




MH No.	mN	mE	LL	IL
SSMH B18	819146.34	407609.81	101.33	98.96
SSMH B19	819173.33	407591.07	104.78	102.89
SSMH B20	819194.14	407574.65	106.63	104.76
SSMH B21	819233.68	407537.44	109.02	106.42
SSMH B22	819234.47	407523.00	108.81	106.76
SSMH B23	819253.46	407497.01	109.05	107.31
SSMH B24	819310.29	407421.64	109.76	108.89
SSMH O2	819093.83	407756.13	87.39	85.62
SSMH O3	819113.08	407734.71	89.80	87.24
SSMH O4	819132.62	407717.29	92.52	90.39
SSMH O5	819177.95	407675.45	99.76	98.15
SSMH O6	819225.93	407639.43	105.44	104.04
SSMH O7	819251.11	407617.90	108.13	106.46
SSMH O8	819295.83	407579.29	110.53	108.58
SSMH O9	819324.41	407551.47	110.53	109.13
SSMH Q1	819095.71	407715.82	89.67	88.33
SSMH R1	819267.93	407508.78	110.52	109.20



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NOTE:

- All house connections are 100mm dia uPVC.
- All sewer main pipes are 150mm dia uPVC unless shown otherwise.
- All positions and levels are accurate at time of survey.
- Levels are in terms of Wellington Vertical Datum 1953.
(Origin of levels: BMLB51 S0 31708, RL = 2.936m)
- Coordinates are in terms of NZGD2000 - Wellington Circuit.


LEGEND




STORMWATER LINE




STORMWATER MANHOLE




STORMWATER CONNECTION




SUMP




SUPERPIT




SEWER LINE




SEWER MANHOLE



SEWER CONNECTION



EXISTING SEWER LINE




EXISTING SEWER MANHOLE

NOTE:

THIS PLAN PART SUPERSEDES DRAWING NO. 000632-4F-AB400.

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**HARRISON
GRIERSON**

CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Giller Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	DISCLAIMER ADDED, PRESENTATION AMENDMENTS	NDH	22/02/2008
A	INITIAL RELEASE	MJH	09/10/2008
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4F & 4G

TITLE:

SANITARY SEWER RETICULATION
AS BUILT PLANS
SHEET 1 OF 2

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:
GAW	09/2005		22/02/2008
DRAWN:	DATE:	SIGNATURE:	CAD REF:
NDH	09/2007		000632-4FG-AB400
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
MJH/CSR	21/02/2008		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
JMS	21/02/2008		GMB, LRC
			SURVEY DATE:
			06/2006
			SDR REF:

PLOT STATUS:

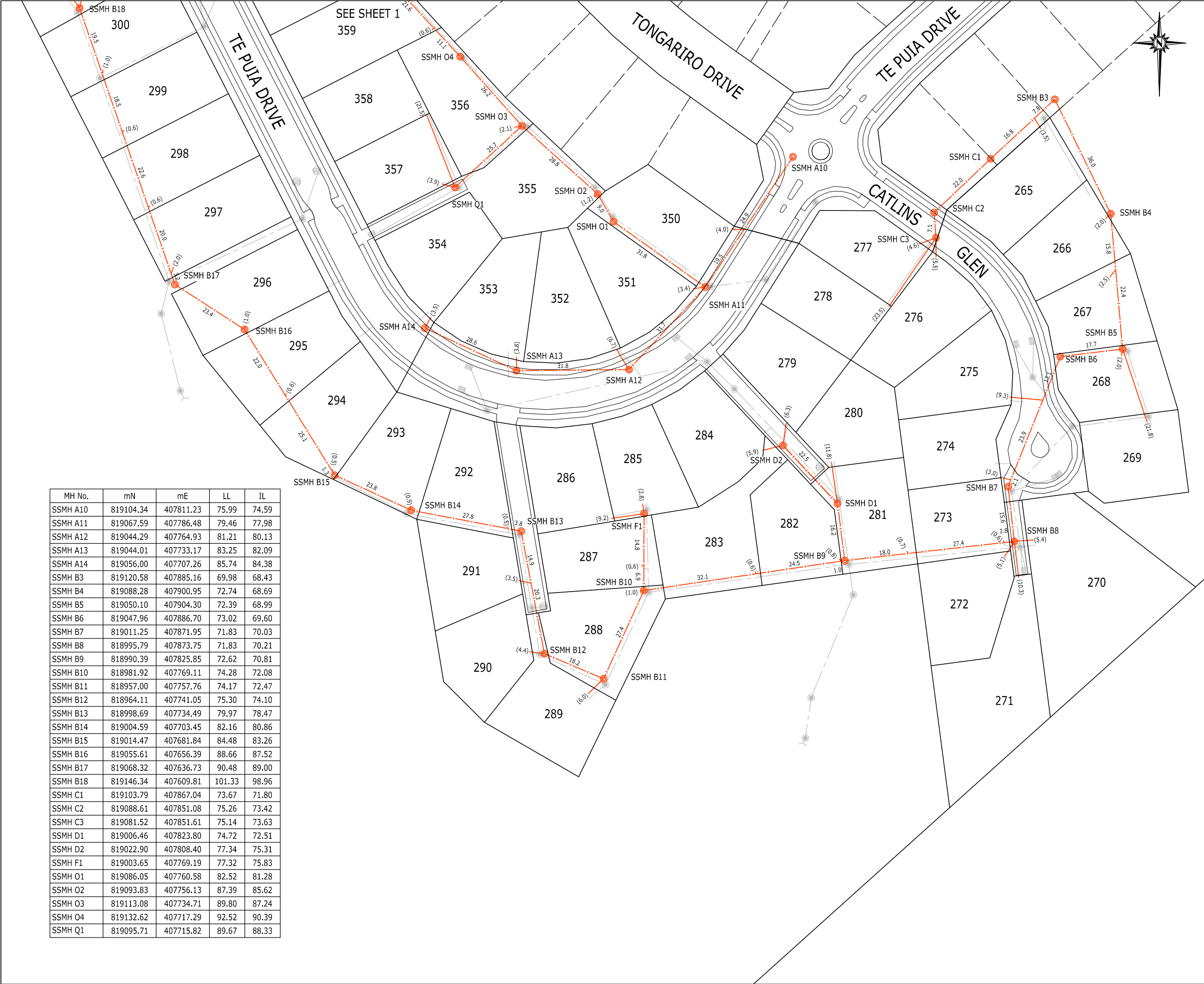
AS BUILT

PROJECT No:	SCALES:		A1
1850-000632-01	1:500 (A1) 1:1000 (A3)		
DRAWING No:			REV


000632-4FG-AB402-SS

B

J:\1850\00632_a\cad\As Builts\Stage F,G H\000632-4F-AB400.dwg



MH No.	mN	mE	LL	IL
SSMH A10	819104.34	407811.23	75.99	74.59
SSMH A11	819067.59	407786.48	79.46	77.98
SSMH A12	819044.29	407764.93	81.21	80.13
SSMH A13	819044.01	407733.17	83.25	82.09
SSMH A14	819056.00	407707.26	85.74	84.38
SSMH B3	819120.58	407885.16	69.98	68.43
SSMH B4	819088.28	407900.95	72.74	68.69
SSMH B5	819050.10	407904.30	72.39	68.99
SSMH B6	819047.96	407886.70	73.02	69.60
SSMH B7	819011.25	407871.95	71.83	70.03
SSMH B8	818995.79	407873.75	71.83	70.21
SSMH B9	818990.39	407825.85	72.62	70.81
SSMH B10	818981.92	407769.11	74.28	72.08
SSMH B11	818957.00	407757.76	74.17	72.47
SSMH B12	818964.11	407741.05	75.30	74.10
SSMH B13	818998.69	407734.49	79.97	78.47
SSMH B14	819004.59	407703.45	82.16	80.86
SSMH B15	819014.47	407681.84	84.48	83.26
SSMH B16	819055.61	407656.39	88.66	87.52
SSMH B17	819068.32	407636.73	90.48	89.00
SSMH B18	819146.34	407609.81	101.33	98.96
SSMH C1	819103.79	407867.04	73.67	71.80
SSMH C2	819088.61	407851.08	75.26	73.42
SSMH C3	819081.52	407851.61	75.14	73.63
SSMH D1	819006.46	407823.80	74.72	72.51
SSMH D2	819022.90	407808.40	77.34	75.31
SSMH F1	819003.65	407769.19	77.32	75.83
SSMH O1	819086.05	407760.58	82.52	81.28
SSMH O2	819093.83	407756.13	87.39	85.62
SSMH O3	819113.08	407734.71	89.80	87.24
SSMH O4	819132.62	407717.29	92.52	90.39
SSMH Q1	819095.71	407715.82	89.67	88.33



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NOTE:

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- All sewer main pipes are 150mm dia uPVC unless shown otherwise.
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- Levels are in terms of Wellington Vertical Datum 1953.
(Origin of levels: BMLB51 S0 31708, RL = 2.936m)
- Coordinates are in terms of NZGD2000 - Wellington Circuit.

LEGEND




STORMWATER LINE
STORMWATER MANHOLE
STORMWATER CONNECTION
SUMP
SUPERPIT
SEWER LINE
SEWER MANHOLE
SEWER CONNECTION
EXISTING SEWER LINE
EXISTING SEWER MANHOLE

NOTE:

THIS PLAN PART SUPERSEDES DRAWING NO. 000632-4F-AB400.

WARNING: Levels, locations and dimensions of drainage services shown on these plans may not be accurate due to circumstances not notified to Harrison Grierson Consultants Ltd. A physical check should be made on all levels, locations and dimensions before starting design or works.



HARRISON
GRIERSON

CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Giller Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	DISCLAIMER ADDED, PRESENTATION AMENDMENTS	NDH	22/02/2008
A	INITIAL RELEASE	MJH	09/10/2008
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4F & 4G

TITLE:

SANITARY SEWER RETICULATION
AS BUILT PLANS
SHEET 2 OF 2

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:
GAW	09/2005		22/02/2008
DRAWN:	DATE:	SIGNATURE:	CAD REF:
NDH	09/2007		000632-4FG-AB400
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
MJH/CSR	21/02/2008		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
JMS	21/02/2008		GMB, LRC
			SURVEY DATE:
			06/2006
			SDR REF:


PLOT STATUS:

AS BUILT

PROJECT No:	SCALES:	
1850-000632-01	1:500 (A1) 1:1000 (A3)	A1
DRAWING No:		REV
000632-4FG-AB403-SS		B



MH No.	mN	mE	LL	IL
SWMH 1-14	819095.74	407755.33	87.74	86.05
SWMH 1-15	819112.96	407736.27	89.71	87.19
SWMH 1-16	819132.29	407718.17	92.22	90.35
SWMH 1-17	819177.71	407676.67	99.65	97.98
SWMH 1-18	819227.55	407639.33	105.45	104.14
SWMH 1-19	819252.64	407617.70	108.29	106.57
SWMH 1-20	819297.10	407579.15	110.61	108.67
SWMH 1-21	819325.46	407551.54	110.41	109.12
SWMH 11-1	819095.74	407716.92	89.66	88.41
SWMH 12-1	819145.09	407609.24	101.29	99.40
SWMH 12-2	819172.06	407590.29	104.58	102.91
SWMH 12-3	819192.78	407574.87	106.38	104.55
SWMH 12-4	819232.40	407538.00	108.97	106.38
SWMH 12-5	819233.62	407521.41	108.83	106.69
SWMH 12-6	819251.85	407497.21	108.95	106.88
SWMH 12-7	819295.85	407438.69	109.24	107.57
SWMH 17-1	819266.48	407509.48	110.47	109.20
SWMH 19-5	819126.59	407615.60	98.72	96.40
SWMH 19-6	819141.13	407645.09	98.30	97.08
SWMH 20-1	819210.37	407597.86	107.27	105.95
SUMP 17-1	819267.24	407511.10	110.36	-
SUMP 19-1	819153.87	407650.05	99.14	-
SUMP 19-2	819150.49	407643.19	99.12	-
SUMP 20-1	819213.57	407607.71	107.21	-
SUMP 20-2	819212.71	407598.04	107.75	-
S-PIT 24-1	819100.50	407677.29	91.94	-
S-PIT 24-2	819096.48	407670.83	91.86	-



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NOTE:

- All house connections are 100mm dia uPVC.
- All single sump leads are 225mm dia rcrrf class z.
- All double sump leads are 300mm dia rcrrf class z.
- All positions and levels are accurate as at time of survey
- Levels are in terms of Wellington Vertical Datum 1953
(Origin of levels: BMLB51 S0 31708, RL = 2.936m)
- Coordinates are in terms of NZGD2000 - Wellington Circuit


LEGEND




STORMWATER LINE




STORMWATER MANHOLE




STORMWATER CONNECTION




SUMP




SUPERPIT



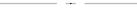
SEWER LINE




SEWER MANHOLE



SEWER CONNECTION




EXISTING STORMWATER LINE



EXISTING STORMWATER MANHOLE

THIS PLAN PART SUPERSEDES DRAWING NO. 000632-4F-AB400.

WARNING: Levels, locations and dimensions of drainage services shown on these plans may not be accurate due to circumstances not notified to Harrson Grierson Consultants Ltd. A physical check should be made on all levels, locations and dimensions before starting design or works.



**HARRISON
GRIERSON**

CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Giller Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	DISCLAIMER ADDED, PRESENTATION AMENDMENTS	NDH	22/02/2008
A	INITIAL RELEASE	MJH	09/10/2008
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4F & 4G

TITLE:

STORMWATER RETICULATION
AS BUILT PLANS
SHEET 1 OF 2

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:
GAW	09/2005		22/02/2008
DRAWN:	DATE:	SIGNATURE:	CAD REF:
NDH	09/2007		000632-4FG-AB400
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
MJH/CSR	21/02/2008		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
JMS	21/02/2008		GMB, LRC
			SURVEY DATE:
			06/2006
			SDR REF:

PLOT STATUS:

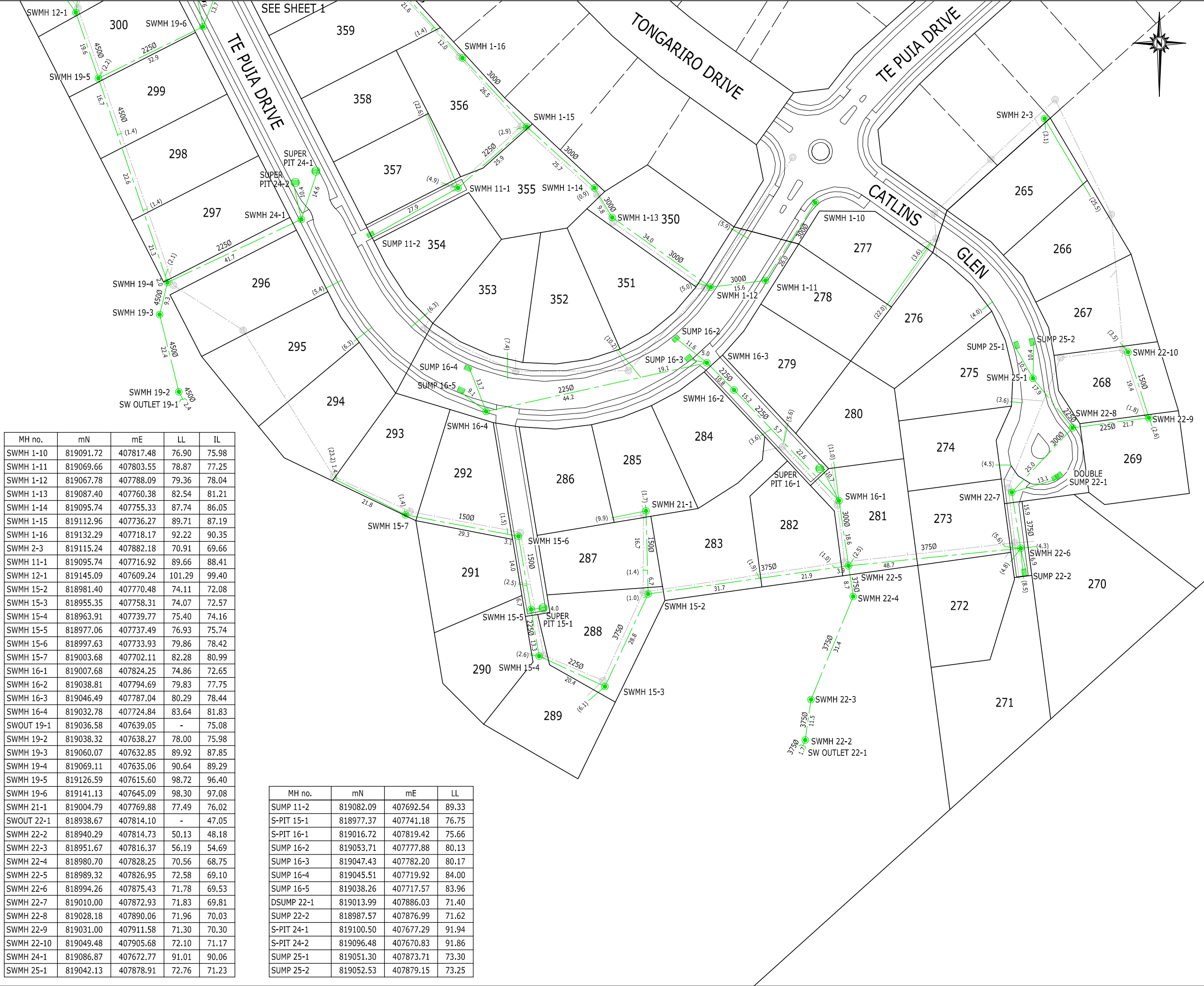
AS BUILT

PROJECT No:	SCALES:		
1850-000632-01	1:500 (A1) 1:1000 (A3)		A1
DRAWING No:			REV

000632-4FG-AB400-SW


B

J:\1850\00632_a\cad\As Bults\Stage F,G H\000632-4F-AB400.dwg



MH no.	mN	mE	LL	IL
SWMH 1-10	819091.72	407817.48	76.90	75.98
SWMH 1-11	819069.66	407803.55	78.87	77.25
SWMH 1-12	819067.78	407788.09	79.36	78.04
SWMH 1-13	819087.40	407760.38	82.54	81.21
SWMH 1-14	819095.74	407755.33	87.74	86.05
SWMH 1-15	819112.96	407736.27	89.71	87.19
SWMH 1-16	819132.29	407718.17	92.22	90.35
SWMH 2-3	819115.24	407882.18	70.91	69.66
SWMH 11-1	819095.74	407716.92	89.66	88.41
SWMH 12-1	819145.09	407609.24	101.29	99.40
SWMH 15-2	818981.40	407770.48	74.11	72.08
SWMH 15-3	818955.35	407758.31	74.07	72.57
SWMH 15-4	818963.91	407739.77	75.40	74.16
SWMH 15-5	818977.06	407737.49	76.93	75.74
SWMH 15-6	818997.63	407733.93	79.86	78.42
SWMH 15-7	819003.68	407702.11	82.28	80.99
SWMH 16-1	819007.68	407824.25	74.86	72.65
SWMH 16-2	819038.81	407794.69	79.83	77.75
SWMH 16-3	819046.49	407787.04	80.29	78.44
SWMH 16-4	819032.78	407724.84	83.64	81.83
SWOUT 19-1	819036.58	407639.05	-	75.08
SWMH 19-2	819038.32	407638.27	78.00	75.98
SWMH 19-3	819060.07	407632.85	89.92	87.85
SWMH 19-4	819069.11	407635.06	90.64	89.29
SWMH 19-5	819126.59	407615.60	98.72	96.40
SWMH 19-6	819141.13	407645.09	98.30	97.08
SWMH 21-1	819004.79	407769.88	77.49	76.02
SWOUT 22-1	818938.67	407814.10	-	47.05
SWMH 22-2	818940.29	407814.73	50.13	48.18
SWMH 22-3	818951.67	407816.37	56.19	54.69
SWMH 22-4	818980.70	407828.25	70.56	68.75
SWMH 22-5	818989.32	407826.95	72.58	69.10
SWMH 22-6	818994.26	407875.43	71.78	69.53
SWMH 22-7	819010.00	407872.93	71.83	69.81
SWMH 22-8	819028.18	407890.06	71.96	70.03
SWMH 22-9	819031.00	407911.58	71.30	70.30
SWMH 22-10	819049.48	407905.68	72.10	71.17
SWMH 24-1	819086.87	407672.77	91.01	90.06
SWMH 25-1	819042.13	407878.91	72.76	71.23

MH no.	mN	mE	LL
SUMP 11-2	819082.09	407692.54	89.33
S-PIT 15-1	818977.37	407741.18	76.75
S-PIT 16-1	819016.72	407819.42	75.66
SUMP 16-2	819053.71	407777.88	80.13
SUMP 16-3	819047.43	407782.20	80.17
SUMP 16-4	819045.51	407719.92	84.00
SUMP 16-5	819038.26	407717.57	83.96
DSUMP 22-1	819013.99	407886.03	71.40
SUMP 22-2	818987.57	407876.99	71.62
S-PIT 24-1	819100.50	407677.29	91.94
S-PIT 24-2	819096.48	407670.83	91.86
SUMP 25-1	819051.30	407873.71	73.30
SUMP 25-2	819052.53	407879.15	73.25



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NOTE:

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- All single sump leads are 225mm dia rcrrf class z.
- All double sump leads are 300mm dia rcrrf class z.
- All positions and levels are accurate as at time of survey
- Levels are in terms of Wellington Vertical Datum 1953
(Origin of levels: BMLB51 S0 31708, RL = 2.936m)
- Coordinates are in terms of NZGD2000 - Wellington Circuit

LEGEND



STORMWATER LINE
STORMWATER MANHOLE
STORMWATER CONNECTION
SUMP
SUPERPIT
SEWER LINE
SEWER MANHOLE
SEWER CONNECTION
EXISTING STORMWATER LINE
EXISTING STORMWATER MANHOLE

NOTE:

THIS PLAN PART SUPERSEDES DRAWING NO. 000632-4F-AB400.

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**HARRISON
GRIERSON**

CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Giller Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	DISCLAIMER ADDED, PRESENTATION AMENDMENTS	NDH	22/02/2008
A	INITIAL RELEASE	MJH	09/10/2008
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4F & 4G

TITLE:

STORMWATER RETICULATION
AS BUILT PLANS
SHEET 2 OF 2

DESIGNED: GAW	DATE: 09/2005	SIGNATURE:	PLOT DATE: 22/02/2008
DRAWN: NDH	DATE: 09/2007	SIGNATURE:	CAD REF: 000632-4FG-AB400
CHECKED: MJH/CSR	DATE: 21/02/2008	SIGNATURE:	CAD XREF: GMB, LRC
APPROVED: JMS	DATE: 21/02/2008	SIGNATURE:	SURVEY DATE: 06/2006
PLOT STATUS:			

AS BUILT

PROJECT No: 1850-000632-01	SCALES: 1:500 (A1) 1:1000 (A3)	A1
DRAWING No:		REV

000632-4FG-AB401-SW

B

J:\1850\00632_a\cad\As Bults\Stage F,G H\000632-4F-AB400.dwg



ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND

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LEGEND:

- GATE VALVE
- SLUICE VALVE
- FIRE HYDRANT
- WATER TOBY
- 150mmØ PVC WATERMAIN
- 50mmØ MDPE RIDERMAIN
- WATER/RIDERMAIN IN OTHER STAGE
- RIDERMAIN IN OTHER STAGE

NOTES:

1. All Dimensions are shown in metres unless otherwise stated.

LOT 298	407660.96	819105.40
LOT 299	407643.75	819139.54
LOT 300	407643.31	819140.41
LOT 301	407622.53	819176.30
LOT 302	407621.94	819177.12
LOT 303	407596.15	819208.04
LOT 304	407595.48	819208.84
LOT 305	407570.88	819237.78
LOT 306	407570.28	819238.54
LOT 307	407544.20	819269.38
LOT 308	407543.52	819270.10
LOT 309	407506.29	819303.10
LOT 310	407505.46	819303.97
LOT 355	407719.59	819094.73
LOT 356	407718.21	819098.22
LOT 357	407681.60	819102.23
LOT 358	407681.16	819103.14
LOT 359	407663.53	819137.76
LOT 360	407662.99	819138.83
LOT 361	407646.39	819171.23
LOT 362	407645.77	819171.97
LOT 363	407625.15	819200.34
LOT 364	407624.34	819201.16
LOT 365	407598.97	819230.84
LOT 366	407598.22	819231.69
LOT 367	407572.75	819261.77
LOT 368	407572.09	819262.48
LOT 369	407547.64	819290.07
LOT 370	407546.92	819290.88
LOT 371	407519.80	819314.55
LOT 372	407518.95	819315.15
LOT 456	407509.69	819265.00
LOT 457	407507.03	819267.37

FH 3	407651.08	819154.16
FH 4	407544.61	819288.42
GV 8	407643.17	819148.92
GV 9	407649.81	819155.44
GV 10	407526.50	819285.19
SV 2	407650.66	819155.02

This drawing supercedes drawing number 000632-4F-AB600.

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CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Giller Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

A	INITIAL RELEASE	JMS	30/01/2008
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4F & 4G

TITLE:

WATER AS-BUILTS
LAYOUT PLAN
SHEET 1 OF 2

DESIGNED: PWJ/CSR	DATE: 08/2006	SIGNATURE:	PLOT DATE: 30/01/2008
DRAWN: NDH	DATE: 12/2007	SIGNATURE:	CAD REF:
CHECKED: CSR	DATE: 15/01/2008	SIGNATURE:	SURVEY BY: GMB, LRC
APPROVED: JMS	DATE: 30/01/2008	SIGNATURE:	SURVEY DATE: 06/2006
			SDR REF:

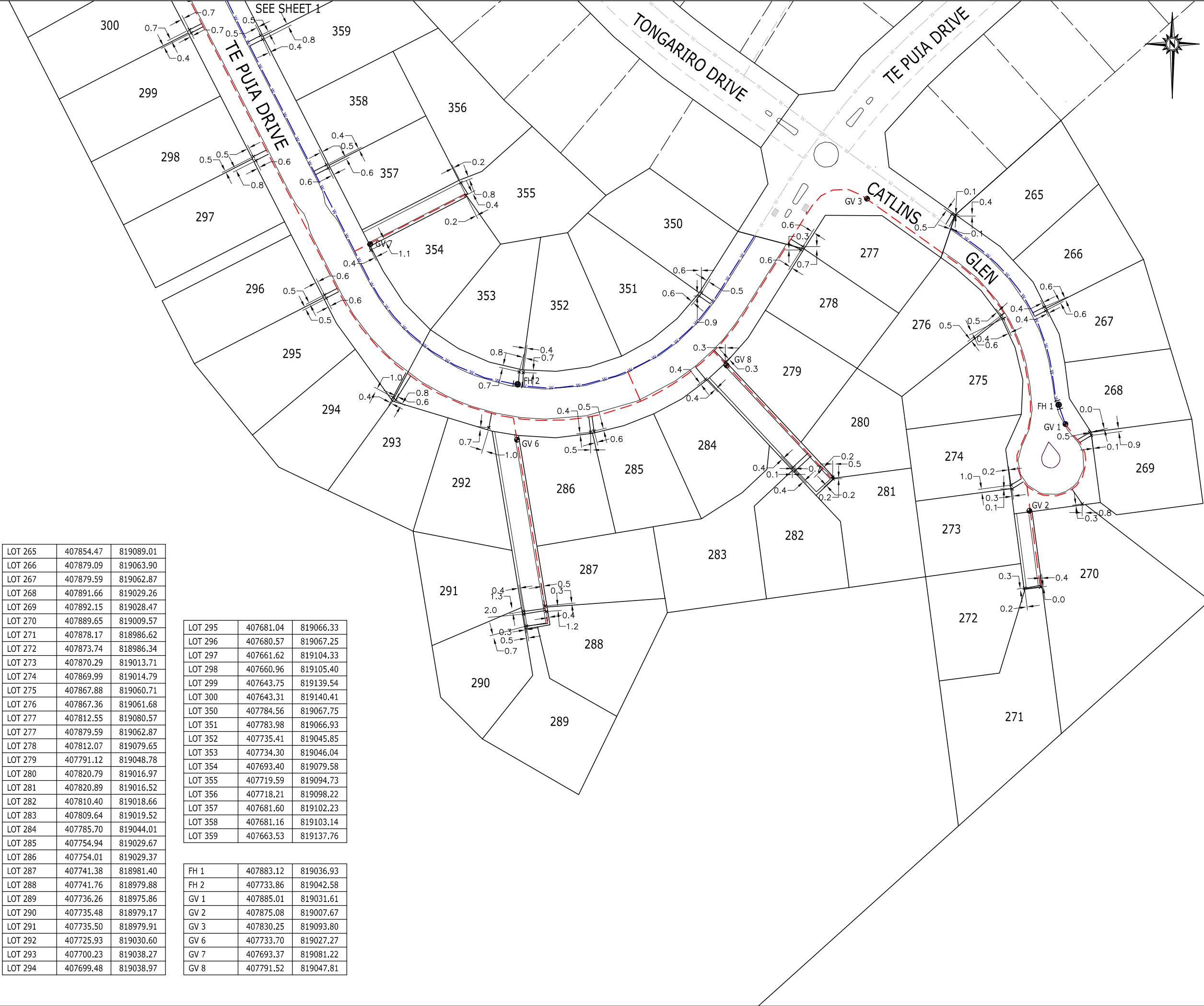
PLOT STATUS:

AS BUILT

PROJECT No: 1850-000632-01	SCALES: 1:500 @ A1 1:1000 @ A3	A1
DRAWING No:		REV

000632-4FG-AB500


A



LOT 265	407854.47	819089.01
LOT 266	407879.09	819063.90
LOT 267	407879.59	819062.87
LOT 268	407891.66	819029.26
LOT 269	407892.15	819028.47
LOT 270	407889.65	819009.57
LOT 271	407878.17	818986.62
LOT 272	407873.74	818986.34
LOT 273	407870.29	819013.71
LOT 274	407869.99	819014.79
LOT 275	407867.88	819060.71
LOT 276	407867.36	819061.68
LOT 277	407812.55	819080.57
LOT 277	407879.59	819062.87
LOT 278	407812.07	819079.65
LOT 279	407791.12	819048.78
LOT 280	407820.79	819016.97
LOT 281	407820.89	819016.52
LOT 282	407810.40	819018.66
LOT 283	407809.64	819019.52
LOT 284	407785.70	819044.01
LOT 285	407754.94	819029.67
LOT 286	407754.01	819029.37
LOT 287	407741.38	818981.40
LOT 288	407741.76	818979.88
LOT 289	407736.26	818975.86
LOT 290	407735.48	818979.17
LOT 291	407735.50	818979.91
LOT 292	407725.93	819030.60
LOT 293	407700.23	819038.27
LOT 294	407699.48	819038.97

LOT 295	407681.04	819066.33
LOT 296	407680.57	819067.25
LOT 297	407661.62	819104.33
LOT 298	407660.96	819105.40
LOT 299	407643.75	819139.54
LOT 300	407643.31	819140.41
LOT 350	407784.56	819067.75
LOT 351	407783.98	819066.93
LOT 352	407735.41	819045.85
LOT 353	407734.30	819046.04
LOT 354	407693.40	819079.58
LOT 355	407719.59	819094.73
LOT 356	407718.21	819098.22
LOT 357	407681.60	819102.23
LOT 358	407681.16	819103.14
LOT 359	407663.53	819137.76

FH 1	407883.12	819036.93
FH 2	407733.86	819042.58
GV 1	407885.01	819031.61
GV 2	407875.08	819007.67
GV 3	407830.25	819093.80
GV 6	407733.70	819027.27
GV 7	407693.37	819081.22
GV 8	407791.52	819047.81





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
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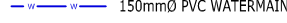
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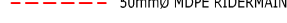
 GATE VALVE

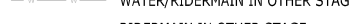
 SLUICE VALVE


 FIRE HYDRANT

 WATER TOBY

 150mmØ PVC WATERMAIN

 50mmØ MDPE RIDERMAIN

 WATER/RIDERMAIN IN OTHER STAGE


 RIDERMAIN IN OTHER STAGE

NOTES:

1. All Dimensions are shown in metres unless otherwise stated.

This drawing supercedes drawing number 000632-4F-AB600.

WARNING: Levels, locations and dmsnsons of water services shown on these plans may not be accurate due to circumstances not notified to Harrsion Grierson Consultants Ltd. A physical check should be made on all levels, locations and dmsnsons before starting design or works.



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CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Giller Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

A	INITIAL RELEASE	JMS	30/01/2008
REF	AMENDMENT	BY	DATE
PROJECT:			
CARRUS LIMITED AOTEA BLOCK - PORIRUA STAGE 4F & 4G			
TITLE:			
WATER AS-BUILTS LAYOUT PLAN SHEET 2 OF 2			
DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:
PWJ/CSR	08/2006		30/01/2008
DRAWN:	DATE:	SIGNATURE:	CAD REF:
NDH	12/2007		
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
CSR	15/01/2008		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
JMS	30/01/2008		GMB, LRC
			SURVEY DATE:
			06/2006
			SDR REF:
PLOT STATUS:			
AS BUILT			
PROJECT No:		SCALES:	
1850-000632-01		1:500 @ A1 1:1000 @ A3	A1
DRAWING No:			REV
000632-4FG-AB501			A

J:\1850\00632_a\cad\As Builts\Stage F,G H\000632-4FG-AB500.dwg





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NOTES:

1. CONTOURS ARE AT 1.0m INTERVALS

2. TOPSOIL OF APPROX. 0.2m HAS BEEN LAID ON ALL SUBGRADE



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CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 2-6 Gilmer Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

C	DISCLAIMER ADDED	LRC	10/06
B	MINOR AMENDMENTS	ATS	17.08.06
A	AS BUILT ISSUE	ATS	06.07.06
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4F, 4G & 4H

TITLE:

STAGE 4F, 4G & 4H
ASBUILT SUBGRADE CONTOURS

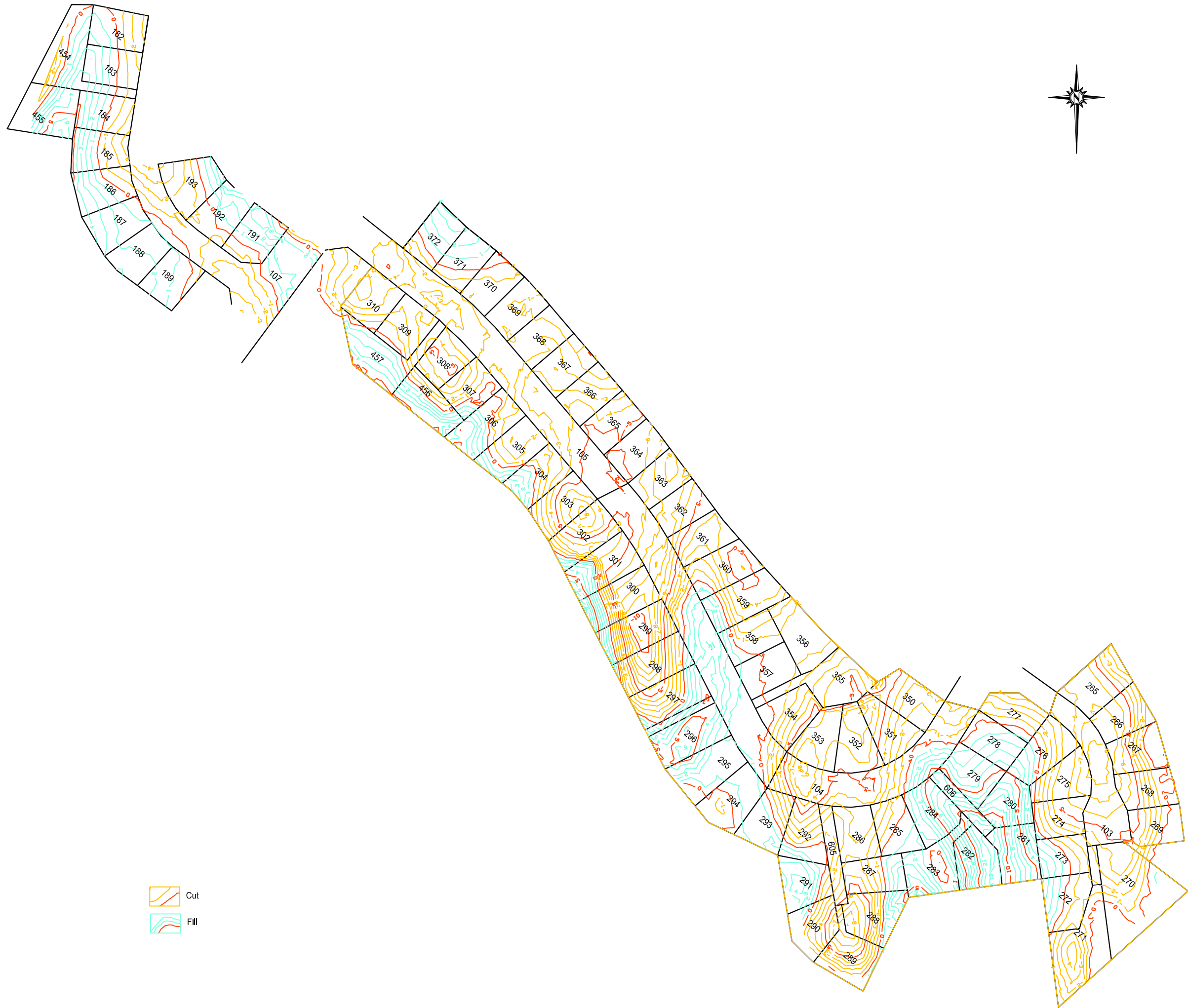
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	08/06		17.08.06
DRAWN:	DATE:	SIGNATURE:	CAD REF:
ATS	08/06		000632-4F-AB200-202
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
CSR	08/06		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
PWMW	08/06		
			SURVEY DATE:
			SDR REF:

PLOT STATUS:

ISSUE A

PROJECT No:	SCALES:	
1850-000632-01	1:1000 (A1) 1:2000 (A3)	A1
DRAWING No:		REV
000632-4F-AB200		C

J:\1850\00632_a\cad\As Builts\Stage F,G,H\000632-4F-AB200-202-rev C.dwg



B	MINOR AMENDMENTS	ATS	17.08.06
A	AS BUILT ISSUE	ATS	06.07.06
REF	AMENDMENT	BY	DATE

PROJECT:

**CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4F, 4G & 4H**

TITLE:

**STAGE 4F, 4G & 4H
AS BUILT CUT/FILL CONTOURS**

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:
	08/06		17.08.06
DRAWN:	DATE:	SIGNATURE:	CAD REF:
PWJ	08/06		000632-4F-AB200-202
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
CSR	08/06		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
PWMW	08/06		
			SURVEY DATE:
			SDR REF:

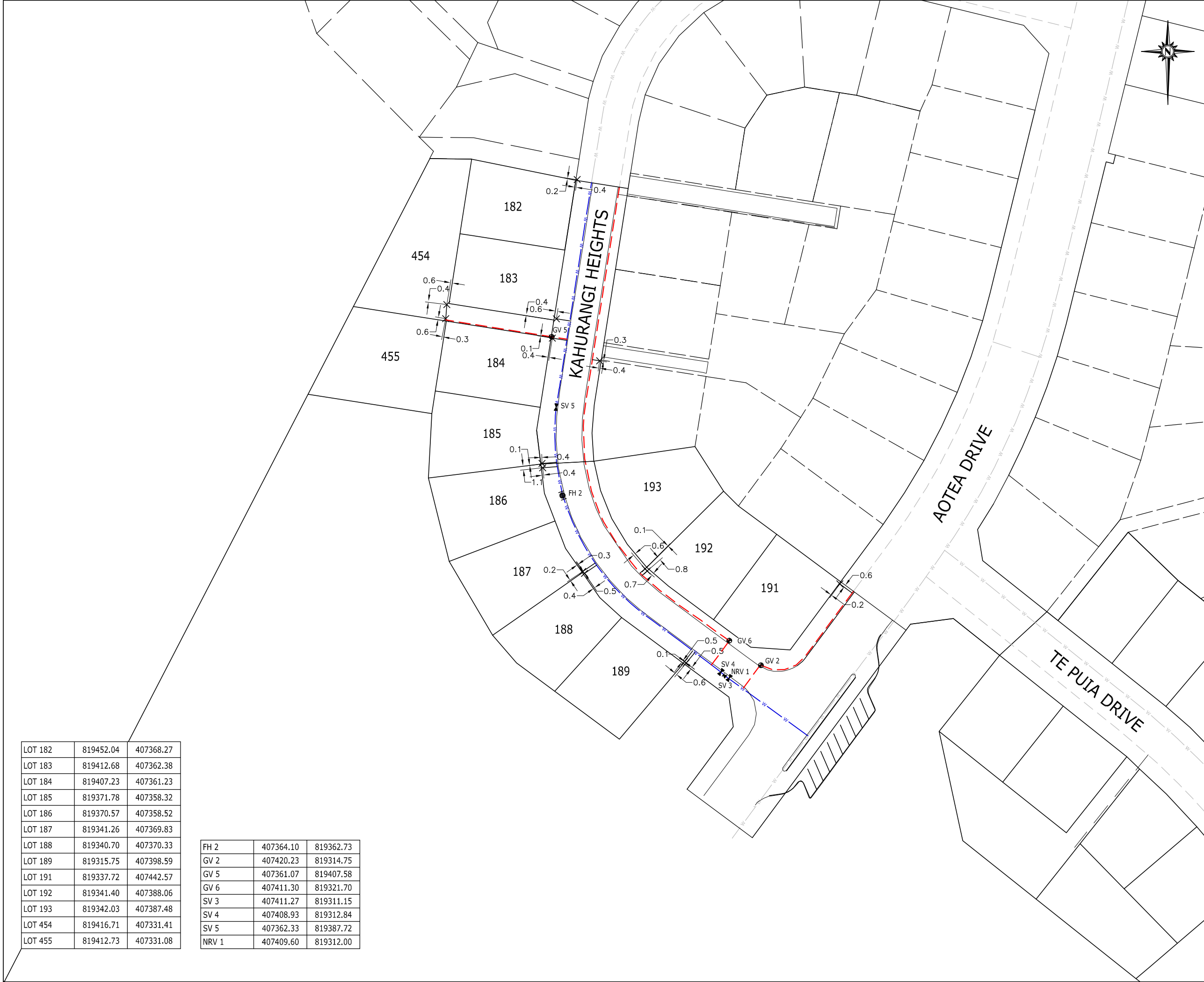
PLOT STATUS:


ISSUE A

PROJECT No:	SCALES:	
1850-000632-01	1:1000 (A1) 1:2000 (A3)	A1
DRAWING No:		REV
000632-4F-AB201		B

LOT 182	819452.04	407368.27
LOT 183	819412.68	407362.38
LOT 184	819407.23	407361.23
LOT 185	819371.78	407358.32
LOT 186	819370.57	407358.52
LOT 187	819341.26	407369.83
LOT 188	819340.70	407370.33
LOT 189	819315.75	407398.59
LOT 191	819337.72	407442.57
LOT 192	819341.40	407388.06
LOT 193	819342.03	407387.48
LOT 454	819416.71	407331.41
LOT 455	819412.73	407331.08

FH 2	407364.10	819362.73
GV 2	407420.23	819314.75
GV 5	407361.07	819407.58
GV 6	407411.30	819321.70
SV 3	407411.27	819311.15
SV 4	407408.93	819312.84
SV 5	407362.33	819387.72
NRV 1	407409.60	819312.00





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LEGEND:




GATE VALVE




SLUICE VALVE




FIRE HYDRANT




WATER TOBY




NON-RETURN VALVE




150mmØ PVC WATERMAIN



50mmØ MDPE RIDERMAIN



WATER/RIDERMAIN IN OTHER STAGE



RIDERMAIN IN OTHER STAGE

NOTES:

1. All Dimensions are shown in metres unless otherwise stated.

This drawing supercedes drawing number 000632-4H-AB600

WARNING: Levels, locations and dmsnsons of water services shown on these plans may not be accurate due to circumstances not notified to Harrlson Grierson Consultants Ltd. A physical check should be made on all levels, locations and dimensions before starting design or works.



**HARRISON
GRIERSON**

CONSULTING ENGINEERS SURVEYORS PLANNERS

Level 16 Grand Plimmer Tower 2-6 Gilmer Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

A	INITIAL RELEASE	JMS	30/01/2008
REF	AMENDMENT	BY	DATE

PROJECT:

CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4H

TITLE:

WATER AS-BUILTS
LAYOUT PLAN

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:
PWJ/CSR	08/2006		30/01/2008
DRAWN:	DATE:	SIGNATURE:	CAD REF:
NDH	12/2007		
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
CSR	15/01/2008		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
JMS	30/01/2008		GMB
			SURVEY DATE:
			06/2006
			SDR REF:


PLOT STATUS:

AS BUILT

PROJECT No:	SCALES:		
1850-000632-01	1:500 @ A1 1:1000 @ A3		A1
DRAWING No:			REV
000632-4H-AB500			A

MH No.	mN	mE	LL	IL
SSMH B24	819310.29	407421.64	109.76	108.89
SSMH B25	819322.55	407402.72	111.95	109.67
SSMH B26	819297.27	407380.47	111.03	110.21
SSMH B27	819316.33	407352.89	113.11	112.16
SSMH B28	819345.62	407334.04	116.82	115.84
SSMH B29	819369.22	407328.53	119.65	118.36
SSMH B30	819391.75	407329.64	121.82	120.89
SSMH B31	819436.64	407337.35	124.24	122.66





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NOTE:

- All house connections are 100mm dia uPVC.
- All sewer main pipes are 150mm dia uPVC unless shown otherwise.
- All positions and levels are accurate at time of survey.
- Levels are in terms of Wellington Vertical Datum 1953.
(Origin of levels: BMLB51 S0 31708, RL = 2.936m)
- Coordinates are in terms of NZGD2000 - Wellington Circuit.


LEGEND

	STORMWATER LINE
	STORMWATER MANHOLE
	STORMWATER CONNECTION
	SUMP
	SUPERPIT
	SEWER LINE
	SEWER MANHOLE
	SEWER CONNECTION
	EXISTING SEWER LINE
	EXISTING SEWER MANHOLE

NOTE:

THIS PLAN PART SUPERSEDES DRAWING NO. 000632-4H-AB400.

WARNING: Levels, locations and dimensions of drainage services shown on these plans may not be accurate due to circumstances not notified to Harrson Grierson Consultants Ltd. A physical check should be made on all levels, locations and dimensions before starting design or works.



**HARRISON
GRIERSON**
CONSULTING ENGINEERS SURVEYORS PLANNERS
Level 16 Grand Plimmer Tower 2-6 Giller Terrace Wellington Ph 04 385 0005 Fax 04 385 0006

B	DISCLAIMER ADDED, PRESENTATION AMENDMENTS	NDH	22/02/2008
A	INITIAL RELEASE	MJH	09/10/2008
REF	AMENDMENT	BY	DATE

PROJECT:

**CARRUS LIMITED
AOTEA BLOCK - PORIRUA
STAGE 4H**

TITLE:

**SANITARY SEWER RETICULATION
AS BUILT PLANS
OVERALL LAYOUT**

DESIGNED:	DATE:	SIGNATURE:	PLOT DATE:
GAW	09/2005		22/02/2008
DRAWN:	DATE:	SIGNATURE:	CAD REF:
NDH	28/09/2007		
CHECKED:	DATE:	SIGNATURE:	CAD XREF:
MJH	21/02/2008		
APPROVED:	DATE:	SIGNATURE:	SURVEY BY:
PWMW	21/02/2008		GMB
			SURVEY DATE:
			06/2006
			SDR REF:

PLOT STATUS:

AS BUILT

PROJECT No:	SCALES:	
1850-00632-01	1:500 (A1) 1:1000 (A3)	A1
DRAWING No:		REV
000632-4H-AB400		B

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