described below.

- *a licence (or amendment of the licence)
- *the transfer of the licence

for the keeping of dangerous goods in or on the premises

(*delete whichever is not required)

FEE: \$10.00 per Depot for new licence.
\$10.00 for amendment or transfer.

Name of Applicant in full (see over)	Australian Conference Association limited.	
Trading name or occupier's name (if any)	Sydney Adventist Hospital	
Postal address	335B 10/09/82 Postcode	
Address of the premises including street number (if any)	185 Fox Valley Road Wahroonga Postcode 2076	
Nature of premises (see over)	Hospital	
Telephone number of applicant	STD Code	Number 4879111

Particulars of type of depots and maximum quantities of dangerous goods to be kept at any one time.

Depot number	Type of depot (see over)	Storage capacity Litre	Dangerous goods	C & C Office use only
			Product being stored	
1	Underground Tank	15000	Class 3.1 Petrol	004 060 7
2	✓	15000	✓ ✓ ✓	2 020 24
3	Aboveground Tank	2172 m ³	Class 2.2. Oxygen	1 040 23
4	Rooted Package Store	1000	Class 3.1, 3.2	6 020 13
5	(Pharmacy)			
6				
7				
8				
9				
10				
11				
12				

Has site plan been approved? Yes No If yes, no plans required. If no, please attach site plan.

Have premises previously been licensed? Yes No If yes, state name of previous occupier. As above

Name of company supplying flammable liquid (if any) Mobil

Signature of applicant *[Signature]* Date 2.9.82

For external explosives magazine(s), please fill in side 2.

HOSPITAL SECRETARY - LICENSEE

FOR OFFICE USE ONLY

CERTIFICATE OF INSPECTION

I, *Calilliam, R. Machon* being an Inspector under the Dangerous Goods Act, 1975, do hereby certify that the premises described above do comply with the requirements of the Dangerous Goods Act, 1975, and the Dangerous Goods Regulation with regard to their situation and construction for the keeping of dangerous goods of the nature and in the quantity specified.

INFLAMMABLE LIQUID ACT, 1915 (AS AMENDED)

Application for Registration of Premises or Store Licence under Division B or for the transfer alteration or amendment of any such Registration or Licence, for the keeping of Inflammable Liquid and/or Dangerous Goods, in accordance with the provisions of the Inflammable Liquid Act, 1915 (as amended), for the ensuing year.

(MOBIL)

DIRECTIONS

1. Applications must be forwarded to the Chief Inspector of Inflammable Liquid, Explosives Department, Box R.216, Royal Exchange Sydney, N.S.W. 2000 and must be accompanied by the prescribed fee, as set out hereunder:

Registration of Premises (Fee \$3.00 p.a.) - For quantities not exceeding 300 gallons of mineral oil and 100 gallons of mineral spirit, if kept together; or 800 gallons of mineral oil and 100 gallons of mineral spirit, if kept in separate depots; or 500 gallons of mineral spirit, if kept in an underground tank depot; or 800 gallons of mineral oil and 500 gallons of mineral spirit, if mineral spirit is kept in an underground tank depot.

In addition to, or in lieu of the above, similar quantities of Dangerous Goods of Classes 1 and 2 may be kept under the like conditions; reading Dangerous Goods of Class 1 for the words Mineral Spirit and Dangerous Goods of Class 2 for the words Mineral Oil.

Store License, Div. A (Fee, \$6.50 p.a.) - For quantities in excess of those stated above, but not exceeding 4,000 gallons mineral oil and/or mineral spirit, and/or Dangerous Goods of Classes 1, 2 and 9.

Store License, Div. B (Fee, See Regulation 7) - For quantities exceeding 4,000 gallons of mineral spirit, and/or dangerous goods of Classes 1 and 2, and/or dangerous goods of Class 3.

For the keeping of Dangerous Goods of Classes 3 and/or 4. (\$15.00 p.a.)

Fees for the keeping of inflammable liquid and dangerous goods in excess of the above stated quantities and also for Liquid Petroleum Gas storage are set out in Regulation 7.

Amend & renew A14066 to 15-7-72

<p>1. Name of occupier including full christian names.</p> <p>2. Trading Name (if any)</p> <p>3. Locality of the premises in which the depot or depots are situated</p> <p>4. Postal address</p> <p>5. Occupation</p> <p>6. Nature of premises (dwelling, garage etc.)</p>	<p align="center"><u>AUSTRALIAN CONFERENCE ASSOCIATION LIMITED</u></p> <p align="center"><u>SYDNEY SANITARIUM & HOSPITAL</u></p> <p>No. or Name <u>185</u></p> <p>Street <u>FOX VALLEY ROAD</u></p> <p>Town <u>WAHROONGA</u></p> <p><u>as above</u> Postcode <u>2076</u></p> <p><u>Hospital Prof</u></p> <p><u>Hospital</u></p>
--	---

7. Particulars of construction of depots and maximum quantities of inflammable liquid and/or Dangerous Goods to be kept at any one time.

PLEASE ATTACH PLAN OF PREMISES

Depot No.	Construction of depots *			Inflammable liquid		Dangerous goods					
	Walls	Roof	Floor	Mineral spirit gallons	Mineral oil gallons	Class 1 gallons	Class 2 gallons	Class 3 lb	Class 4 cu ft	Class 5A water gal	Class 9 gallons
1	<u>Underground Tank</u>			<u>3000</u>							
2				<u>3000</u>							
3											
4											
5											
6											
7											
8											
9											
10											

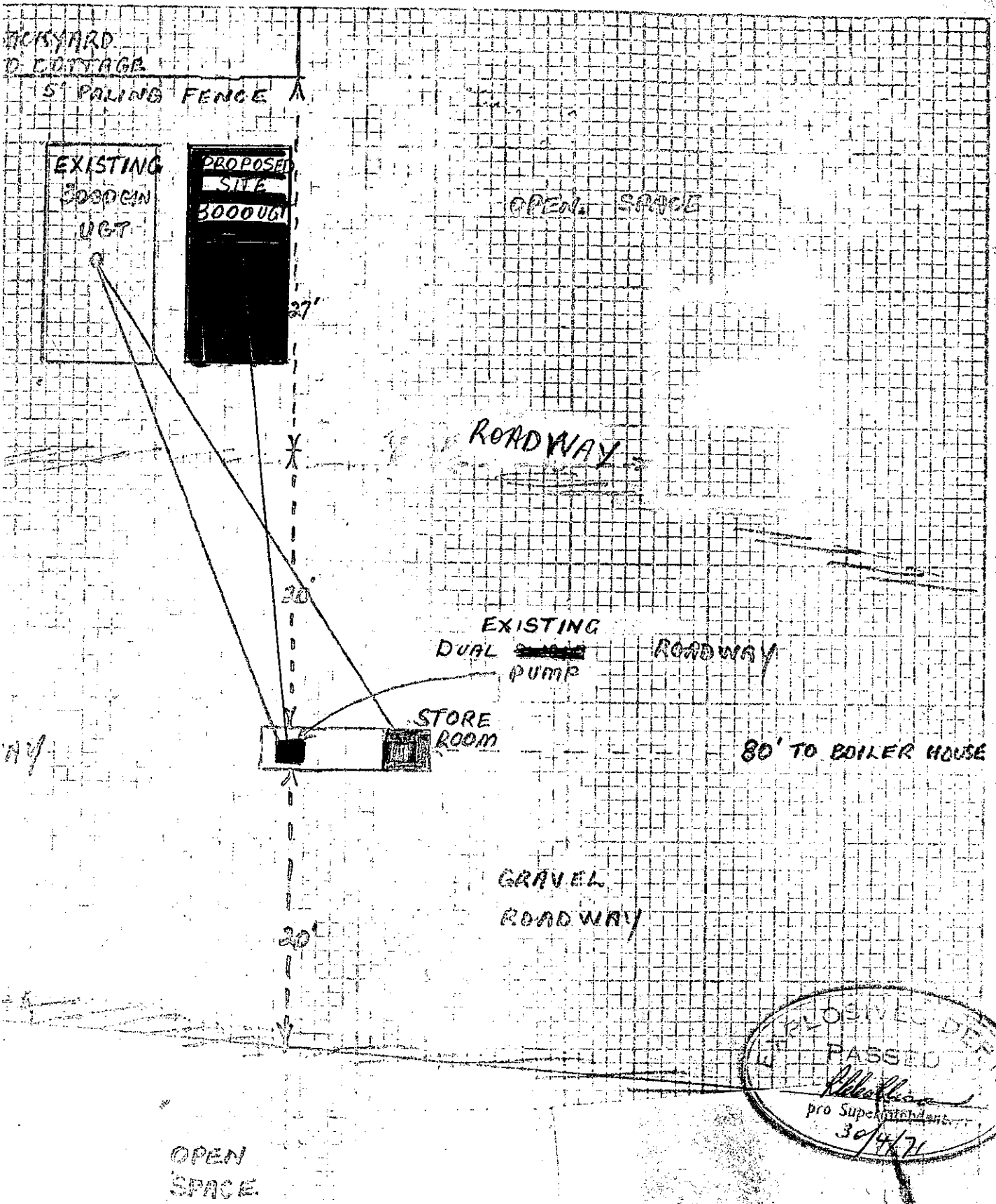
* If product is kept in tanks describe depots as underground or aboveground tanks. Sydney Sanitarium & Hospital

Signature of applicant _____

Date of application 4/7/71, 1971

A Leonard Baxter **CERTIFICATE OF INSPECTION**

REAR OF SANITARIUM HOSPITAL WAHROONGA



FOX VALLEY RD

ENCLOSURE DEPT
PASSED BY
[Signature]
pro Superintendent
30/4/71

APPENDIX E
Historical Land Titles Summary

Street Number	Lot	Street	Title Folio/ Volume	Area sq.m	LGA	Property Number	Zoning	Area Zone	Included in Redevelopment
West									
Mt Pleasant Avenue, Normanhurst									
64	4	Mt Pleasant Avenue	4/834969	1159	Ku-ring-gai	708091	Special Use		YES
66	5	Mt Pleasant Avenue	5/834969	949	Ku-ring-gai	708092	Special Use		YES
68	6	Mt Pleasant Avenue	6/834969	930	Ku-ring-gai	708093	Special Use		YES
70	7	Mt Pleasant Avenue	7/834969	940.8	Ku-ring-gai	708094	Special Use		YES
72	8	Mt Pleasant Avenue	8/834969	930.1	Ku-ring-gai	708095	Special Use		YES
74	9	Mt Pleasant Avenue	9/834969	1198	Ku-ring-gai	708096	Special Use		YES
76	10	Mt Pleasant Avenue	10/834969	930.9	Ku-ring-gai	708097	Residential		YES
78	11	Mt Pleasant Avenue	11/834969	1200	Ku-ring-gai	708098	Special Use		YES
80	12	Mt Pleasant Avenue	12/834969	930.2	Ku-ring-gai	708099	Special Use		YES
82	50	Mt Pleasant Avenue	50/1017514	931.4	Ku-ring-gai	2775960	Residential		YES
84	51	Mt Pleasant Avenue	51/1017514	1244	Ku-ring-gai	2775961	Residential		YES
86	52	Mt Pleasant Avenue	52/1017514	9547	Ku-ring-gai	2775962	Residential		YES
88	53	Mt Pleasant Avenue	53/1017514	1078	Ku-ring-gai	2775963	Residential		YES
90	54	Mt Pleasant Avenue	54/1017514	931.6	Ku-ring-gai	2775964	Residential		YES
92	55	Mt Pleasant Avenue	55/1017514	971.5	Ku-ring-gai	2775965	Residential		YES
94	56	Mt Pleasant Avenue	56/10175140	1054.8	Ku-ring-gai	2775966	Residential		YES
96	57	Mt Pleasant Avenue	57/1017514	974.6	Ku-ring-gai	2775967	Residential		YES
98	58	Mt Pleasant Avenue	58/1017514	935.8	Ku-ring-gai	2775968	Residential		YES
100	59	Mt Pleasant Avenue	59/1017514	939.9	Ku-ring-gai	2775969	Residential		YES
102	60	Mt Pleasant Avenue	60/1017514	1145.6	Ku-ring-gai	2775970	Residential		YES
104	61	Mt Pleasant Avenue	61/1017514	1035.1	Ku-ring-gai	2775971	Residential		YES
Other									
7	4	Nicholas Crescent	4/213978	942.2	Hornsby	659168	Residential		YES

F86321

F 86321

Plan Form N°7 (for compilations)

Municipality of Ku-ring-gai

PLAN

FP 366127

of subdivision of land in Cert of Title Vol. 2745 fol. 1B
 Parish of South Colah County of Cumberland

Scale 60 feet to an inch.

Certificate No. 49/90

This subdivision certified approved by the Council of the Municipality of Ku-ring-gai, the instrument of the Local Government Act, 1919 (other than the provisions of the regulations (No. 118) having been complied with.

Approved by the Council on the 3rd day of 1949.

of 1949.

Town Clerk.

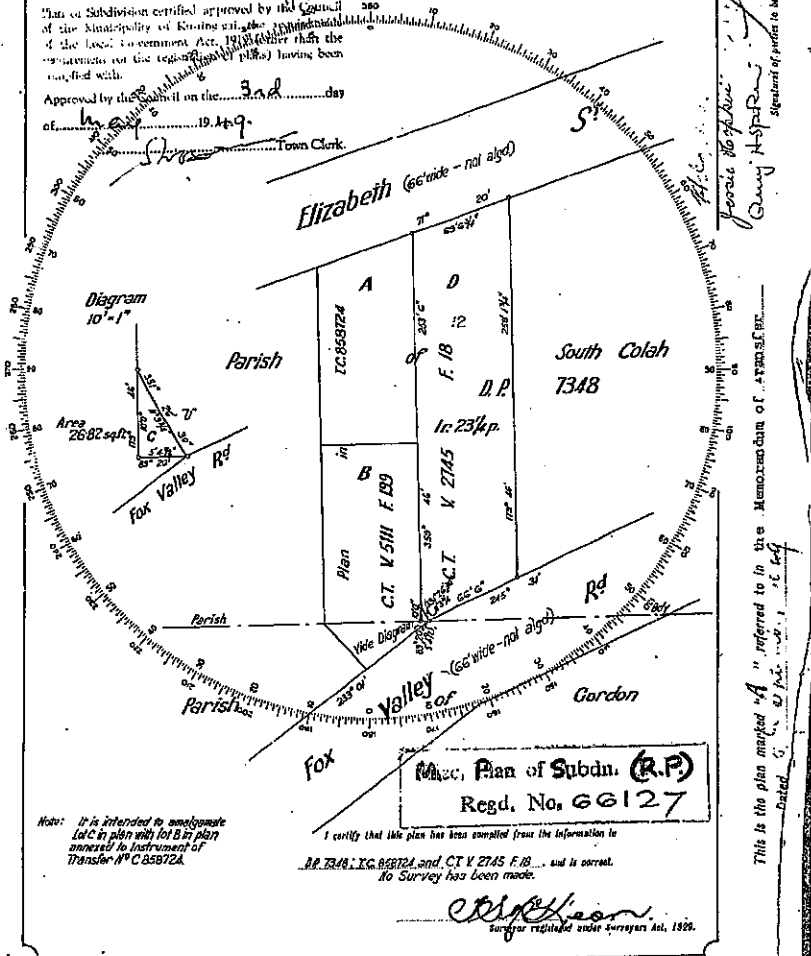


Diagram 10'-1"

Area 2682 sq ft

Note: It is intended to amalgamate lot C in plan with lot B in plan annexed to instrument of Transfer N° C.859724.

Plan of Subdn. (R.P.)
 Regd. No. 66127

[Signature]
 Surveyor registered under Surveyors Act, 1920.

This is the plan marked 'A' referred to in the Memorandum of Transfer of...
 dated 1949.

CONVERSION TABLE ADDED IN DEPARTMENT OF LANDS.

DP 366127

FEET	INCHES	METRES
5	4 1/2	1.638
10	1	3.048
11	3 3/4	3.448
66	1	20.117
66	6	20.269
69	6 3/4	21.203
100	1	30.480
253	6	77.267
258	1 3/4	78.683
AC RD P		50 M
- 1	23 1/4	1600
SQ FT		50 M
26.82		2.5

1158/54
 2/12/49
 149/2332

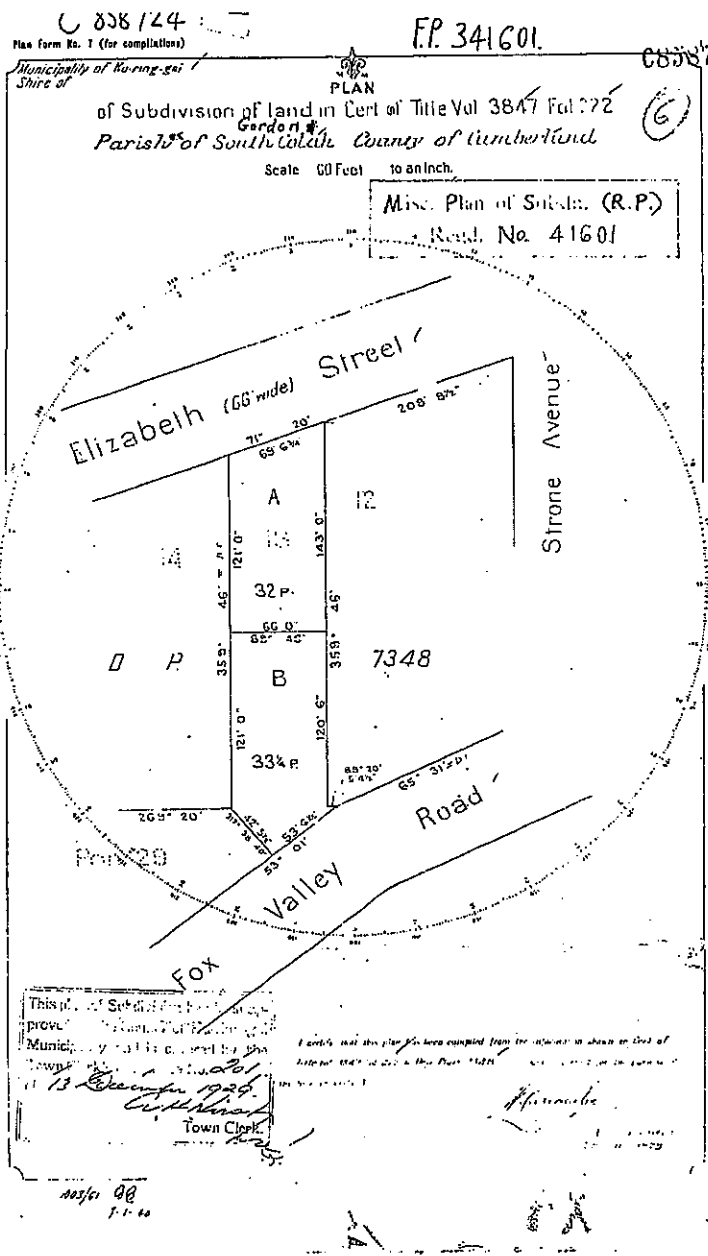
PX

0	10	20	30	40	50	60	70	80	90	100
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I, Bruce Richard Davies, Registrar General for New South Wales, certify that this negative is a photograph made as a permanent record of a document in my custody this 14th day of September, 1978

1

Req:R185780 /Doc:DP 0341601 P /Rev:29-Sep-1992 /Sts:OK.OK /Prt:08-Feb-2007 09:52 /Pgs:ALL /Seq:1 of 1
 Ref:2199794 /Src:U



REGISTRAR GENERAL'S DEPARTMENT

DP 341601

FEET INCHES		METRES
5	4 1/2	1.638
42	5 1/2	12.941
53	6 1/4	16.313
66	-	20.117
69	6 3/4	21.203
120	-	34.728
121	-	34.881
143	-	43.586
208	8 1/2	63.614

AC	RD	P	SD M
-	-	32	809.4
-	-	33.2	839.7
-	-	33 1/4	841

10	20	30	40	50	60	70	80	90	100
----	----	----	----	----	----	----	----	----	-----

I, Bruce Richard Davies, Registrar General for New South Wales, certify that this negative is a photograph made as a permanent record of a document in my custody this 4th day of July, 1978.

[Signature]

1

APPENDIX F
Historical Plates



Photo 1: Market Gardens west of the hospital in the 1940s

Wairoonga Estate: Phase 1 Contamination Assessment:
Market Gardens west of the hospital
148 Fox Valley Road
Wairoonga NSW 2076

Project
45569.01

June
2008

Plate
F 1



Photo 2: Market Gardens east of Fox Valley Road in the 1940s

Wahroonga Estate: Phase 1 Contamination Assessment:
Market Gardens east of Fox Valley Road in the 1940s
148 Fox Valley Road
Wahroonga NSW 2076

Project
45569.01

June
2008

Plate
F 2

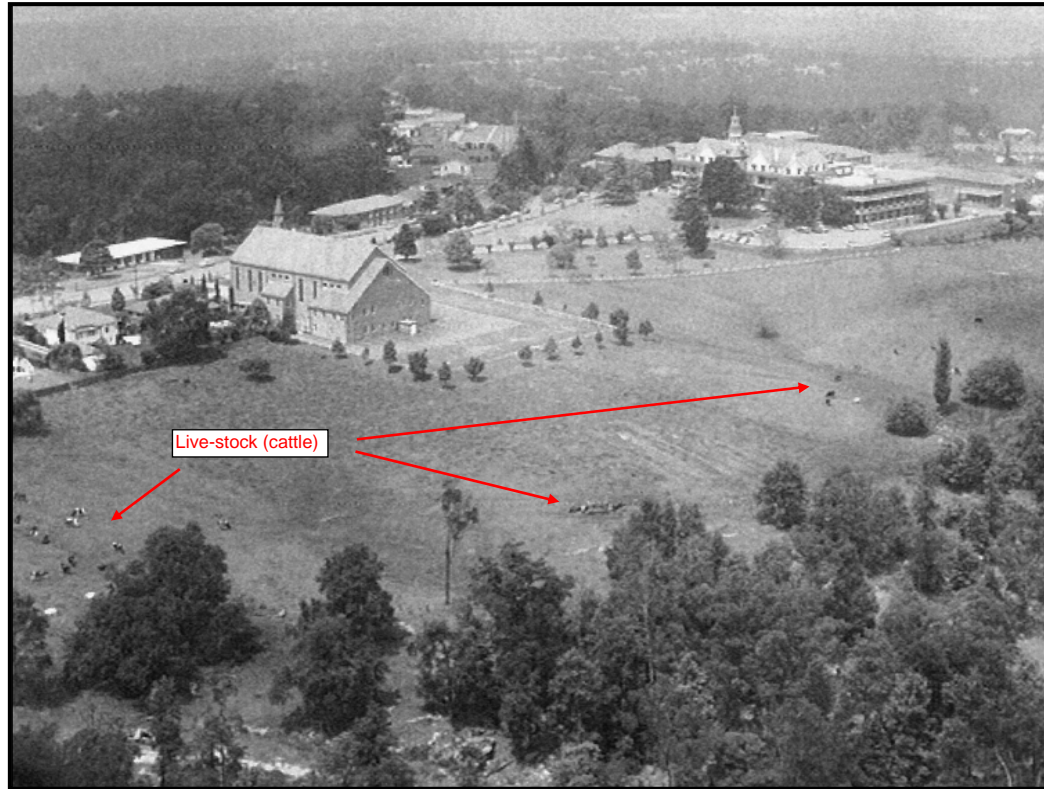


Photo 3: Live-stock (cattle) in the 1940s

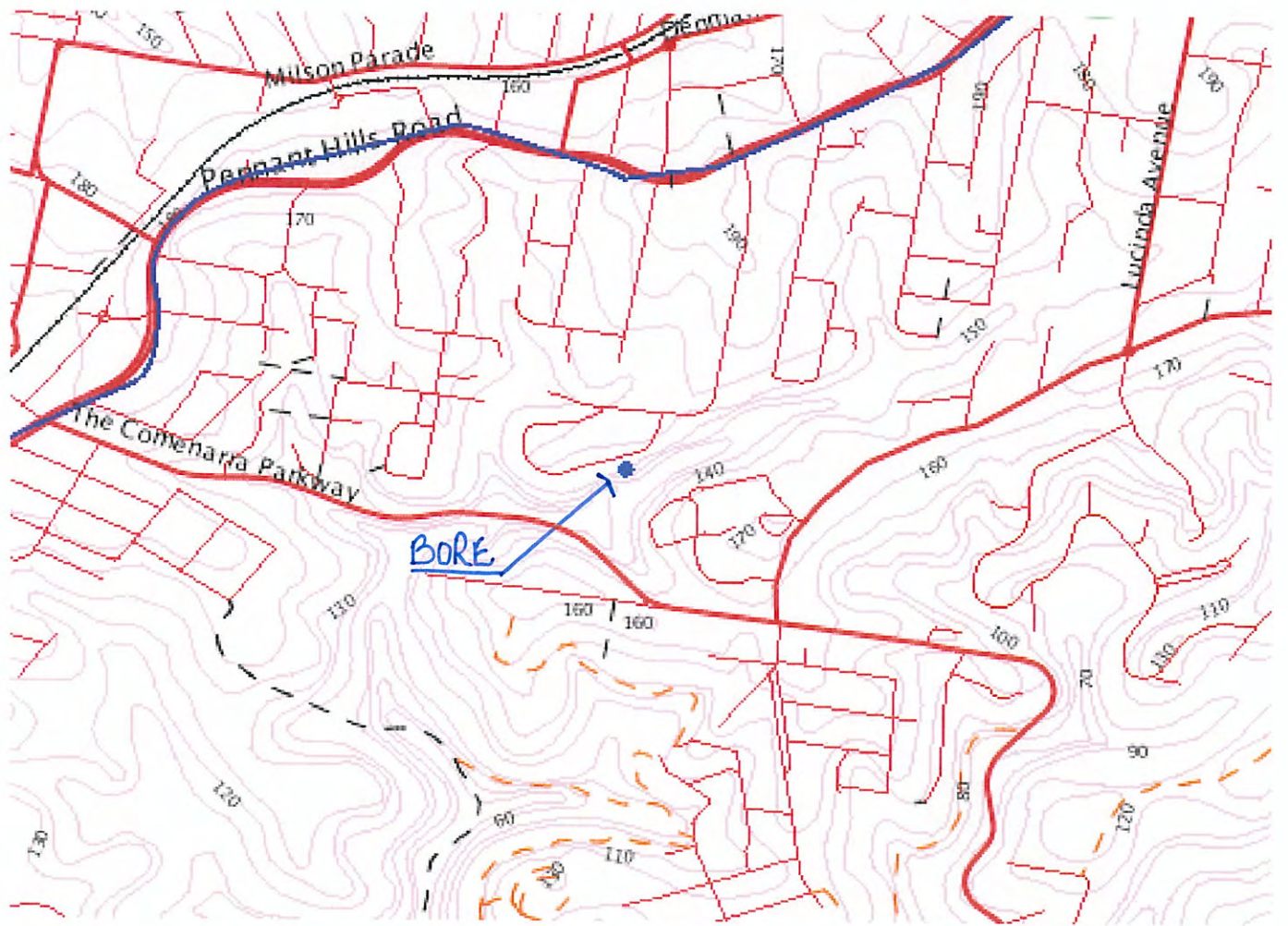
Wahroonga Estate: Phase 1 Contamination Assessment:
Live-stock (cattle) in the 1940s
148 Fox Valley Road
Wahroonga NSW 2076

Project
45569.01

June
2008

Plate
F 3

APPENDIX G
Groundwater Bore Data



Groundwater Works Summary

For information on the meaning of fields please see [Glossary](#)
Document Generated on Friday, May 16, 2008

[Print Report](#)

[Works Details](#) [Site Details](#) [Form A](#) [Licensed](#) [Construction](#) [Water Bearing Zones](#) [Drillers Log](#)

Work Requested -- GW107929

Works Details ([top](#))

GROUNDWATER NUMBER GW107929
LIC-NUM 10BL165856
AUTHORISED-PURPOSES RECREATION (GROUNDWATER)
INTENDED-PURPOSES RECREATION (GROUNDWATER)
WORK-TYPE Bore
WORK-STATUS
CONSTRUCTION-METHOD Rotary
OWNER-TYPE
COMMENCE-DATE
COMPLETION-DATE 2005-03-18
FINAL-DEPTH (metres) 180.00
DRILLED-DEPTH (metres) 180.00
CONTRACTOR-NAME
DRILLER-NAME
PROPERTY AUSTRALASIAN CONFERENCE ASSOC.
GWMA - UPPER MURRAY (U/S COROWA)
GW-ZONE - MAIN FAN AREA PRIMARY RECHARGE
STANDING-WATER-LEVEL 58.00
SALINITY 1800.00
YIELD 0.10

Site Details ([top](#))

REGION 10 - SYDNEY SOUTH COAST
RIVER-BASIN
AREA-DISTRICT
CMA-MAP
GRID-ZONE
SCALE
ELEVATION
ELEVATION-SOURCE
NORTHING 6265935.00
EASTING 323621.00

LATITUDE 33 43' 55"
 LONGITUDE 151 5' 46"
 GS-MAP
 AMG-ZONE 56
 COORD-SOURCE
 REMARK

Form-A (top)

COUNTY CUMBERLAND
 PARISH GORDON
 PORTION-LOT-DP 62 1017514

Licensed (top)

COUNTY CUMBERLAND
 PARISH GORDON
 PORTION-LOT-DP 62 1017514

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
 ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE- NO	PIPE- NO	COMPONENT- CODE	COMPONENT- TYPE	DEPTH- FROM (metres)	DEPTH- TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	2.50	206			Down Hole Hammer
1		Hole	Hole	2.50	180.00	162			Down Hole Hammer
1	1	Casing	Steel	-0.50	5.50	162	152.4		C: -.1-5.5m; Driven into Hole
1	1	Casing	PVC Class 9	-0.50	23.50	140			Screwed and Glued; Suspended in Clamps

Water Bearing Zones (top)

FROM- DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK- CAT- DESC	S-W- L	D- D- L	YIELD	TEST-HOLE- DEPTH (metres)	DURATION	SALINITY
73.00	74.50	1.50				0.15	78.00	0.25	1188.00
117.00	117.20	0.20		58.00		0.25	120.00	0.25	1715.00
133.00	135.00	2.00				0.25	150.00	0.25	1677.00
153.00	156.50	3.50				0.10	180.00	0.25	1800.00

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL COMMENT
0.00	16.00	16.00	SANDSTONE L./B	
16.00	17.00	1.00	SANDSTONE,FRACTURED, SOFT	
17.00	35.00	18.00	SANDSTONE GREY	
35.00	35.50	0.50	SHALE	
35.50	73.00	37.50	SANDSTONE GREY	
73.00	74.50	1.50	SANDSTONE FINE QUARTZ	
74.50	83.00	8.50	SANDSTONE GREY	
83.00	88.00	5.00	SANDSTONE D/G	
88.00	92.00	4.00	SANDSTONE GREY	
92.00	92.50	0.50	SANDSTONE F/Q	
92.50	117.00	24.50	SANDSTONE D/G	
117.00	117.20	0.20	SANDSTONE FRACTURED	
117.20	124.00	6.80	SANDSTONE GREY	
124.00	124.50	0.50	SANDSTONE F/Q	
124.50	133.00	8.50	SANDSTONE GREY	
133.00	135.00	2.00	SANDSTONE / QUARTZ	
135.00	153.00	18.00	SANDSTONE GREY	
153.00	156.50	3.50	SANDSTOHNE FINE QUARTZ	
156.50	180.00	23.50	SANDSTONE GREY	

Warning To Clients: This raw data has been supplied to the Department of Infrastructure, Planning and Natural Resources (DIPNR) by drillers, licensees and other sources. The DIPNR does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

APPENDIX H
Sydney Water Hazard Alert

hazard alert

Trade Waste Discharge: Iodine 131

Alert No: 2 - 2007

Date: June 21 2007

Description of what happened

Iodine-131 is used for treatment in specialist treatment units in some Sydney Hospitals. There is a potential health risk if Iodine-131 is discharged into the sewer close to workers. The probability of exposure to workers is considered low. However, Sydney Water is working with NSW Health to ensure the risk to workers is eliminated. All hospitals using Iodine-131 have been asked to install waste holding tanks within 9 months. Until this installation programme is complete, procedures have been developed to minimise the risk of exposure.

Location / Who it affects / issues / outcomes

- Sydney Water Employees and Contractors working on affected Sewers and Sewage Pumping Station 93 (SPS 93) must follow the interim arrangements detailed in this alert.
- Sydney Water's HYDRA system has been updated to identify the areas of the sewer that are affected by the 20 registered nuclear medicine units. Please note, not all of these units use Iodine-131.
- The Sydney Water Schedulers know the affected areas of the sewer and affected Sewage Pumping Station 93 (SPS 93).
- The Trade Waste Group have established contact links with the affected hospitals.

Immediate actions

- Identify if you are about to commence work on an affected area of the sewer. The SWC Schedulers will review HYDRA and advise the WSD work team.
- The Schedulers to contact a Trade Waste Officer.
- The Trade Waste Team will contact the hospital to determine if and when Iodine-131 is being discharged.
- The Schedulers will then advise the WSD work Team on when to do the work.
- Notify your immediate Supervisor of Trade Waste Team advice before starting work.
- For planned work outside of Water Services the responsible person must check HYDRA, and if the area of the sewer is highlighted, then contact Patrick O'Beirne (North) on 0419 461387 or Phil Halkyard (South) on 0419 277 289 from the Trade Waste Team.
- A sample diagram showing an affected sewer highlighted on HYDRA, is on page 2 of this hazard alert

Corrective actions

- Ensure NSW Health completes installation of waste holding tanks, according to Sydney Water specifications.
- Ensure NSW Health complies with Sydney Water Trade Waste contract for the discharge of waste from holding tanks.

Issued : 21 June 2007

Jennie Thompson
Manager, Health and Safety (Acting)

For Review: Jan 2008

hazard alert

Trade Waste Discharge: Iodine 131



APPENDIX I
Council Correspondence

DOUGLAS PARTNERS

22 AUG 2008

818 Pacific Highway, Gordon NSW 2072

Locked Bag 1056, Pymble NSW 2073

T 02 9424 0888 F 02 9424 0880

DX 8703 Gordon TTY 02 9424 0875

E kmc@kmc.nsw.gov.au

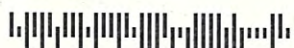
W www.kmc.nsw.gov.au

ABN 86 408 856 411



Contact: Louise Hayward

Reference: S05913 /
20 August 2008



Mr Lindsay Rockett
Snr Associate/Environmental Scientist
Douglas Partners P/L
PO Box 472
WEST RYDE NSW 1685

Dear Mr Rockett

Contaminated land inquiry for proposed redevelopment, Wahroonga estate

I refer to your letter dated 8 August 2008 in relation to Council's knowledge of any recorded contaminated land issues for the identified site.

I have undertaken a search of our electronic records for the main Hospital site and have found no specific recorded contaminated land incidents. However I advise that this does not preclude the site from contamination.

Historically, activities on the site have been potentially contaminating as scheduled in Council's Contaminated Land Policy, 2004. These include agricultural and horticultural activities, service stations (underground and above ground storage tanks) and hospital activities.

In light of this, there is strong evidence that the project site has the potential to contain contaminated land based on previous and current activities on the site.

If you wish to discuss this further, please do not hesitate to contact me on 9424 0172.

Regards,

A handwritten signature in blue ink, appearing to read 'Louise Hayward'.

Louise Hayward
Sustainability Officer



Douglas Partners
Geotechnics • Environment • Groundwater

Douglas Partners Pty Ltd
ABN 75 053 980 117
96 Hermitage Road
West Ryde NSW 2114
Australia

PO Box 472
West Ryde NSW 1685
Phone (02) 9809 0666
Fax (02) 9809 4095
www.douglaspartners.com.au

LR:jlb
Project 45569.01
8 August 2008

The General Manager
Ku-ring-gai Council
Locked Bag 1056
PYMBLE NSW 2073

Attention: Ms Louise Hayward

Dear Sirs

**PROPOSED REDEVELOPMENT
WAHROONGA ESTATE
AUSTRALIAN CONFERENCE ASSOCIATION**

We refer to our conversation of 8 August, concerning the above project.

Douglas Partners is currently finalising a report on potential contamination issues in relation to the redevelopment of the Wahroonga Estate, off Fox Valley Road, Wahroonga. It is a Phase 1 contamination assessment, generally in accordance with the EPA publication *Guidelines for Consultants Reporting on Contaminated Sites* (1997). The estate is 62 hectares in area and contains many individual land titles. The attached Figure 1 outlines the extent of the estate and the attached tables summarise the title identifiers.

As part of the investigation process we are writing to Council to enquire whether there are any issues that Council is aware of in relation to recorded contamination issues. We have searched the public register of contaminated sites on the DECC web site and we can confirm that there is no record for the project site. We would be pleased to discuss the above with you in more detail, if required.

Your early attention to the above would be most appreciated.

Yours faithfully
DOUGLAS PARTNERS PTY LTD

L Rockett
Senior Associate

Attachments: Drawing 1 and Land Title Summary



APPENDIX J
Extracts of Coffey Environments Pty Ltd Report

**CONTAMINATION ASSESSMENT
SYDNEY ADVENTIST HOSPITAL
185 FOX VALLEY ROAD
WAHROONGA NSW**

Prepared for:

Taylor Thomson Whitting
Level 3, 48 Chandos Street
ST LEONARDS, NSW, 2065

Report Date: 30 May 2008
Project Ref: GEOTLCOV23462AA

Written/Submitted

Revised/Approved by:

Daniel Deen
Environmental Scientist

Manuel Fernandez
Associate Environmental
Engineer

30 May 2008

Taylor Thomson Whitting
Level 3, 48 Chandos Street
ST LEONARDS, NSW, 2065

Attention: Mr Barry Young

Dear Barry,

**RE: CONTAMINATION ASSESSMENT - SYDNEY ADVENTIST HOSPITAL
185 FOX VALLEY ROAD, WAHROONGA, NSW**

We are pleased to present our Contamination Assessment report on the above site.

We draw your attention to the attached sheets titled "Important Information about your Coffey Environmental Report". These sheets should be read in conjunction with this report.

Thank you for your commission for this work and we look forward to the opportunity of being of assistance in the future. Should you have any questions in relation to the report, please do not hesitate to contact the undersigned.

For and on behalf of Coffey Environments Pty Ltd

MANUEL FERNANDEZ

Associate Environmental Engineer

RECORD OF DISTRIBUTION

No. of copies	Report File Name	Report Status	Date	Prepared for:	Initials
4	GEOTLCOV23462AA-AG.doc	Final	30 May 2008	Taylor Thomson Whitting Pty Ltd	
1	GEOTLCOV23462AA-AG.doc	Final	30 May 2008	Coffey Geotechnics Pty Ltd	

CONTENTS

LIST OF ATTACHMENTS	I
ABBREVIATIONS	II
EXECUTIVE SUMMARY	1
1 INTRODUCTION	3
1.1 Objectives	3
2 SCOPE OF WORK	4
3 SITE LANDUSE AND DESCRIPTION	5
3.1 Site Location and Landuse	5
3.2 Topography and Drainage	6
3.3 Local Geology, Hydrogeology and Groundwater Use	7
4 SITE HISTORY AND OBSERVATIONS	8
4.1 Summary of Site History	8
4.1.1 General	8
4.1.2 Building 1	9
4.1.3 Building 2	9
4.1.4 Building 3	9
4.1.5 Building 4	9
4.1.6 Gaps in the Site History	10
4.2 Site Observations	10
4.2.1 Building 1	10
4.2.2 Building 2	10
4.2.3 Building 3	11
4.2.4 Building 4	11
5 POTENTIAL AREAS OF ENVIRONMENTAL CONCERN (AEC) AND CHEMICALS OF CONCERN (COC)	12
6 SAMPLING AND ANALYSIS PLAN	14
6.1 Quality Assurance/Quality Control	15

CONTENTS

7	ASSESSMENT CRITERIA	16
7.1	Soil Vapour Criteria	16
7.2	Soil Investigation Levels (SILs)	16
7.3	Waste Classification Criteria	17
8	FIELD INVESTIGATIONS	18
8.1	Soil Sampling	18
8.2	Field Quality Control Procedures	19
8.3	Laboratory Analysis	20
9	RESULTS OF FIELD AND LABORATORY INVESTIGATIONS	22
9.1	Subsurface Conditions	22
9.2	Soil Vapour	23
9.3	Soil Contamination	23
9.3.1	Quality Assurance/Quality Control	23
9.3.2	Comparison of Results to Soil Investigation Levels	24
9.3.3	Comparison of Results to Waste Classification Guidelines	25
10	DISCUSSION	26
10.1	Building 1	26
10.2	Building 2	26
10.3	Building 3	26
10.4	Building 4	26
11	CONCLUSIONS	27
12	LIMITATIONS	28
13	REFERENCES	29

LIST OF ATTACHMENTS

Important Information about your Coffey Environmental Report

Tables

- Table 1: Summary of Site Identification
- Table 2: Potential Areas of Environmental Concern
- Table 3: Generalised Soil Gas Criteria
- Table 4: Summary of Duplicate Soil Samples
- Table 5: Summary of Laboratory Results for Soil Samples – Proposed Building 1
- Table 6: Summary of Laboratory Results for Soil Samples – Proposed Building 2
- Table 7: Summary of Laboratory Results for Soil Samples – Proposed Building 3
- Table 8: Summary of Soil Laboratory Results - Waste Classification for Proposed Building 1
- Table 9: Summary of Soil Laboratory Results - Waste Classification for Proposed Building 2
- Table 10: Summary of Soil Laboratory Results - Waste Classification for Proposed Building 3

Figures

- Figure 1: Site Locality Plan
- Figure 2: Site Layout Plan
- Figure 3: Plan of Building 1 and 3 Showing Borehole Locations
- Figure 4: Plan of Building 2 Showing Borehole Locations

Appendices

- Appendix A: Site History and Groundwater Bore Search Results
- Appendix B: Engineering Logs of Test Pits and Boreholes, with explanation notes
- Appendix C: Soil Vapour Results
- Appendix D: Chemical Laboratory Reports
- Appendix E: Data Validation Report
- Appendix F: Site Photographs

ABBREVIATIONS

AEC	Area of Environmental Concern
AHD	Australian Height Datum
AST	Aboveground Storage Tank
C₆-C₃₆	Hydrocarbon chainlength fraction
BH	Borehole
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
CBH	Coffey Borehole
COC	Chemical of Concern
DECC	Department of Environment and Climate Change (NSW)
DIPNR	Department of Infrastructure, Planning and Natural Resources
ID	Identification
LOR	Limit of Reporting
MGT	MGT Environmental
µg/L	micrograms per litre
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
NATA	National Association of Testing Authorities
NEHF	National Environmental Health Forum
NEPM	National Environment Protection Measure
NSW EPA	Environment Protection Authority of New South Wales
OCP	Organochlorine Pesticide
OPP	Organophosphorous Pesticide
PAH	Polycyclic Aromatic Hydrocarbon

ABBREVIATIONS

PCB	Polychlorinated Biphenyl
PID	Photoionisation Detector
Ppm	parts per million
PQL	Practical Quantitation Limit
QA	Quality Assurance
QC	Quality Control
RL	Reduced Level
RPD	Relative Percent Difference
SGS	SGS Environmental Services Pty Ltd
SIL	Soil Investigation Level
SOP	Standard Operating Procedures
TD	Total Depth
TPH	Total Petroleum Hydrocarbon
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

Coffey Geotechnics Pty Ltd (Coffey Geotechnics) was commissioned by Taylor Thomson Whitting, to carry out a Geotechnical Investigation and Contamination Assessment at the SAN Hospital located at 185 Fox Valley Road, Wahroonga, NSW (Figure 1) (referred herein as 'the site'). The work was commissioned by Barry Young of Taylor Thomson Whitting (TTW) on behalf of Coffey Projects Pty Ltd and was carried out in general accordance with the relevant sections of our fee proposal reference GEOTLCOV23464AA-AA, dated 4 February 2008. Coffey Geotechnics sister company Coffey Environments Pty Ltd (Coffey Environments) assisted with the contamination investigation component of the works. This report presents the results of the contamination assessment which was carried out in conjunction with a geotechnical investigation (Report Ref: GEOTLCOV23462AA-AD, dated 4 April 2008).

The existing SAN Hospital is located on the western side of Fox Valley Road and is bound by The Comenarra Parkway to the south and Coups Creek to the west and north. Existing developments within the hospital grounds include multistorey buildings, roads, car parks, sport facilities and landscaped grassed areas.

We understand there are four proposed improvements to the hospital and these are labelled building 1, 2, 3 and 4 as shown on the Site Plan in Figure 2. Information of the proposed improvements are as follows:

- Building 1: A new five storey multi deck car park to be built in the same area as an existing car park at grade.
- Building 2: A new four storey reinforced concrete framed building to replace an existing car park at grade.
- Building 3: A new building with a possible three storey basement.
- Building 4: An existing three storey brick building with modifications to load bearing internal walls within the eastern corner. The building will appear unchanged from the outside.

The objectives of the contamination assessment were to assess the likelihood for contamination to exist on the site from past and present activities and make recommendations on the need for further investigation and/or remediation, should contamination be present.

The scope of work for the contamination assessment included:

- A site history study and site walkover,
- Drilling (28) boreholes, from which the subsurface conditions were logged and soil samples were collected;
- Laboratory analysis of selected soil samples for a suite of potential chemicals of concern (COC); and
- Reporting the results of the assessment including, summarising the site history, results of fieldwork, presenting and interpreting analytical results and findings, comparing chemical concentrations to applicable guidelines, and making recommendations on the need for further investigation and / or remediation and management.

EXECUTIVE SUMMARY

The results of the site history study indicated that the site has been used for hospital related purposes since at least 1951 and possibly since 1903. The proposed building areas have generally been undeveloped with part of Building 2 possibly having been used for some agricultural use and Buildings 1 and 3 recording some filling. Building 3 received larger quantities of fill to raise levels and create a retention pond. Generally the likelihood for the areas assessed to be affected by contamination was assessed to be low.

Field investigations confirmed the presence of fill soils in the three study areas ranging between 0.2m and 6.9m in depth. Building area 3 recorded the deeper fill profile with shallower fill at proposed Building areas 1 and 2. No obvious evidence of contamination was noted and samples selected for analysis for a suite of potential COCs did not record concentrations exceeding the adopted SILs for a commercial landuse.

A direct assessment of the groundwater quality was not made as part of this study. Based on the soil laboratory results, the anticipated depth to groundwater and lack of nearby contamination sources, the likelihood of groundwater contamination adversely affecting the proposed development is considered low.

Based on the results of this study it is considered that the potential for the areas assessed to be affected by land contamination that would adversely affect the proposed development is low and therefore the areas are considered suitable for proposed commercial use.

A preliminary assessment of the fill soils waste classification was made as part of this study. Based on the results, the fill soils are likely to classify as general solid waste for offsite disposal to a licensed facility. Natural soils underlying the fill are likely to classify as Virgin Excavated Natural Material (VENM), subject to the soils not being mixed with other fill soils or wastes.



1 INTRODUCTION

Coffey Geotechnics Pty Ltd (Coffey Geotechnics) was commissioned by Taylor Thomson Whitting, to carry out a Geotechnical Investigation and Contamination Assessment at the SAN Hospital located at 185 Fox Valley Road, Wahroonga, NSW (Figure 1) (referred herein as 'the site'). The work was commissioned by Barry Young of Taylor Thomson Whitting (TTW) on behalf of Coffey Projects Pty Ltd and was carried out in general accordance with the relevant sections of our fee proposal reference GEOTLCOV23464AA-AA, dated 4 February 2008. Coffey Geotechnics sister company Coffey Environments Pty Ltd (Coffey Environments) assisted with the contamination investigation component of the works. This report presents the results of the contamination assessment which should be read in conjunction with the Geotechnical Investigation report (Report Ref: GEOTLCOV23462AA-AD, dated 4 April 2008).

The existing SAN Hospital is located on the western side of Fox Valley Road and is bound by The Comenarra Parkway to the south and Coups Creek to the west and north. Existing developments within the hospital grounds include multistorey buildings, roads, car parks, sport facilities and landscaped grassed areas.

We understand there are four proposed improvements to the hospital and these are labelled building 1, 2, 3 and 4 as shown on the Site Plan in Figure 2. Information of the proposed improvements are as follows:

- Building 1: A new five storey multi deck car park to be built in the same area as an existing car park at grade.
- Building 2: A new four storey reinforced concrete framed building to replace an existing car park at grade.
- Building 3: A new building with a possible three storey basement.
- Building 4: An existing three storey brick building with modifications to load bearing internal walls within the eastern corner. The building will appear unchanged from the outside.

1.1 Objectives

The objectives of the contamination assessment were to assess the likelihood for contamination to exist on the site from past and present activities and make recommendations on the need for further investigation and/or remediation, should contamination be present.

2 SCOPE OF WORK

The scope of work for the contamination assessment was as follows:

- A site history study including a review of aerial photographs, a search of historical land titles, interviewing people familiar with the history of the site, a review of published geological and topographic maps, review of NSW Department of Environment and Climate Change (DECC) records for listing of the site, a search of nearby groundwater bores registered with the Department of Natural Resources (DNR), review of dangerous goods licenses held for the site by WorkCover and a search of Ku-Ring-Gai Council (Council) records;
- A site walkover to visually assess potential sources of contamination, observe surrounding landuses, topography, drainage, nearby sensitive environments, and assess details of the site history and desk study to further assess potential Areas of Environmental Concern (AECs) and Chemicals of Concern (COCs);
- Drilling (28) boreholes, from which the subsurface conditions were logged and soil samples were collected;
- Laboratory analysis of selected soil samples for a suite of analytes including Total Petroleum Hydrocarbons (TPH), Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Polycyclic Aromatic Hydrocarbons (PAH), Polychlorinated Biphenyls (PCB), Organochlorine Pesticides (OCP), asbestos and heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc). For waste classification purposes selected samples were also tested using the Toxicity Characteristic Leaching Procedure (TCLP) for PAH and heavy metals; and
- Preparation of this report summarising the site history, results of fieldwork, presenting and interpreting analytical results and findings, comparing chemical concentrations to applicable guidelines, and making recommendations on the need for further investigation and / or remediation and management.

3 SITE LANDUSE AND DESCRIPTION

3.1 Site Location and Landuse

The existing SAN Hospital is located on the western side of Fox Valley Road and is bound by The Comenarra Parkway to the south and Coups Creek to the west and north. The hospital grounds are a parcel of land that is irregular in shape with an approximate area of 55,550m². The approximate sizes of the three areas where new building structures will require some ground disturbance (and being the focus of this assessment) are:

- Building 1 66m x 24m 1,584m²
- Building 2 95m x 37m 3,515m²
- Building 3 32m x 30m 960m²
- Building 4 20m x 9m 180m²

Existing developments within the hospital grounds include multistorey buildings, roads, car parks, sport facilities and landscaped grassed areas. A summary of the site identification is presented below in Table 1.

Table 1: Summary of Site Identification Information

Street Address	185 Fox Valley Road, Wahroonga, NSW
Area	Total - 55,550m ² (size of areas covered by this assessment – are Bld 1 – 1,584m ² , Bld 2 – 3,515m ² , Bld 3 - 960m ² & Bld 4 180m ²)
Title Identifiers	Lot 62 DP1017514
Zoning	5(a) Special uses A (Hospital) and Part Recreation 6(b)
Local Government Area	Ku-Ring-Gai
Parish	Gordon
County	Cumberland
Grid Co-ordinates	151° 05' 48.62" E; 33° 44' 01.39" S (Centre Building 1) 151° 05' 56.41" E; 33° 43' 56.90" S (Centre Building 2) 151° 05' 50.58" E; 33° 44' 03.59" S (Centre Building 3) 151° 05' 59.41" E; 33° 44' 03.11" S (Centre Building 4)

The site locality is shown in Figure 1, the proposed improvements (Buildings 1 to 4) and the current SAN Hospital layout are shown in Figure 2. A cadastral plan is also included in Appendix A.

Surrounding land use to the SAN Hospital includes:

- Residential premises, located to the northeast, east and south;
- Creek and bushland, located to the west and northwest;
- A childcare Centre located to the southeast at the intersection of Fox Valley Road and Comenarra Parkway.

3.2 Topography and Drainage

Reference to the Hornsby 1:25,000 Topographic Map (9130-4-S) indicates that the site lies at an elevation between about 150m and 160m above Australian Height Datum (AHD). Typically the ground surface of the central hospital grounds is relatively flat and falls to the western and southern areas of the site towards Coups Creek.

A survey plan provided to Coffey Geotechnics (Drawing Ref: Plan titled 'Detail Survey of Sydney Adventist Hospital Ground', prepared by Concrete Constructions (NSW) Pty Ltd, dated 1989) indicates Buildings 1 and 3 lie at an elevation range of 156m AHD and 160m AHD and Building 2 lies at an elevation ranging between 157m AHD and 161m AHD.

Surface water at the site is anticipated to flow from the higher elevated central and northern hospital ground areas and flow towards the northwest, west and south towards Coup Creek and areas of lower elevation. A grassed stormwater retention pond was noted to the north west of proposed Building 2 and a grassed stormwater retention pond within the proposed Building 3 area. On site drainage is likely to flow into the grassed ponds during wet weather periods.

The closest watercourse to the site is Coup Creek, which is located approximately 50m north and west of the site in an inferred down slope direction. Runoff from the site is likely to flow into Coups Creek, which eventually flows into the Lane Cove River located approximately 620m to the west. The Lane Cove River flows in a south-easterly direction before joining the Parramatta River located approximately 14km to the southeast.

Further details regarding the general topography and drainage for each proposed building area are included in Section 4.2.

3.3 Local Geology, Hydrogeology and Groundwater Use

Reference to the Sydney 1:100,000 Geological Sheet indicates the site locality spans the contact between Ashfield Shale and Hawkesbury Sandstone. Ashfield Shale is described as a black to dark grey shale and laminate while Hawkesbury Sandstone is described as medium to coarse grained quartz sandstone, very minor shale and laminate lenses.

A survey of groundwater bores registered with Department of Water and Energy (DWE) indicated that there is one registered bore within a 1 kilometre radius of the site. Bore GW107929 is registered for recreation purposes and is located within the grounds of the retirement village on Mount Pleasant Avenue which is approximately 50m west to northwest and in an inferred upgradient location of the hospital grounds. The work summary sheet for the bore indicated that the bore was installed on the 18 March 2005, is registered for recreational purposes, had a standing water level of 58m below ground surface level with the lithology indicated to be sandstone from 0m to 180m. No other relevant details were supplied.

Based on observations of the surrounding topography, the regional groundwater would be expected to be located at depths greater than 10m.

4 SITE HISTORY AND OBSERVATIONS

Information on the site history was obtained from:

- A historical land title search to review previous landowners and possible past uses of the site;
- Interviews with persons familiar with the site;
- Review of selected aerial photographs;
- Review of records held by Ku-Ring-Gai Council;
- A search of NSW DECC records;
- A search of WorkCover records; and

The site history information is presented in Appendix A and a summary is provided below.

4.1 Summary of Site History

4.1.1 General

Site history information suggests that the site has been used as a hospital since prior to 1951 and possibly as far back as 1903. Various individuals owned the site prior to this time. Title records indicate that Sydney Sanitarium and Benevolent Associate was the registered proprietor for at least a portion of the site since 1903 and later by the Australasian Conference Association Limited (who are the current registered proprietors).

Various alterations have occurred to the hospital buildings over the history of the site. The areas of the proposed buildings have not previously been developed, except more recently for retention basins or car park areas. Further details of each area are provided below.

A search of the NSW DECC Contaminated Land Record website indicated there were no notices issued for the site under the Environmentally Hazardous Chemicals Act (1985) or the Contaminated Land Management Act (1997).

A search of the NSW DECC public register for Licenses, Applications and Notices website indicated the site has an EPA license for Hazardous, Industrial or Group A waste generation or storage (73) up to 100T under section 308 of the Protection of the Environment Operations Act 1997. No breaches or notices have been issued for the site under the license (No. 6546).

Site history information suggested that fuel or chemical storage was unlikely within or in very close proximity to the proposed building sites.

A WorkCover search of the Stored Chemical Information Database (SCID) for licenses to keep dangerous goods indicated that a license (No.35/0174066) for the SAN Hospital to store a number of dangerous goods at various locations throughout the SAN Hospital for hospital related activities. The records indicate storage of products such as compressed/liquefied gases, motor spirit, copper based pesticide, organophosphorous pesticide, caustic, hypochlorite, hydrogen peroxide, hydrochloric acid, ethanol, diesel and heating oil. The closest (non-gaseous) storage area to the current study areas is approximately 100m.