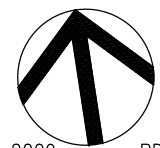
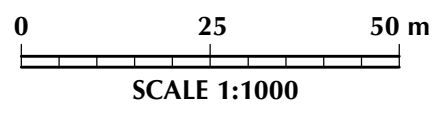


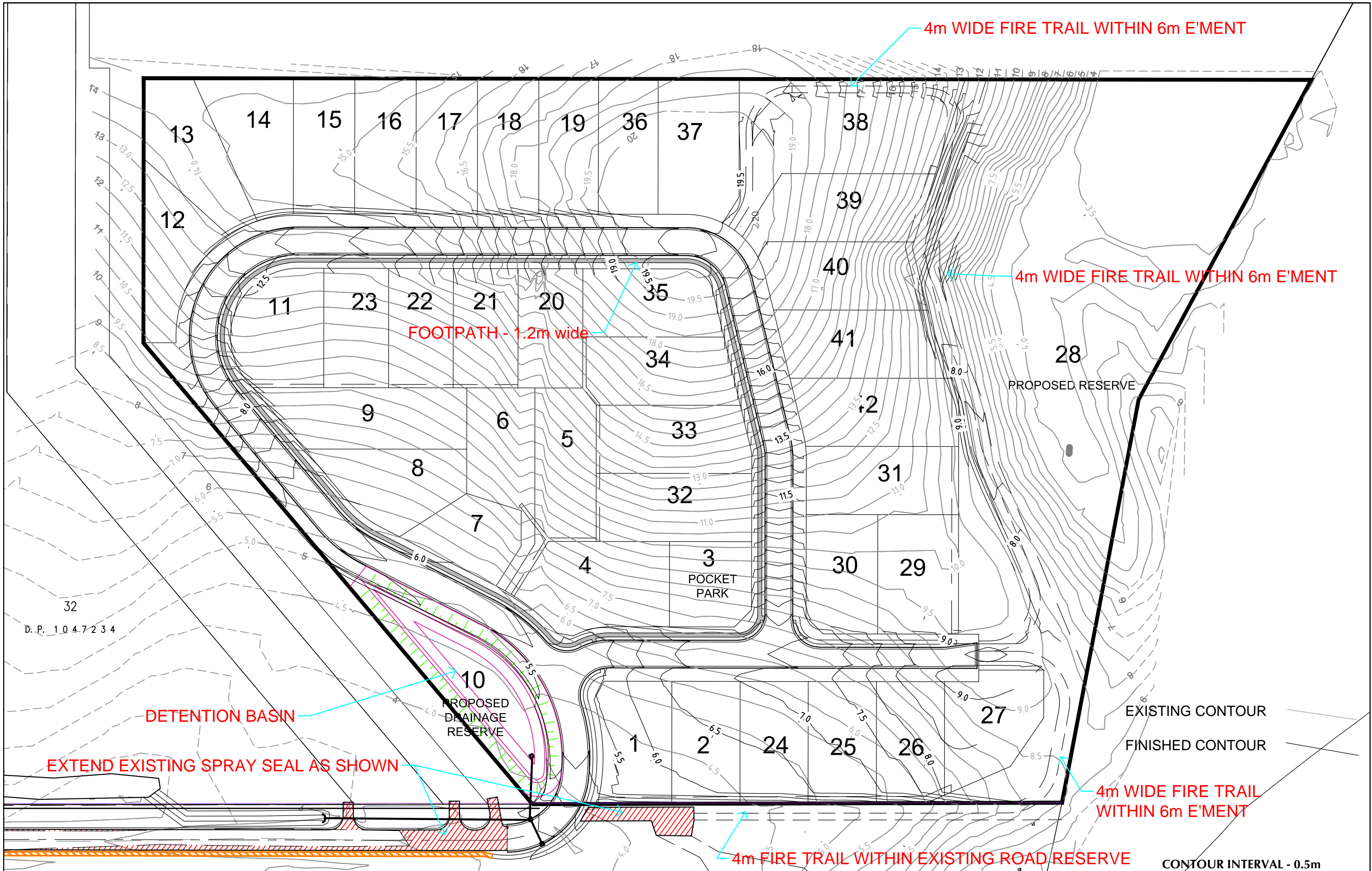
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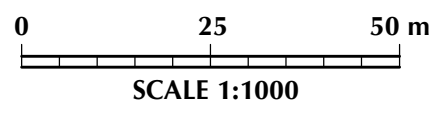
RESIDENTIAL SUBDIVISION  
 LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**STAGING PLAN**



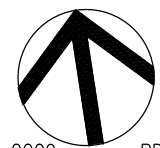
MAP 2  
 06265  
 Amendment No. H



RESIDENTIAL SUBDIVISION  
 LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**LAYOUT PLAN**



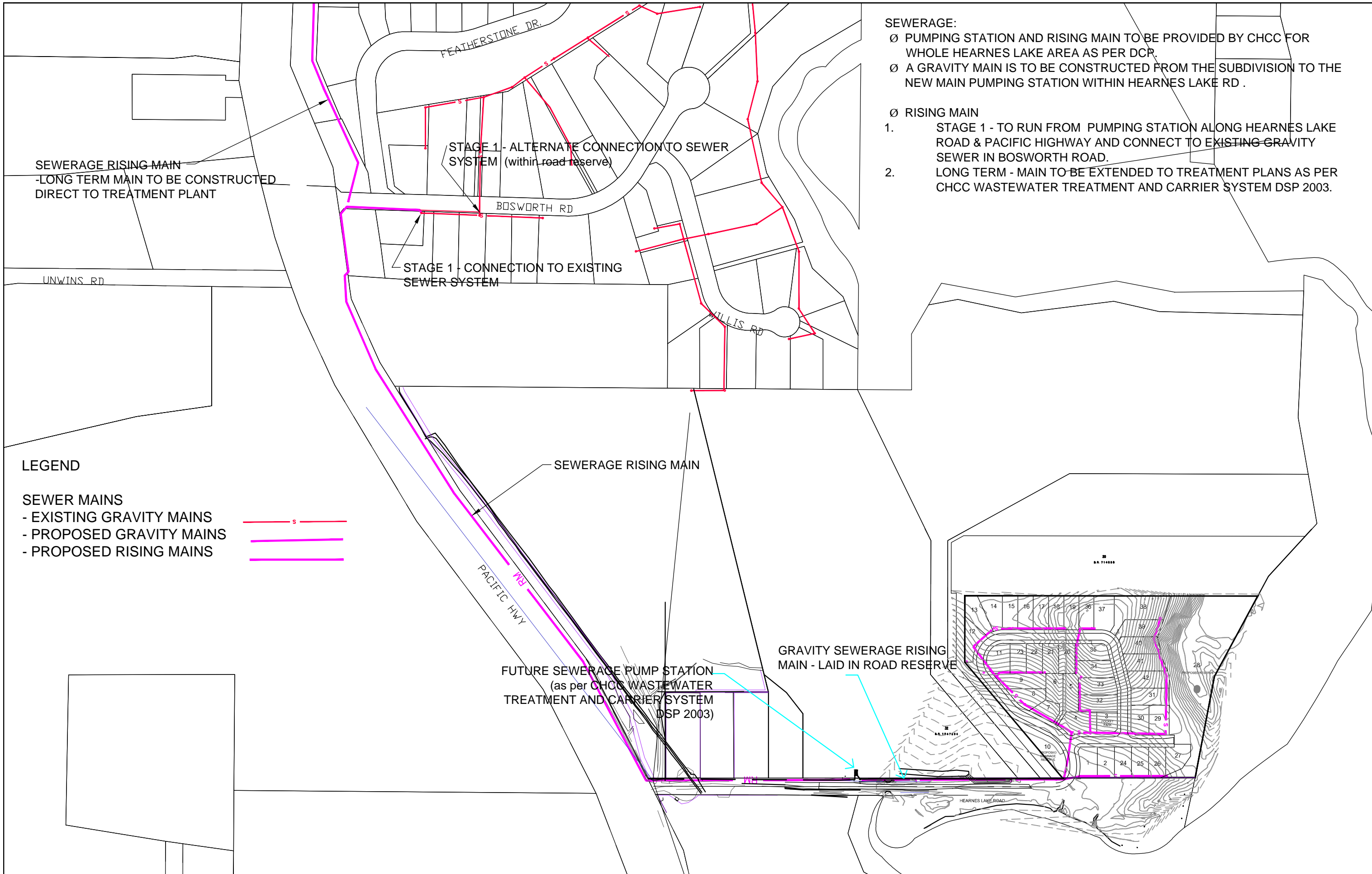
CONTOUR INTERVAL - 0.5m



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MAP 3  
 06265  
 Amendment No.  
**H**

- 21 AUGUST 2009 RDG



- SEWERAGE:**
- Ø PUMPING STATION AND RISING MAIN TO BE PROVIDED BY CHCC FOR WHOLE HEARNES LAKE AREA AS PER DCP.
  - Ø A GRAVITY MAIN IS TO BE CONSTRUCTED FROM THE SUBDIVISION TO THE NEW MAIN PUMPING STATION WITHIN HEARNES LAKE RD .
  - Ø RISING MAIN
    1. STAGE 1 - TO RUN FROM PUMPING STATION ALONG HEARNES LAKE ROAD & PACIFIC HIGHWAY AND CONNECT TO EXISTING GRAVITY SEWER IN BOSWORTH ROAD.
    2. LONG TERM - MAIN TO BE EXTENDED TO TREATMENT PLANS AS PER CHCC WASTEWATER TREATMENT AND CARRIER SYSTEM DSP 2003.

SEWERAGE RISING MAIN  
-LONG TERM MAIN TO BE CONSTRUCTED  
DIRECT TO TREATMENT PLANT

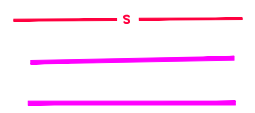
STAGE 1 - ALTERNATE CONNECTION TO SEWER  
SYSTEM (within road reserve)

STAGE 1 - CONNECTION TO EXISTING  
SEWER SYSTEM

**LEGEND**

SEWER MAINS

- EXISTING GRAVITY MAINS
- PROPOSED GRAVITY MAINS
- PROPOSED RISING MAINS



FUTURE SEWERAGE PUMP STATION  
(as per CHCC WASTEWATER  
TREATMENT AND CARRIER SYSTEM  
DSP 2003)

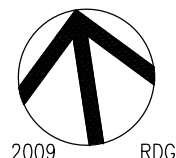
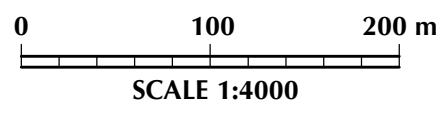
GRAVITY SEWERAGE RISING  
MAIN - LAID IN ROAD RESERVE

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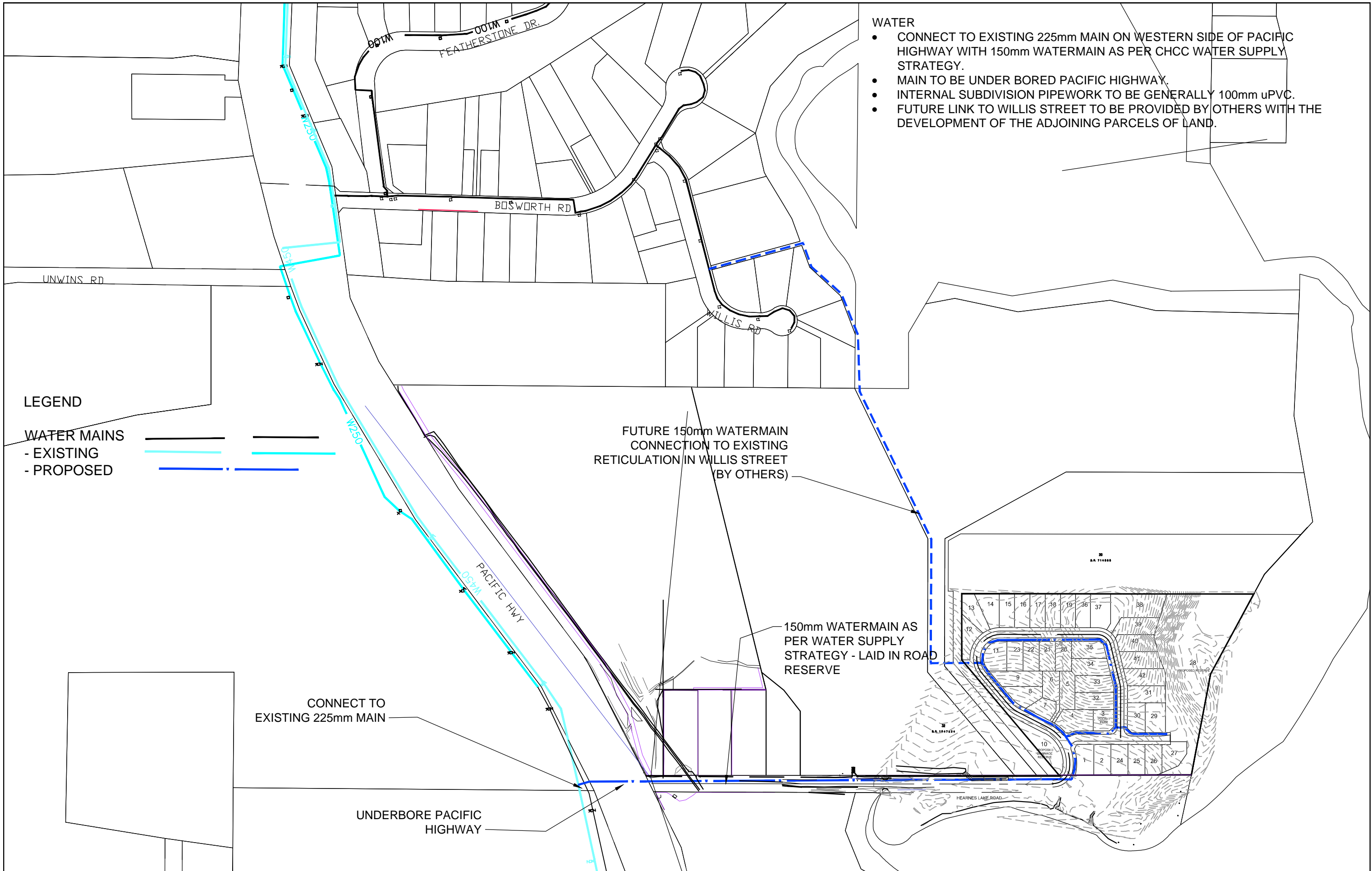
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RESIDENTIAL SUBDIVISION  
LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**SEWER CONCEPT PLAN**



MAP 4S  
06265  
Amendment No.  
**H**



- WATER**
- CONNECT TO EXISTING 225mm MAIN ON WESTERN SIDE OF PACIFIC HIGHWAY WITH 150mm WATERMAIN AS PER CHCC WATER SUPPLY STRATEGY.
  - MAIN TO BE UNDER BORED PACIFIC HIGHWAY.
  - INTERNAL SUBDIVISION PIPEWORK TO BE GENERALLY 100mm uPVC.
  - FUTURE LINK TO WILLIS STREET TO BE PROVIDED BY OTHERS WITH THE DEVELOPMENT OF THE ADJOINING PARCELS OF LAND.

**LEGEND**

**WATER MAINS**  
 - EXISTING (black line)  
 - PROPOSED (cyan line)

FUTURE 150mm WATERMAIN CONNECTION TO EXISTING RETICULATION IN WILLIS STREET (BY OTHERS)

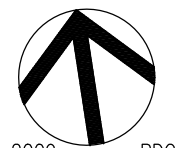
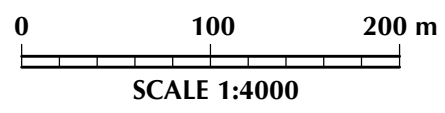
150mm WATERMAIN AS PER WATER SUPPLY STRATEGY - LAID IN ROAD RESERVE

CONNECT TO EXISTING 225mm MAIN

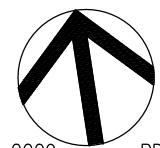
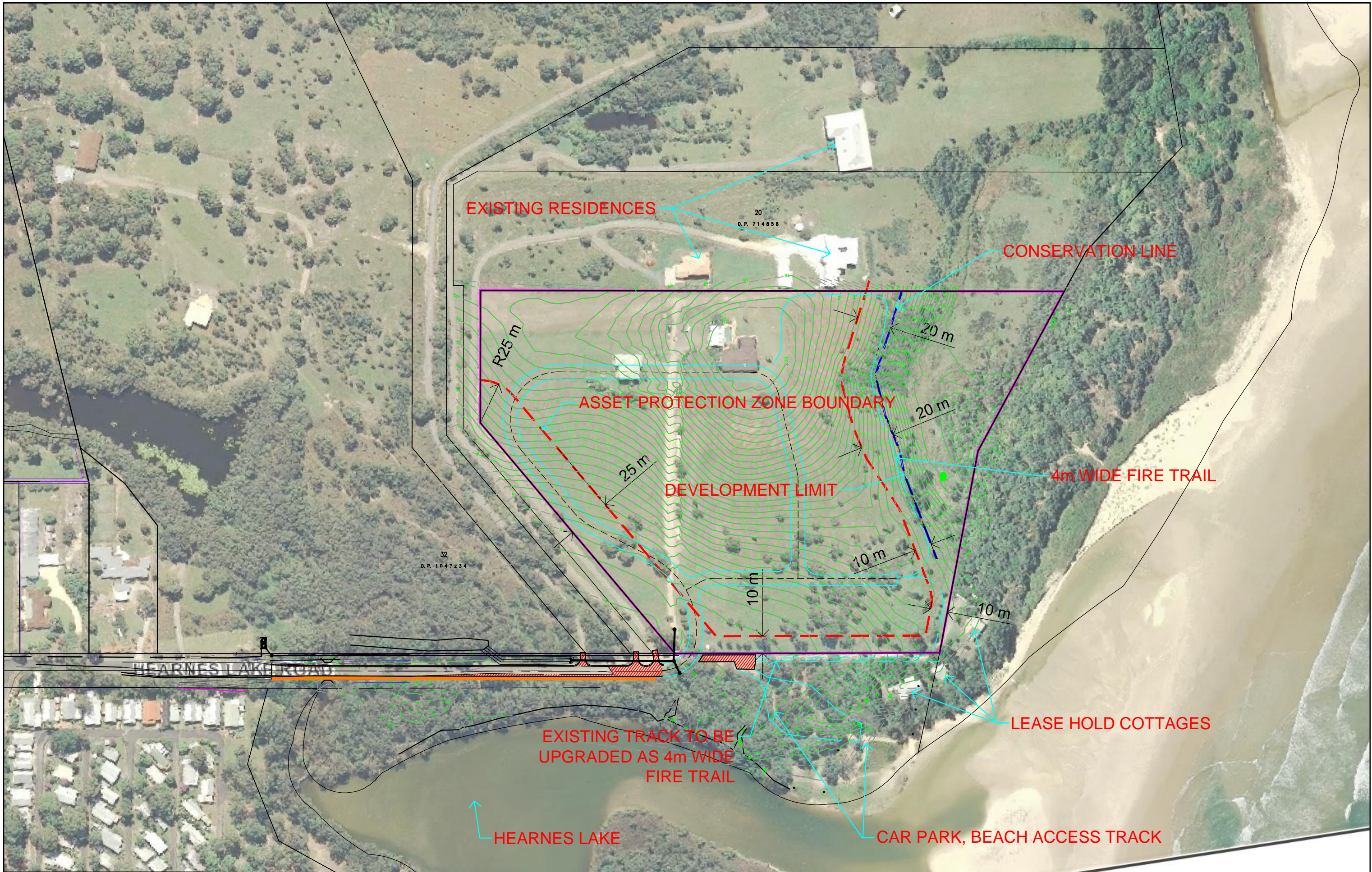
UNDERBORE PACIFIC HIGHWAY

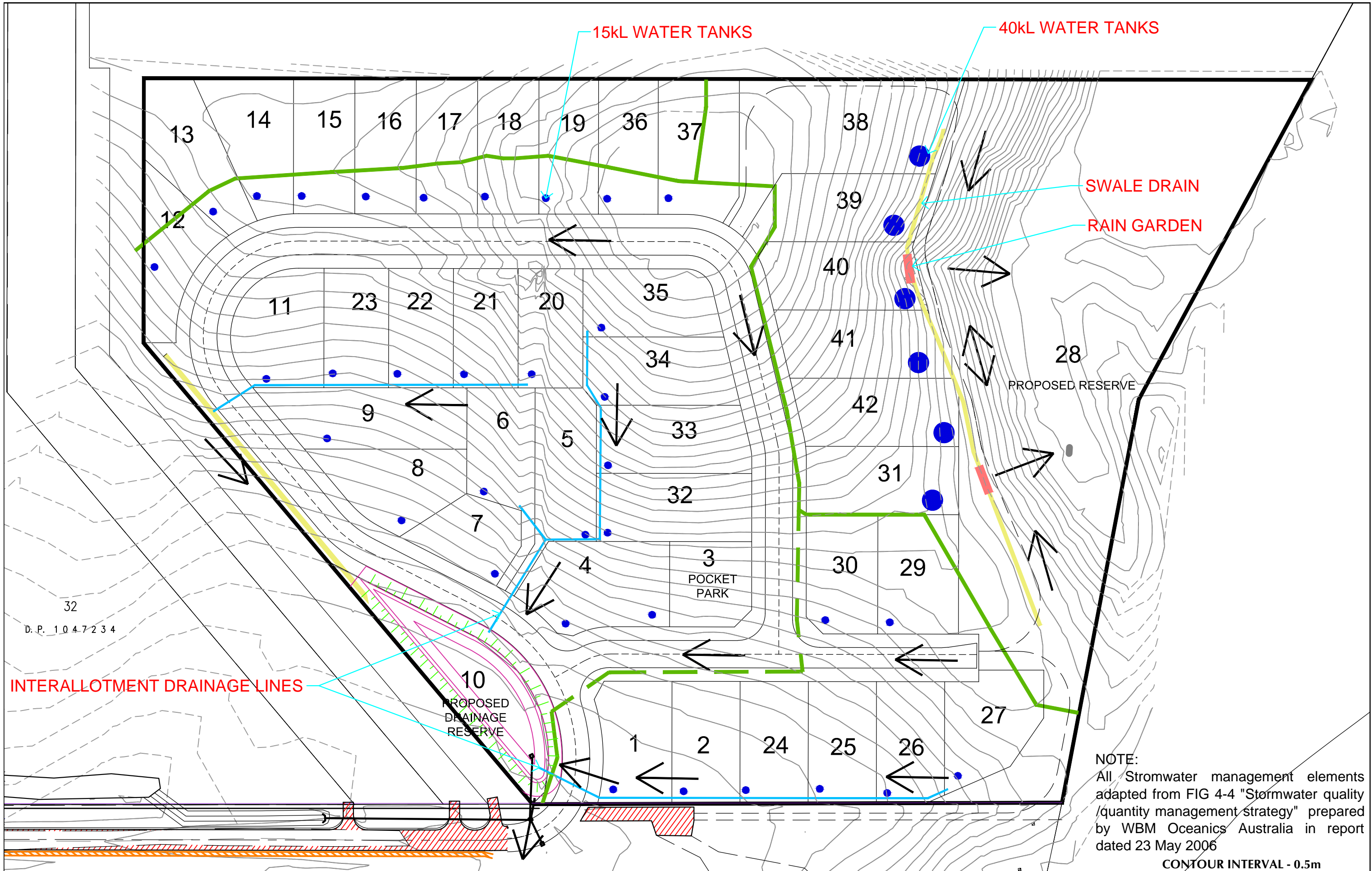
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**WATER CONCEPT PLAN**



MAP 4W  
 06265  
 Amendment No.  
**H**





15kL WATER TANKS

40kL WATER TANKS

SWALE DRAIN

RAIN GARDEN

INTERALLOTMENT DRAINAGE LINES

PROPOSED DRAINAGE RESERVE

PROPOSED RESERVE

POCKET PARK

NOTE:  
 All Stormwater management elements adapted from FIG 4-4 "Stormwater quality /quantity management strategy" prepared by WBM Oceanics Australia in report dated 23 May 2006

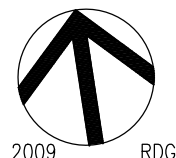
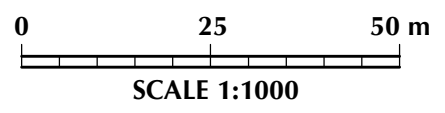
CONTOUR INTERVAL - 0.5m

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RESIDENTIAL SUBDIVISION  
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**STORMWATER MANAGEMENT**



MAP 7  
 Amendment No. 06265  
 H

- 21 AUGUST 2009 RDG



EXISTING INDUSTRIAL SUBDIVISION

WILLIS CREEK

PACIFIC OCEAN

FORMER SAWMILL SITE

EXISTING RESIDENCES

FUTURE COLLECTOR ROAD (AS PER DCP)

EXISTING BATTLE-AXE HANDLE DRIVE WAYS

EXISTING RESIDENCES

DAM

ACCESS TRACK TO BEACH AND COTTAGES

LEASE HOLD COTTAGES

BUS STOP

CARAVAN PARK

HEARNES LAKE

EXISTING PICNIC AREAS  
CAR PARK, BEACH ACCESS TRACK

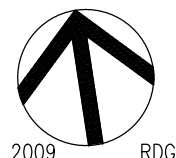
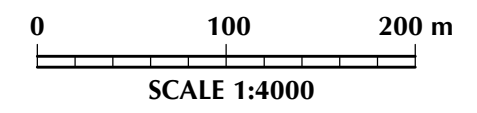
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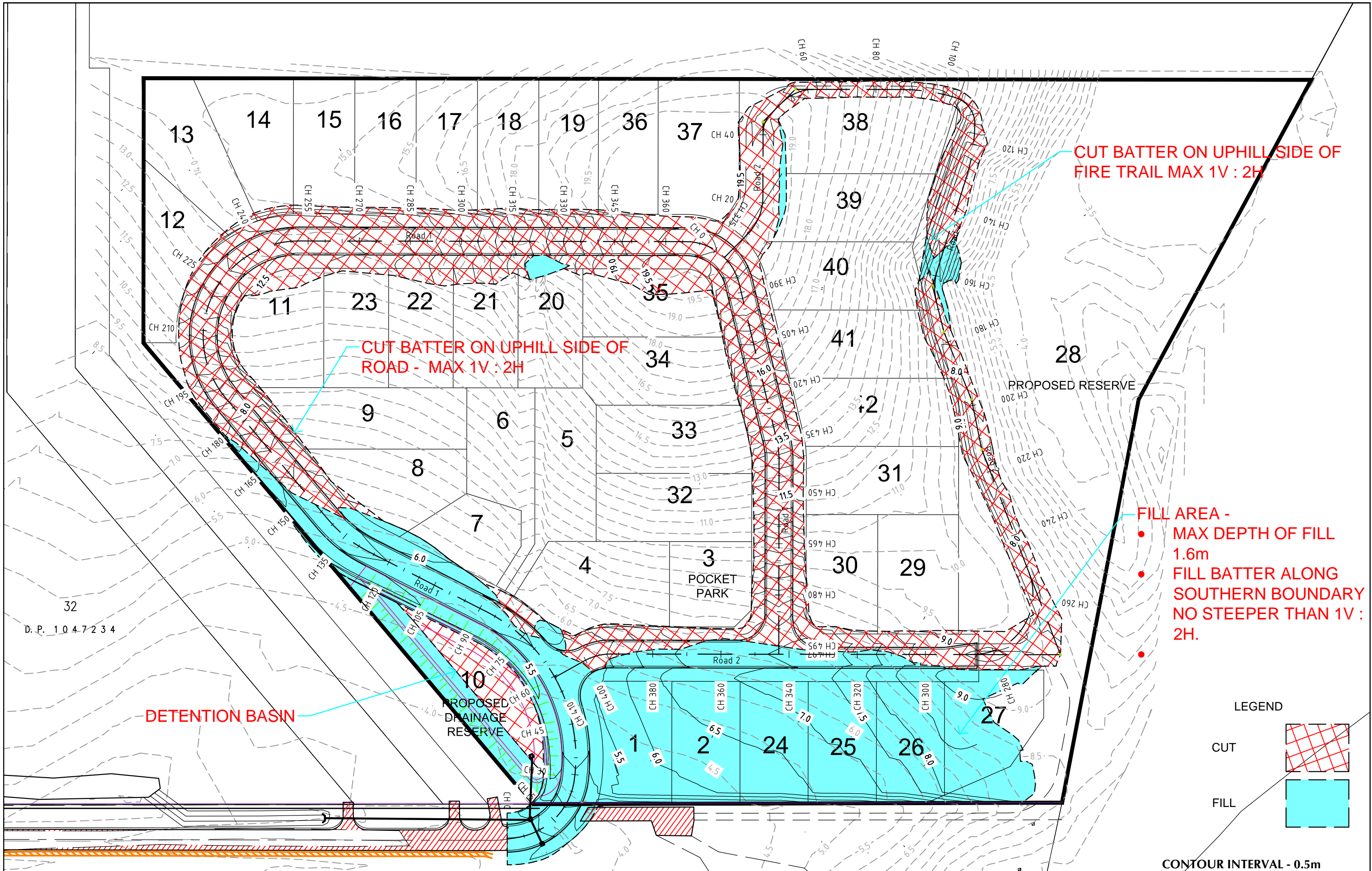
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 LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**LOCALITY PLAN**

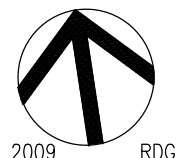
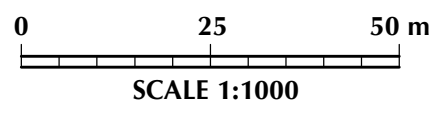


MAP 8  
 06265  
 Amendment No.  
**H**





RESIDENTIAL SUBDIVISION  
 LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**CROSS SECTIONS - SHEET 1**



MAP 10  
 06265  
 Amendment No.  
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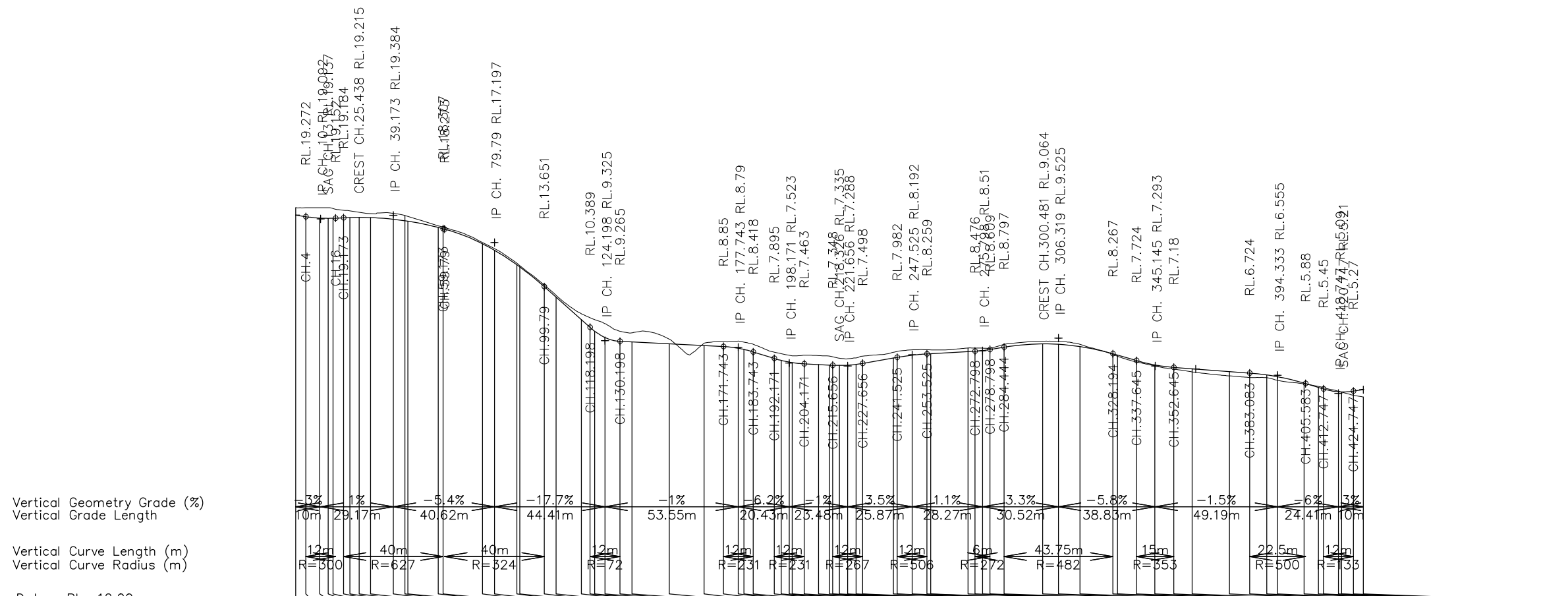
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Vertical Geometry Grade (%)  
Vertical Grade Length

Vertical Curve Length (m)  
Vertical Curve Radius (m)

Datum RL. -13.00

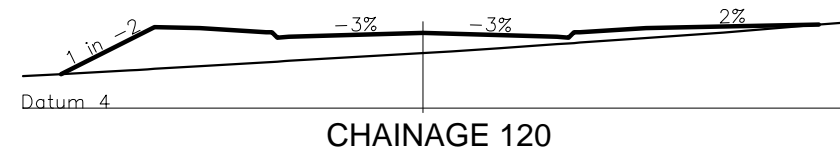
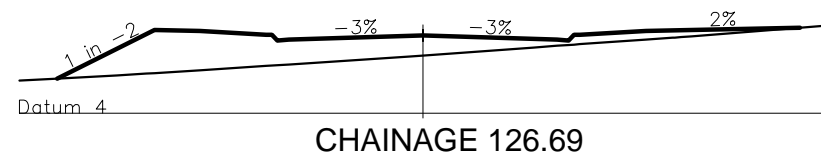
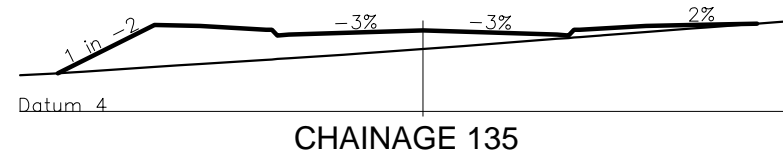
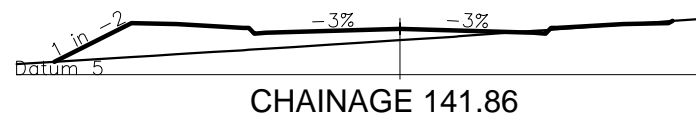
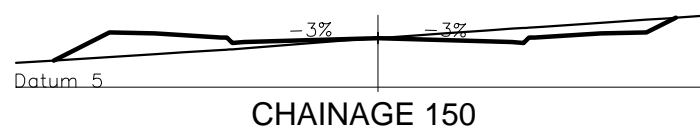
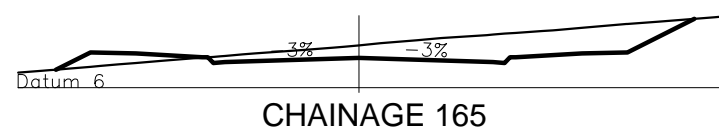
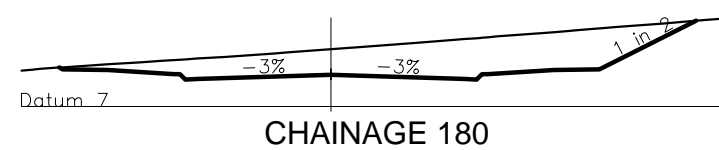
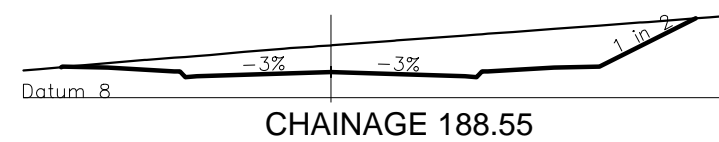
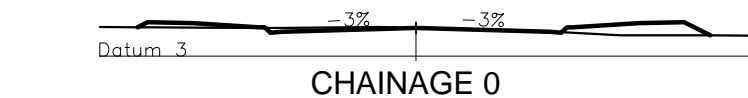
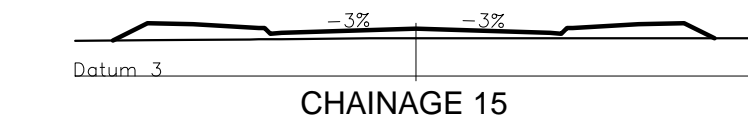
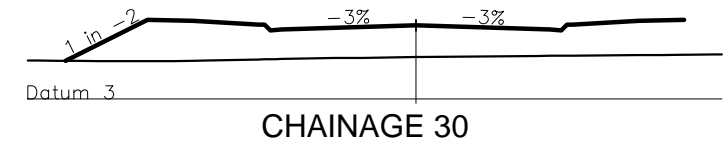
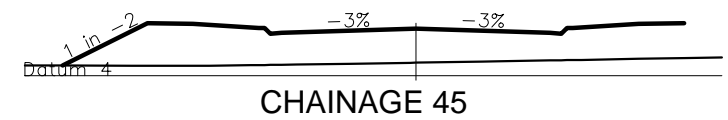
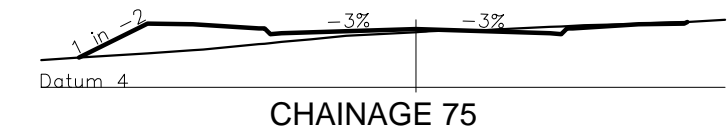
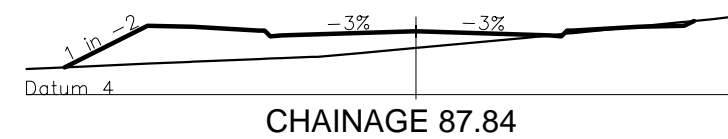
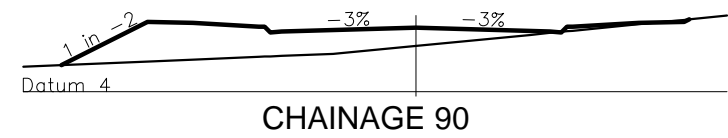
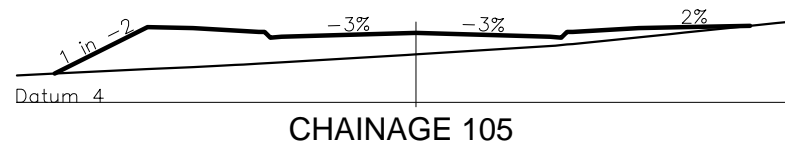
Depth to Natural	-0	3.75	3.91	4.05	4.21	4.37	4.53	4.69	4.85	5.01	5.17	5.33	5.49	5.65	5.81	5.97	6.13	6.29	6.45	6.61	6.77	6.93	7.09	7.25	7.41	7.57	7.73	7.89	8.05	8.21	8.37	8.53	8.69	8.85	9.01	9.17	9.33	9.49	9.65	9.81	9.97	10.13	10.29	10.45	10.61	10.77	10.93	11.09	11.25	11.41	11.57	11.73	11.89	12.05	12.21	12.37	12.53	12.69	12.85	13.01	13.17	13.33	13.49	13.65	13.81	13.97	14.13	14.29	14.45	14.61	14.77	14.93	15.09	15.25	15.41	15.57	15.73	15.89	16.05	16.21	16.37	16.53	16.69	16.85	17.01	17.17	17.33	17.49	17.65	17.81	17.97	18.13	18.29	18.45	18.61	18.77	18.93	19.09	19.25	19.41	19.57	19.73	19.89	20.05	20.21	20.37	20.53	20.69	20.85	21.01	21.17	21.33	21.49	21.65	21.81	21.97	22.13	22.29	22.45	22.61	22.77	22.93	23.09	23.25	23.41	23.57	23.73	23.89	24.05	24.21	24.37	24.53	24.69	24.85	25.01	25.17	25.33	25.49	25.65	25.81	25.97	26.13	26.29	26.45	26.61	26.77	26.93	27.09	27.25	27.41	27.57	27.73	27.89	28.05	28.21	28.37	28.53	28.69	28.85	29.01	29.17	29.33	29.49	29.65	29.81	29.97	30.13	30.29	30.45	30.61	30.77	30.93	31.09	31.25	31.41	31.57	31.73	31.89	32.05	32.21	32.37	32.53	32.69	32.85	33.01	33.17	33.33	33.49	33.65	33.81	33.97	34.13	34.29	34.45	34.61	34.77	34.93	35.09	35.25	35.41	35.57	35.73	35.89	36.05	36.21	36.37	36.53	36.69	36.85	37.01	37.17	37.33	37.49	37.65	37.81	37.97	38.13	38.29	38.45	38.61	38.77	38.93	39.09	39.25	39.41	39.57	39.73	39.89	40.05	40.21	40.37	40.53	40.69	40.85	41.01	41.17	41.33	41.49	41.65	41.81	41.97	42.13	42.29	42.45	42.61	42.77	42.93	43.09	43.25	43.41	43.57	43.73	43.89	44.05	44.21	44.37	44.53	44.69	44.85	45.01	45.17	45.33	45.49	45.65	45.81	45.97	46.13	46.29	46.45	46.61	46.77	46.93	47.09	47.25	47.41	47.57	47.73	47.89	48.05	48.21	48.37	48.53	48.69	48.85	49.01	49.17	49.33	49.49	49.65	49.81	49.97	50.13	50.29	50.45	50.61	50.77	50.93	51.09	51.25	51.41	51.57	51.73	51.89	52.05	52.21	52.37	52.53	52.69	52.85	53.01	53.17	53.33	53.49	53.65	53.81	53.97	54.13	54.29	54.45	54.61	54.77	54.93	55.09	55.25	55.41	55.57	55.73	55.89	56.05	56.21	56.37	56.53	56.69	56.85	57.01	57.17	57.33	57.49	57.65	57.81	57.97	58.13	58.29	58.45	58.61	58.77	58.93	59.09	59.25	59.41	59.57	59.73	59.89	60.05	60.21	60.37	60.53	60.69	60.85	61.01	61.17	61.33	61.49	61.65	61.81	61.97	62.13	62.29	62.45	62.61	62.77	62.93	63.09	63.25	63.41	63.57	63.73	63.89	64.05	64.21	64.37	64.53	64.69	64.85	65.01	65.17	65.33	65.49	65.65	65.81	65.97	66.13	66.29	66.45	66.61	66.77	66.93	67.09	67.25	67.41	67.57	67.73	67.89	68.05	68.21	68.37	68.53	68.69	68.85	69.01	69.17	69.33	69.49	69.65	69.81	69.97	70.13	70.29	70.45	70.61	70.77	70.93	71.09	71.25	71.41	71.57	71.73	71.89	72.05	72.21	72.37	72.53	72.69	72.85	73.01	73.17	73.33	73.49	73.65	73.81	73.97	74.13	74.29	74.45	74.61	74.77	74.93	75.09	75.25	75.41	75.57	75.73	75.89	76.05	76.21	76.37	76.53	76.69	76.85	77.01	77.17	77.33	77.49	77.65	77.81	77.97	78.13	78.29	78.45	78.61	78.77	78.93	79.09	79.25	79.41	79.57	79.73	79.89	80.05	80.21	80.37	80.53	80.69	80.85	81.01	81.17	81.33	81.49	81.65	81.81	81.97	82.13	82.29	82.45	82.61	82.77	82.93	83.09	83.25	83.41	83.57	83.73	83.89	84.05	84.21	84.37	84.53	84.69	84.85	85.01	85.17	85.33	85.49	85.65	85.81	85.97	86.13	86.29	86.45	86.61	86.77	86.93	87.09	87.25	87.41	87.57	87.73	87.89	88.05	88.21	88.37	88.53	88.69	88.85	89.01	89.17	89.33	89.49	89.65	89.81	89.97	90.13	90.29	90.45	90.61	90.77	90.93	91.09	91.25	91.41	91.57	91.73	91.89	92.05	92.21	92.37	92.53	92.69	92.85	93.01	93.17	93.33	93.49	93.65	93.81	93.97	94.13	94.29	94.45	94.61	94.77	94.93	95.09	95.25	95.41	95.57	95.73	95.89	96.05	96.21	96.37	96.53	96.69	96.85	97.01	97.17	97.33	97.49	97.65	97.81	97.97	98.13	98.29	98.45	98.61	98.77	98.93	99.09	99.25	99.41	99.57	99.73	99.89	100.05	100.21	100.37	100.53	100.69	100.85	101.01	101.17	101.33	101.49	101.65	101.81	101.97	102.13	102.29	102.45	102.61	102.77	102.93	103.09	103.25	103.41	103.57	103.73	103.89	104.05	104.21	104.37	104.53	104.69	104.85	105.01	105.17	105.33	105.49	105.65	105.81	105.97	106.13	106.29	106.45	106.61	106.77	106.93	107.09	107.25	107.41	107.57	107.73	107.89	108.05	108.21	108.37	108.53	108.69	108.85	109.01	109.17	109.33	109.49	109.65	109.81	109.97	110.13	110.29	110.45	110.61	110.77	110.93	111.09	111.25	111.41	111.57	111.73	111.89	112.05	112.21	112.37	112.53	112.69	112.85	113.01	113.17	113.33	113.49	113.65	113.81	113.97	114.13	114.29	114.45	114.61	114.77	114.93	115.09	115.25	115.41	115.57	115.73	115.89	116.05	116.21	116.37	116.53	116.69	116.85	117.01	117.17	117.33	117.49	117.65	117.81	117.97	118.13	118.29	118.45	118.61	118.77	118.93	119.09	119.25	119.41	119.57	119.73	119.89	120.05	120.21	120.37	120.53	120.69	120.85	121.01	121.17	121.33	121.49	121.65	121.81	121.97	122.13	122.29	122.45	122.61	122.77	122.93	123.09	123.25	123.41	123.57	123.73	123.89	124.05	124.21	124.37	124.53	124.69	124.85	125.01	125.17	125.33	125.49	125.65	125.81	125.97	126.13	126.29	126.45	126.61	126.77	126.93	127.09	127.25	127.41	127.57	127.73	127.89	128.05	128.21	128.37	128.53	128.69	128.85	129.01	129.17	129.33	129.49	129.65	129.81	129.97	130.13	130.29	130.45	130.61	130.77	130.93	131.09	131.25	131.41	131.57	131.73	131.89	132.05	132.21	132.37	132.53	132.69	132.85	133.01	133.17	133.33	133.49	133.65	133.81	133.97	134.13	134.29	134.45	134.61	134.77	134.93	135.09	135.25	135.41	135.57	135.73	135.89	136.05	136.21	136.37	136.53	136.69	136.85	137.01	137.17	137.33	137.49	137.65	137.81	137.97	138.13	138.29	138.45	138.61	138.77	138.93	139.09	139.25	139.41	139.57	139.73	139.89	140.05	140.21	140.37	140.53	140.69	140.85	141.01	141.17	141.33	141.49	141.65	141.81	141.97	142.13	142.29	142.45	142.61	142.77	142.93	143.09	143.25	143.41	143.57	143.73	143.89	144.05	144.21	144.37	144.53	144.69	144.85	145.01	145.17	145.33	145.49	145.65	145.81	145.97	146.13	146.29	146.45	146.61	146.77	146.93	147.09	147.25	147.41	147.57	147.73	147.89	148.05	148.21	148.37	148.53	148.69	148.85	149.01	149.17	149.33	149.49	149.65	149.81	149.97	150.13	150.29	150.45	150.61	150.77	150.93	151.09	151.25	151.41	151.57	151.73	151.89	152.05	152.21	152.37	152.53	152.69	152.85	153.01	153.17	153.33	153.49	153.65	153.81	153.97	154.13	154.29	154.45	154.61	154.77	154.93	155.09	155.25	155.41	155.57	155.73	155.89	156.05	156.21	156.37	156.53	156.69	156.85	157.01	157.17	157.33	157.49	157.65	157.81	157.97	158.13	158.29	158.45	158.61	158.77	158.93	159.09	159.25	159.41	159.57	159.73	159.89	160.05	160.21	160.37	160.53	160.69	160.85	161.01	161.17	161.33	161.49	161.65	161.81	161.97	162.13	162.29	162.45	162.61	162.77	162.93	163.09	163.25	163.41	163.57	163.73	163.89	164.05	164.21	164.37	164.53	164.69	164.85	165.01	165.17	165.33	165.49	165.65	165.81	165.97	166.13	166.29	166.45	166.61	166.77	166.93	167.09	167.25	167.41	167.57	167.73	167.89	168.05	168.21	168.37	168.53	168.69	168.85	169.01	169.17	169.33	169.49	169.65	169.81	169.97	170.13	170.29	170.45	170.61	170.77	170.93	171.09	171.25	171.41	171.57	171.73	171.89	172.05	172.21	172.37	172.53	172.69	172.85	173.01	173.17	173.33	173.49	173.65	173.81	173.97	174.13	174.29	174.45	174.61	174.77	174.93	175.09	175.25	175.41	175.57	175.73	175.89	176.05	176.21	176.37	176.53	176.69	176.85	177.01	177.17	177.33	177.49	177.65	177.81	177.97	178.13	178.29	178.45	178.61	178.77	178.93	179.09	179.25	179.41	179.57	179.73	179.89	180.05	180.21	180.37	180.53	180.69	180.85	181.01	181.17	181.33	181.49	181.65	181.81	181.97	182.13	182.29	182.45	182.61	182.77	182.93	183.09	183.25	183.41	183.57	183.73	183.89	184.05	184.21	184.37	184.53	184.69	184.85	185.01	185.17	185.33	185.49	185.65	185.81	185.97	186.13	186.29	186.45	186.61	186.77	186.93	187.09	187.25	187.41	187.57	187.73	187.89	188.05	188.21	188.37	188.53	188.69	188.85	189.01	189.17	189.33	189.49	189.65	189.81	189.97	190.13	1
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ROAD CHAINAGE	Natural Surface RL.	Design Surface RL.	Depth to Natural
0		19.39	
4	19.99	19.27	-0.71
9.62	19.99	19.16	-0.84
13	20	19.14	-0.86
15	19.93	19.14	-0.78
19.17	19.79	19.18	-0.6
21.72	19.74	19.2	-0.54
25.44	19.63	19.21	-0.41
30	19.52	19.2	-0.33
39.17	19.54	19.06	-0.47
43.86	19.36	18.94	-0.42
45	19.3	18.91	-0.39
57.25	18.53	18.41	-0.13
59.17	18.43	18.31	-0.12
75	17.2	17.1	-0.1
79.79	16.71	16.58	-0.13
88.79	15.54	15.41	-0.13
90	15.34	15.24	-0.1
99.79	13.79	13.65	-0.14
104.53	12.97	12.81	-0.16
114.67	11.48	11.01	-0.47
118.2	11.16	10.39	-0.77
120	11.01	10.09	-0.92
124.2	10.68	9.58	-1.1
130.2	10.07	9.27	-0.81
135	9.96	9.22	-0.74
150	9.45	9.07	-0.38
164	9.12	8.93	-0.2
171.74	9.25	8.85	-0.4
177.74	9.29	8.71	-0.58
180	9.21	8.62	-0.59
183.74	9.03	8.42	-0.62
192.17	8.4	7.9	-0.51
195	8.28	7.74	-0.54
198.17	8.15	7.6	-0.55
199.37	8.1	7.56	-0.54
204.17	8.15	7.46	-0.69
210	8.13	7.4	-0.72
214.34	8.09	7.36	-0.73
215.66	8.03	7.35	-0.68
218.33	7.91	7.33	-0.58
221.66	7.87	7.36	-0.51
225	7.93	7.42	-0.51
227.66	8.08	7.5	-0.58
241.52	8.46	7.98	-0.48
247.52	8.59	8.16	-0.43
253.52	8.6	8.26	-0.34
255	8.59	8.28	-0.31
270	8.74	8.44	-0.29
272.8	8.72	8.48	-0.25
275.8	8.73	8.53	-0.2
278.8	8.7	8.61	-0.09
284.44	9.02	8.8	-0.22
300	9.28	9.06	-0.22
306.32	9.26	9.03	-0.23
315	9.03	8.85	-0.18
328.19	8.21	8.27	0.05
330	8.08	8.16	0.09
337.65	7.62	7.72	0.1
345	7.3	7.38	0.08
352.65	7.04	7.18	0.14
360	6.82	7.07	0.25
375	6.5	6.84	0.35
383.08	6.37	6.72	0.36
390	6.36	6.57	0.21
394.33	6.14	6.43	0.29
405	5.86	5.91	0.05
410.73	5.66	5.57	-0.08
412.75	5.56	5.45	-0.11
418.75	5.27	5.22	-0.04
420	5.2	5.21	0.01
424.75	4.95	5.27	0.32
428.75	4.81	5.39	0.58

### LONGITUDINAL SECTION Road 2

Scale Horizontal 1000  
Vertical 200



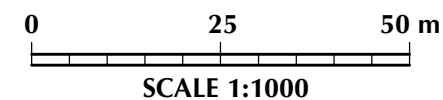
H 1:100 ROAD 1  
V 1:100 Ch0 to Ch210

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Consulting Engineers & Planners

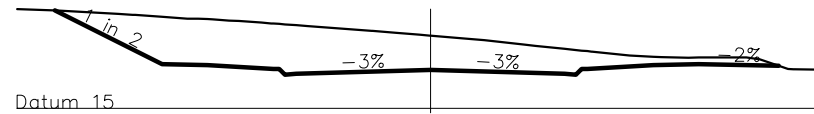
A.C.N. 052 300 571  
236 Harbour Drive  
Coffs Harbour NSW 2450

Phone (02) 6652 1700  
Fax (02) 6652 7418  
Email email@dggh.com.au

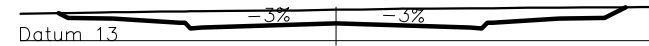
RESIDENTIAL SUBDIVISION  
LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**CROSS SECTIONS - SHEET 1**



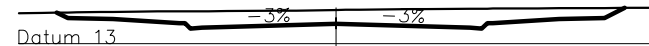
MAP 13  
06265  
Amendment No.



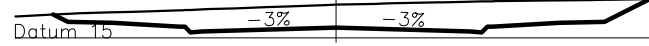
CHAINAGE 315



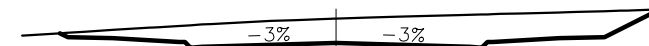
CHAINAGE 435



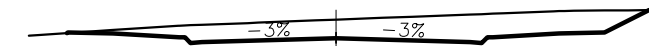
CHAINAGE 434.44



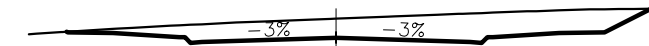
CHAINAGE 420



CHAINAGE 405



CHAINAGE 390



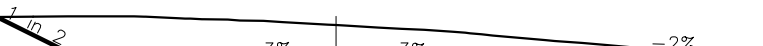
CHAINAGE 387.17



CHAINAGE 365.85



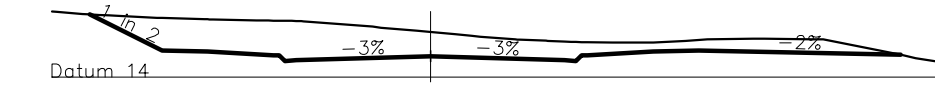
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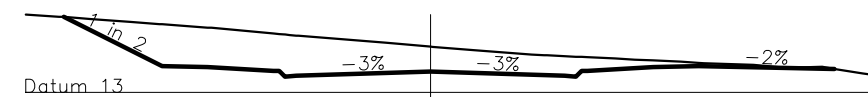
CHAINAGE 345



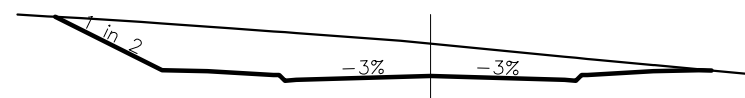
CHAINAGE 330



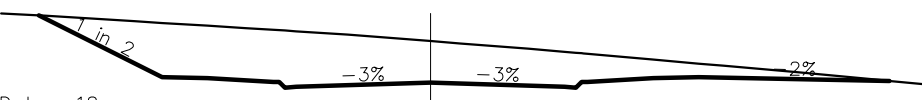
CHAINAGE 300



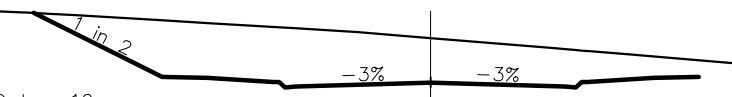
CHAINAGE 285



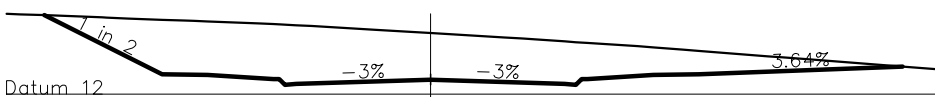
CHAINAGE 270



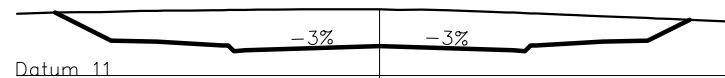
CHAINAGE 255



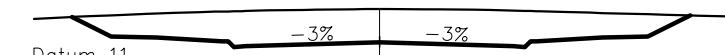
CHAINAGE 252.19



CHAINAGE 240



CHAINAGE 225



CHAINAGE 220.37

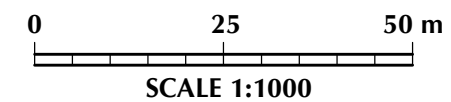
H 1:100 ROAD 1  
V 1:100 Ch220.37 to Ch435

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RESIDENTIAL SUBDIVISION  
LOT 21, DP714858 HEARNES LAKE ROAD, WOOLGOOLGA  
**CROSS SECTIONS - SHEET 2**



MAP 14

06265

Amendment No.

- 21 AUGUST 2009 RDG