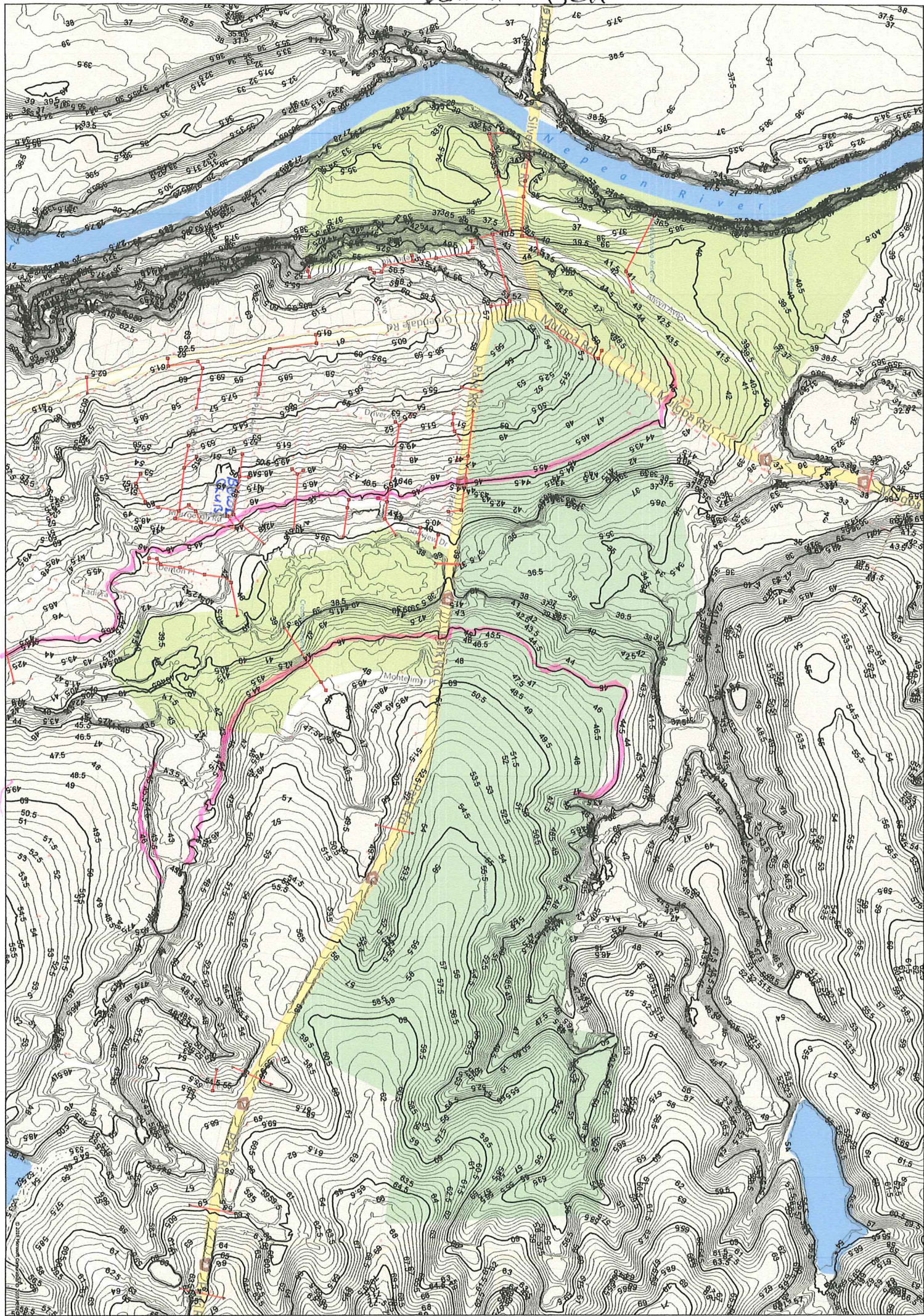
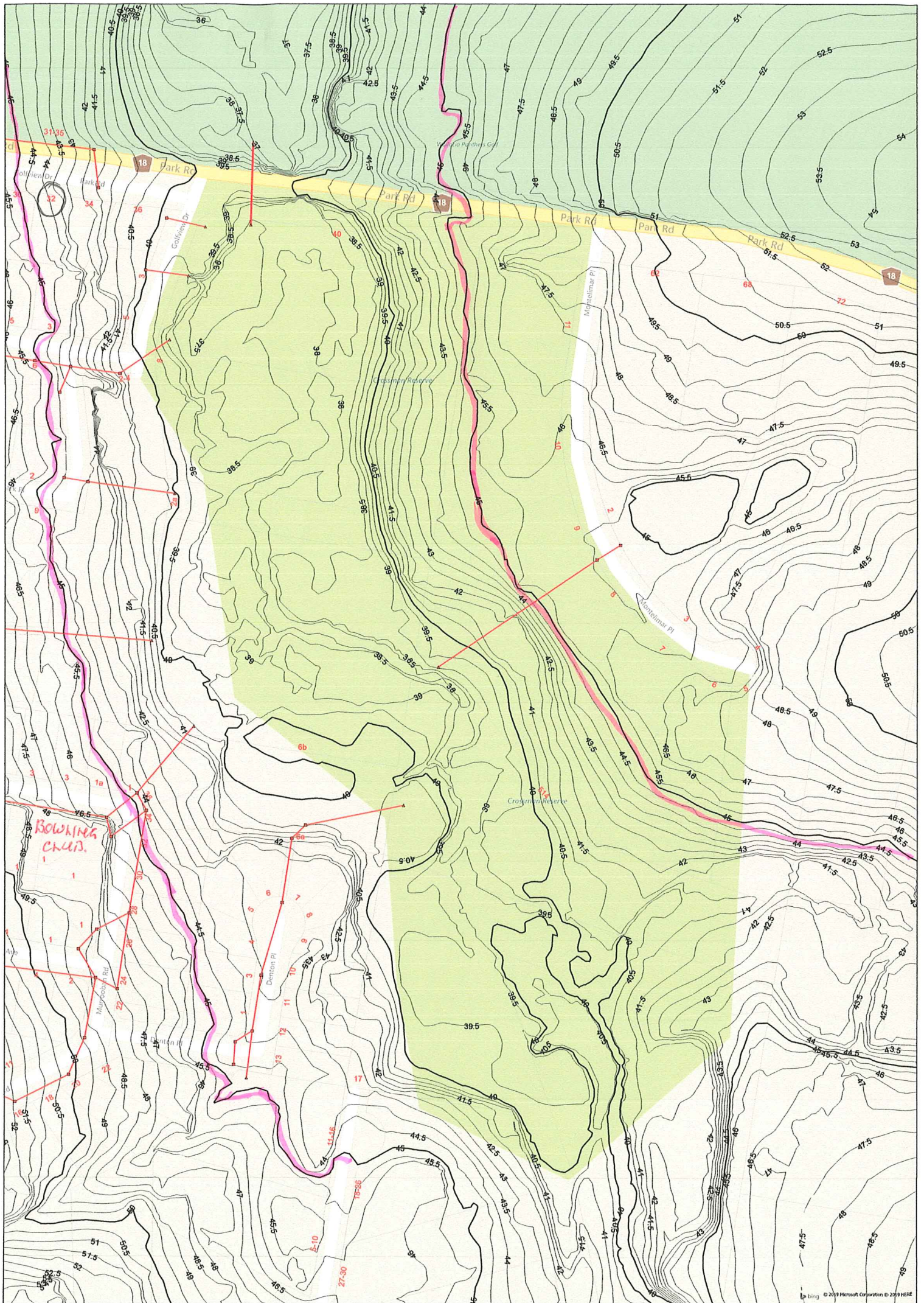


Daniell Bell



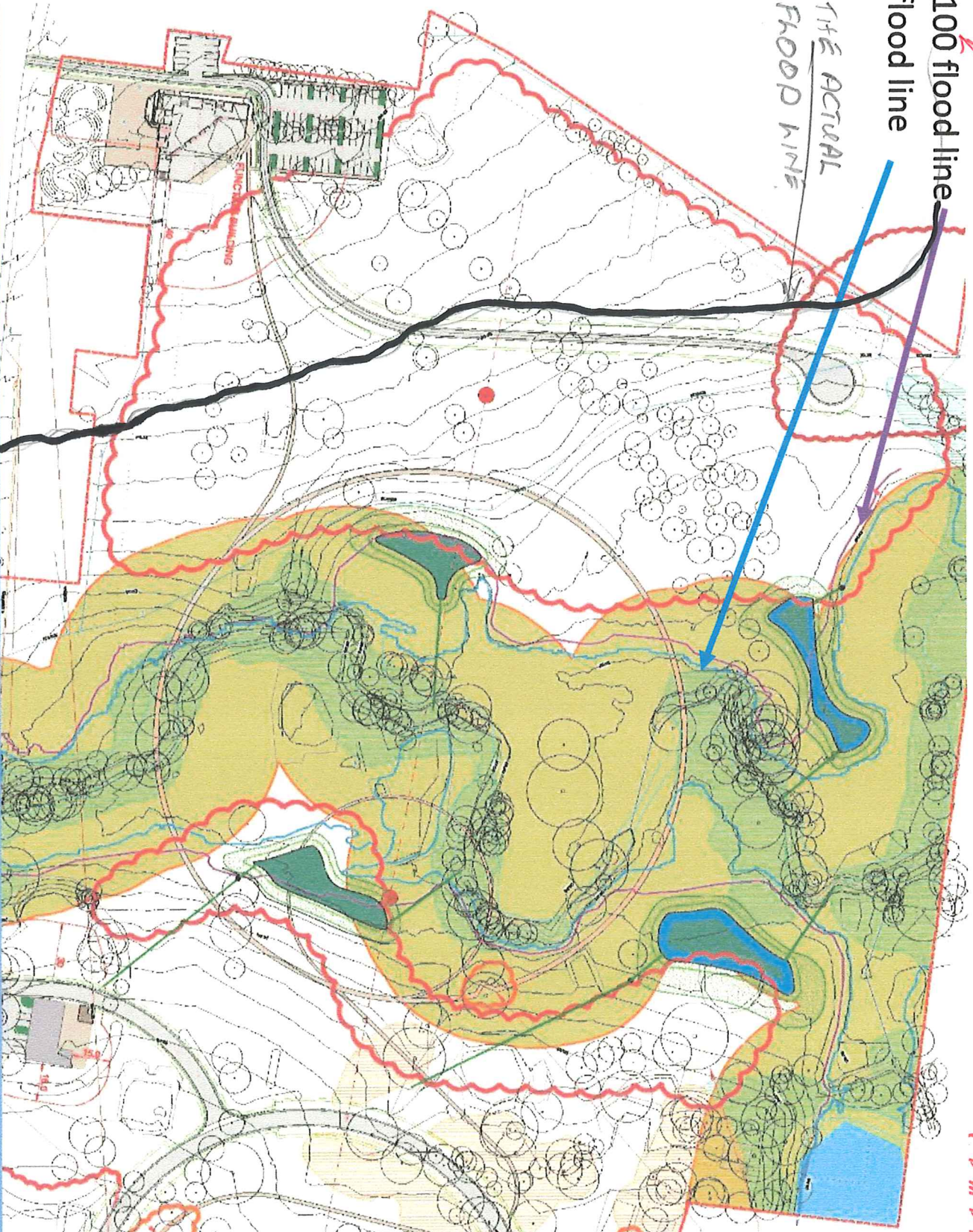
A.H.D.



THIS IS NOT THE 1 IN 100 FLOOD HEIGHT ITS THE 1 IN 50.

Purple line -- 1 in 100 flood line
Blue line -- 1 in 5 flood line

THIS IS THE ACTUAL
1 IN 100 FLOOD LINE



Florence Jaquet
Landscape Architect
Comotor

7. RESPONDING TO ENVIRONMENTALLY SUSTAINABLE DESIGN PRINCIPLES

A number of key sustainable principles have been integrated into the landscape proposals.

The sustainability strategy addresses a broad range of areas, including sustainability and environmental management, community integration, sustainable and active transport promotion, energy, water, materials and waste efficiency and optimisation.

- Water Efficiency Measures:
 - Potential for water storage for re-use on site.
 - Minimise demand by appropriate selection of plants and grass species which do not have high water needs (indigenous and Native).
 - Efficient distribution with efficient systems where irrigation is required.
 - Sustainable Materials:
 - Use locally sourced materials.
 - Re-use material from site (soil+timber).
 - Select low embodied energy materials or materials which can be re-used or recycled.
 - Gabion walls using recycled materials.
 - Waste Management:
 - Reuse of burial spoil on site.
 - Composting of vegetable matter (flowers, and garden clippings) to improve soils.
 - Provide clear waste disposal units for visitors and a 2 bin-system (refer water stations herein) to minimise litter throughout the site.
 - Stormwater Management:
 - Water harvesting in dams for irrigation.
 - Bio-retention swales and wetland planting for water treatment (WWSUD).
 - Passive irrigation from hard surfaces on vegetation.
 - Climate Change:
 - Plants selected to resist increased periods of high and low temperatures, drought and heavy rains.
 - Wind breaks to reduce impact of severe weather onto visitors.
 - Community Development:
 - New park for the community.
 - Educational material and interpretation opportunities throughout the site.
 - Walking / Running / Cycling routes throughout, with shaded walkways to encourage user comfort.
 - Ecology / Biodiversity enhancement:
 - Measures to protect / enhance existing ecology.
- For more detailed information refer Steensen Varming - ESD report.



3. RESULTS OF QUANTITATIVE ANALYSIS – FINANCIAL HARDSHIP

The above described quantitative analysis shows the following impact and associated financial hardship resulting from the imposition of the heritage curtilage:

LOSS OF BURIAL PLOT LAND

Area available for burial plots before heritage curtilage.	40,0153 hectares of burial plot land.
Area available for burial lots after exclusion of heritage curtilage.	14,1396 hectares of burial plot land.
Loss	25,8757 hectares of burial plot land being 64.66% of the original burial plot land.

LOSS OF NUMBER OF BURIAL PLOTS

Plots available for burial plots before heritage curtilage.	138,455 burial plots
Plots available for burial plots after exclusion of heritage curtilage.	45,637 burial plots
Loss	92,818 burial plots being 67.04% of the original burial plots.

$$\begin{array}{r} 100.0 \\ 67.04 \\ \hline 32.96\% \end{array}$$

PERIOD OF PLOT SALES (Supply Period)

Life of Sales before exclusion of heritage curtilage.	110 years
Life of Sales after exclusion of heritage curtilage.	52 years
Loss of Sales Period.	58 years

LOSS OF SALES REVENUE

Present Value of total sales revenue before exclusion of heritage curtilage.	\$565,000,000 approximately
Present Value of total sales revenue after exclusion of heritage curtilage.	\$351,000,000 approximately
Present Value of loss in total sales revenue	\$214,000,000 approximately

CMCT IS ONLY ABOUT MONEY NOT THE PEOPLE OR ANY THINGS ELSE.

N.S.W 200 66.6% CALMATED.

THE NEED FOR A CEMETERY AT WALLACIA?

This table by PCC shows "there is significant capacity for the West City District in relation to existing and approved facilities."

Planning Proposal to amend Penrith Local Environmental Plan 2010
Prohibition of Cemeteries and Crematoriums in Mulgoa Valley and parts of Wallacia

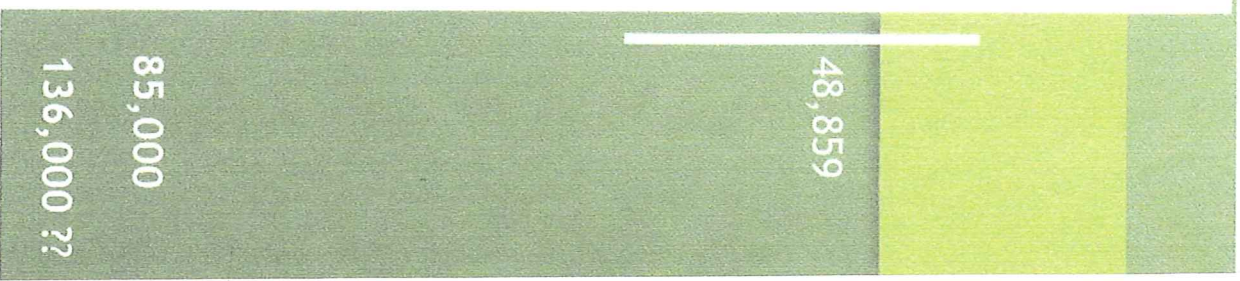
Table 1: A summary of cemetery provision in Penrith LGA

Active cemeteries in Penrith *	Capacity Available	Comments
Penrith	10,000	There is capacity for up to around 10,000 burials still possible within the Penrith Cemetery.
St Marys	655	There are 655 plots reserved at St Marys Cemetery.
Emu Plains	204	There 204 plots reserved at Emu Plains Cemetery.
Approved cemeteries in LGA		
Luddenham Memorial Park	36,000	This development will include cemetery, memorial gardens, associated buildings and crematorium. Capacity for 25,000 ground burials and 13,000 above ground burials.
Other cemeteries outside LGA likely to have an impact on the area as a regional offering		
InvoCare Cemeteries		These cemeteries in Rouse Hill, Minto and Forest Lawn, provide all forms of burial and memorialisation, crematorium, café and florist etc.
Castlebrook		
Pinegrove		
Forest Lawn		
Catholic Metro.		These cemeteries provide a combination of crematorium, natural burial, Islamic burial and lawn burial areas or rural style cemetery set on church grounds.
Cemeteriac Trust		
Catholic Cemetery - Rookwood		
Kemps Creek General Cemetery		
Greenndale Cemetery		
Liverpool Cemetery		
Cemetery proposals within the broader Penrith catchment area		
41 Greendale Road		These are approved cemeteries within the Liverpool LGA. They will have capacity for 85,000 plots.
321 Greendale Road		
Macarthur Memorial Park, Warroville		This facility received rezoning approval in 2016, in the Campbelltown LGA, with capacity for 136,000 plots and expected to be operational by 2018

48,859

85,000

136,000 ??



Annual Operator Activity Survey - 2016/17

as at 30 June 2017

Service type	No. of services	Percentage
Total number of burials	18415	33.4%
Total number of cremations	36704	66.6%
Total number of services	55119	100%

2. Whole of NSW, number of cemetery operators	
Type of Operator	No. of operators
Cemetery operators	229
Crematoria operators	41
Total	270

3. Whole of NSW, number of cemeteries	
Cemeteries Status	No. of facilities
Operational cemeteries	922
Closed cemeteries	327
Total	1249

4. Whole of NSW, cemeteries and crematoria by operator sector								
Operator sector	No. of Cemeteries (Operational & Closed)	% of Total Cemeteries	No. of Cemeteries (Operational)	% of Operational Cemeteries	No. of Cemeteries (Closed)	% of Closed Cemeteries	No. of Crematoria	% of Crematoria
Local Government	998	81%	710	77%	288	88%	8	15%
Crown	20	2%	13	1%	7	2%	4	8%
Private	30	2%	29	3%	1	0.3%	41	77%
Church	189	14%	159	17%	30	9%	0	0
Community	7	1%	11	1%	1	0%	0	0
Total	1244	100%	922	100%	327	100%	53	100%

5. Metropolitan Sydney, cemeteries and crematoria by operator sector								
Operator sector	No. of Cemeteries (Operational & Closed)	% of Total Cemeteries	No. of Cemeteries (Operational)	% of Operational Cemeteries	No. of Cemeteries (Closed)	% of Closed Cemeteries	No. of Crematoria	% of Crematoria
Local Government	57	48%	37	43%	20	61%	0	0%
Crown	10	8%	10	11%	0	0%	4	31%
Private	8	7%	8	9%	0	0%	9	69%
Church	44	37%	31	36%	13	39%	0	0
Community	1	1%	1	1%	0	0%	0	0
Total	120	100%	87	100%	33	100%	13	100%

6. Whole of NSW, summary burial and cremation activity								
Planning Region	No. of burials	No. of cremations	No. of services	Cremation rate	No. of second or subsequent burials	Grave occupancy rate	No. of ash interments or scatterings	Ash disposition rate
Whole of NSW	18415	36704	55119	66.6%	4894	1.43	12925	35.21%
Metropolitan Sydney	9294	17253	26547	65.0%	2615	1.39	6527	37.83%
Rural and Regional NSW*	9121	19451	28572	68.1%	2279	1.46	5320	27.35%
Central Coast, Hunter and Illawarra	2678	10213	12881	79.2%	620	1.71	3438	33.66%

* i.e. all planning regions other than Metropolitan Sydney, including Central Coast, Far West, Hunter, Illawarra.

7. Whole of NSW, burials and cremations by planning region												
Planning Region	No. of cemeteries	No. of burials	% of NSW burials	No. of crematoria	No. of Cremations	Cremation rate %	% of NSW cremations	No. of services [burials and cremations]	% of NSW ser			
Central Coast	16	445	2.4%	2	2591	85.3%	7.1%	3036				
Far West	38	273	1.5%	2	168	38.1%	0.5%	441				
Hunter	173	1315	7.1%	6	5154	79.7%	14.0%	6469	1			
Illawarra	24	918	5.0%	3	2468	72.9%	6.7%	3386				
Metropolitan Sydney	87	9294	50.5%	13	17253	65.0%	47.0%	26547	4			
Riverina Murray	117	1678	9.1%	5	2595	60.7%	7.1%	4273				
New England - North West	98	913	5.0%	4	733	44.5%	2.0%	1646				
North Coast	106	1248	6.8%	10	3707	74.6%	10.1%	4955				
Central West & Orana	152	1429	7.8%	5	1100	43.5%	3.0%	2529				
South East & Tablelands	113	902	4.9%	3	935	50.9%	2.5%	1837				
	924	18415	100%	53	36704	66.6%	100.0%	55119	1			

8. Metropolitan Sydney, burials and cremations by Sydney sub-region												
Metropolitan Sydney District	No. of cemeteries	No. of burials	% of Sydney burials	No. of crematoria	No. of Cremations	Cremation rate %	% of Sydney cremations	No. of services [burials and cremations]	% of total Sydney ser			
Central	7	853	9.2%	1	1195	58.3%	6.9%	2048				
West Central	15	4769	51.3%	4	5079	51.6%	29.4%	9848	3			
North	13	1518	16.3%	2	5266	77.6%	30.5%	6784	2			
West	29	388	4.2%	2	1223	75.9%	7.1%	1611				
South West	22	1188	12.8%	2	2156	64.5%	12.5%	3344	1			
South	1	577	6.2%	2	2334	80.2%	13.5%	2911	1			
	87	9293	100%	13	17253	65.0%		26546	1			

9. Whole of NSW, burials by type and cemetery operator sector												
Operator sector	No. of interments of bodily remains in new perpetual interment sites	No. of interments of bodily remains in perpetual interment sites (one or more previous interments)	No. of interments of bodily remains in interment sites under renewable rights terms	Total No. of interments	% of total interments	2nd or subsequent burials as a % of total interments	Grave occupancy rate*					
Local Government	6318	2299	62	8679	47.1%	12.5%	1.37					
Crown	4314	2411	6	6731	36.6%	13.1%	1.56					
Private	2685	164	0	2849	15.5%	0.9%	1.06					
Church	89	20	0	109	0.6%	0.1%	1.22					
Community	47	0	0	47	0.3%	0.0%	1.00					
	13453	4894	68	18415	100%	26.2%	1.37					

* Grave occupancy rate is an inferred ongoing rate for the no. of interments per grave plot, at the current rate of second interment. The figure is derived by dividing the number of burials completed in the term by the number of burials in new plots completed for the term. The figures must be used with caution, as at the cemetery-specific level, as a cemetery facility nears exhaustion of capacity, only second or subsequent interments may be completed, and the apparent occupancy rate may exceed 2 per grave. CEMSW considers that grave occupancy rate is of value at the regional level, where variations between facilities net out, and where facility-specific anomalies may be excluded from analysis. In specific cases where a single facility volume predominates, the apparent rate of grave occupancy may be deemed unreliable.

10. Metropolitan Sydney, burials by type and cemetery operator sector

Operator sector	No. of interments of bodily remains in new perpetual interment sites	No. of interments of bodily remains in perpetual interment sites one or more previous interments	No. of interments of bodily remains in interment sites under renewable rights terms	Total No. of interments	% of total interments	2nd or subsequent burials as a % of total interments	Grave occupancy rate*
Local Government	579	259	62	900	10%	2.8%	1.55
Crown	4167	2324	6	6497	70%	25.0%	1.56
Private	1785	21	0	1806	19%	0.2%	1.01
Church	40	11	0	51	1%	0.1%	1.28
Community	39	0	0	39	0%	0.0%	1.00
	6610	2615	68	9293	100%	28.1%	1.41

11. Whole of NSW, cremations and ash interments by crematoria operator sector

Operator sector	No. of cremations of bodily remains	% of total cremations	No. of interments of cremated remains*	No. of cremated remains scattered within grounds	No. of ash dispositions**	Ash disposition rate
Local Government	3254	9.6%	3525	60	3585	110.2%
Crown	5359	14.6%	3382	114	3496	65.2%
Private	28091	75.8%	4438	335	4773	17.0%
Church	0	0.0%	528	17	545	0.0%
	36704	100%	11873	526	12399	33.8%

* Generally below ground, or in a niche wall or columbarium††† ie. ashes interred or scattered within a cemetery

12. Whole of NSW, burials and cremations by operator sector

Operator sector	No. of Burials	% of NSW burials	No. of Cremations	% of NSW cremations	Total No. of services	% of NSW total services
Local Government	8679	47.1%	3254	8.9%	11933	21.6%
Crown	6731	36.6%	5359	14.6%	12090	21.9%
Private	2849	15.5%	28091	76.5%	30940	56.1%
Community	156	0.8%	0 N/A	N/A	156 N/A	N/A
	18415	100%	36704	100%	55119	100%

13. Metropolitan Sydney, burials and cremations by operator sector

Operator sector	No. of Burials	% of Sydney burials	No. of Cremations	% of Sydney cremations	Total No. of services	% of total Sydney services
Local Government	900	9.7%	0	N/A	900	3.4%
Crown	6497	69.9%	5359	31%	11856	44.7%
Private	1806	19.4%	11894	69%	13700	51.6%
Church	51	0.5%	0	N/A	51	0.2%
Community	39	0.4%	0	N/A	39	0.1%
	9293	100%	17253	100%	26546	100%

14. Whole of NSW, Local Government operated cemeteries, activity levels

LG Cemeteries	No. of facilities
>10 burials per year	188
<10 burials per year	525
Closed	286
Average burials per cemetery	8.7