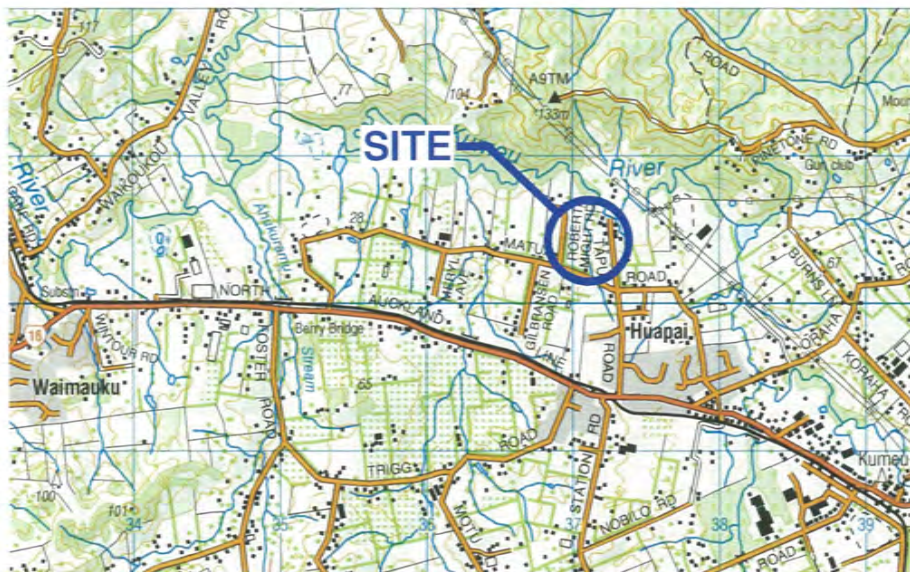


CABRA DEVELOPMENTS LTD. STAGES 1, 2 & 4 MATUA RESIDENTIAL ESTATE ASBUILT 68 LOT RESIDENTIAL SUBDIVISION MATUA ROAD, HUAPAI R59597



154 Centreway Road P.O. Box 150 Telephone (09) 426-5702
Orewa 0946 Orewa Fax (09) 426-9669
Auckland Email info@hc.co.nz



LOCALITY PLAN

DRAWINGS - 16640AB

GENERAL (GE)

- GE-001 COVER
- GE-002 DEVELOPMENT STAGING PLAN

EARTHWORKS (EW)

- EW-101 EXISTING CONTOUR PLAN
- EW-102 ASBUILT CONTOUR PLAN
- EW-103 ASBUILT CUT/FILL DEPTH CONTOURS
- EW-104 ASBUILT UNDERFILL DRAINAGE PLAN
- EW-105 ASBUILT RETAINING WALL PLAN

ROADING (RD)

- RD-201 ASBUILT ROADING PLAN

STORMWATER (SW)

- SW-301 to 305 ASBUILT STORMWATER PLAN

WASTEWATER (WW)

- WW-401 to 405 ASBUILT WASTEWATER PLAN

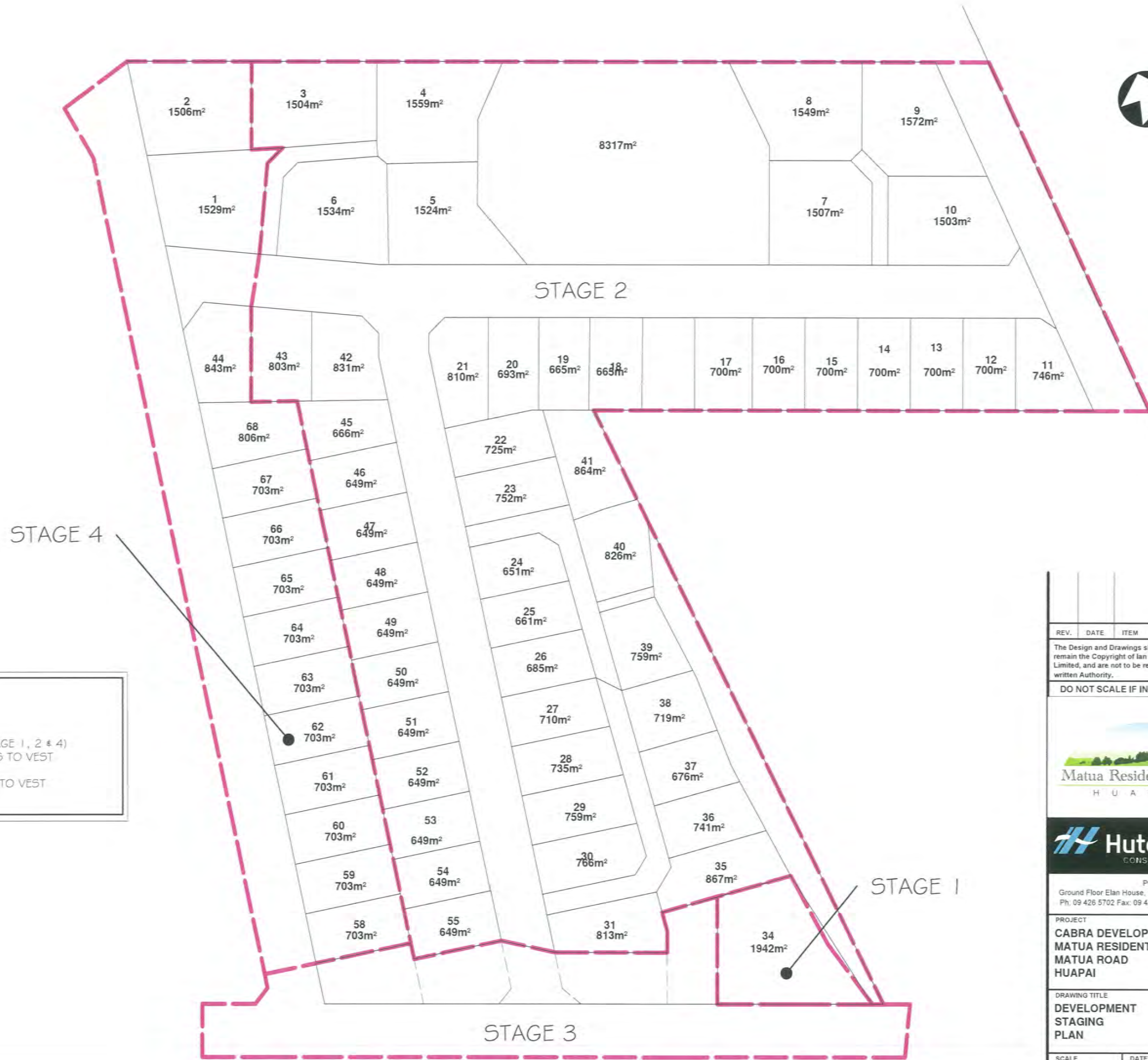
WATER SUPPLY (WS)

- WS-501 to 505 ASBUILT WATER SUPPLY PLAN

CONSENT NOTICE (CN)

- CN-601 to 607 ASBUILT CONSENT NOTICE PLANS

**16640AB/GE-001
AUGUST 2014 Rev A**



NOTE	
LOT NUMBER	PURPOSE
1-68	68 RESIDENTIAL LOTS (STAGE 1, 2 & 4)
224-226	LOCAL PURPOSE RESERVES TO VEST
227-229	COMMON ACCESS LOTS
245	LOCAL PURPOSE RESERVE TO VEST
246	COMMON ACCESS LOT

REV.	DATE	ITEM
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PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI		
DRAWING TITLE DEVELOPMENT STAGING PLAN		
		R59597
SCALE	1:1500 @ A3	DATE
		JULY 2014
DRAWN	ND	DRG No.
		16640AB/GE-002
REV	-	

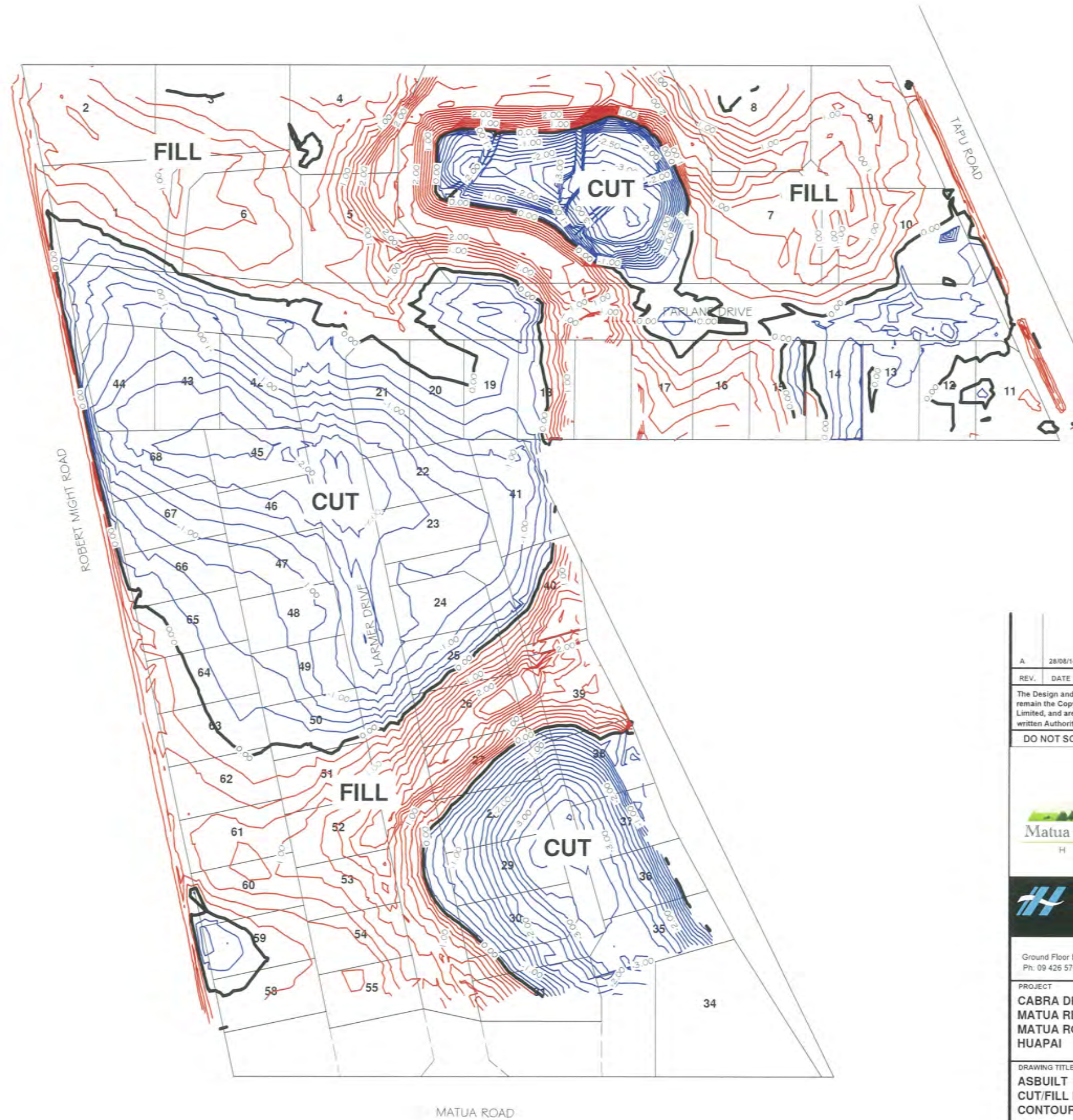
LEGEND	
EXISTING OPEN DRAIN	
EXISTING FENCE	
EXISTING ROAD	



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DRAWING TITLE EXISTING CONTOUR PLAN		
		R59597
SCALE	1:1500 @ A3	DATE JULY 2014
DRAWN	ND	DRG No.
REV	-	16640AB/EW-101



REV.	DATE	ITEM
A	28/08/14	FINISHED LEVELS
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<p>DRAWING TITLE ASBUILT CONTOUR PLAN</p>		
<p>R59597</p>		
SCALE	DATE	
1:1500 @ A3	AUGUST 2014	
DRAWN	DRG No.	
ND		
REV	16640AB/EW-102	
A		



REV.	DATE	ITEM
A	28/08/14	CUT AND FILL DEPTHS
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<p>PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI</p>		
<p>DRAWING TITLE ASBUILT CUT/FILL DEPTH CONTOURS</p>		
<p>R59597</p>		
SCALE	DATE	
1:1500 @ A3	AUGUST 2014	
DRAWN	DRG No.	
ND	16640AB/EW-103	
REV		
A		

UNDERFILL DRAINS

UNDERFILL DRAINAGE LEVELS
RELATE TO TOP OF NOVAFLO
DRAIN COIL

REFERENCE	RL
A	17.70
B	17.15
C	16.69
D	17.23
E	16.10
F	16.17
G	15.37
H	17.55
I	16.33
J	15.51
K	16.30
L	15.39
M	16.25
N	16.04
O	15.20
P	15.14
Q	14.93



REV.	DATE	ITEM
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PROJECT
**CABRA DEVELOPMENTS LTD
MATUA RESIDENTIAL ESTATE
MATUA ROAD
HUAPAI**

DRAWING TITLE
**ASBUILT
UNDERFILL DRAINAGE
PLAN**

R59597

SCALE 1:1500 @ A3	DATE JULY 2014
DRAWN ND	DRG No.
REV	16640AB/EW-104

WALL TYPE

TYPE A 5 kPA SURCHARGE,
15° FRONTSLOPE,
H5 POLES AT 1200mm CRS.

TYPE B 5 kPA SURCHARGE,
H5 POLES AT 1200mm CRS.

KEY

TYPE A

TYPE B

NOTE

TIMBER POLE RETAINING WALLS HAVE A
1.2m HIGH POWDER COATED FENCE
INSTALLED AT TOP OF WALL

NOTE

RETAINING WALL POLES ARE NOT
SHOWN TO SCALE. DO NOT SCALE
POLE DIAMETER AND SPACING SHOWN.



REV.	DATE	ITEM
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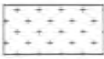




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PROJECT
**CABRA DEVELOPMENTS LTD
MATUA RESIDENTIAL ESTATE
MATUA ROAD
HUAPAI**

DRAWING TITLE
**ASBUILT
RETAINING WALL
PLAN**

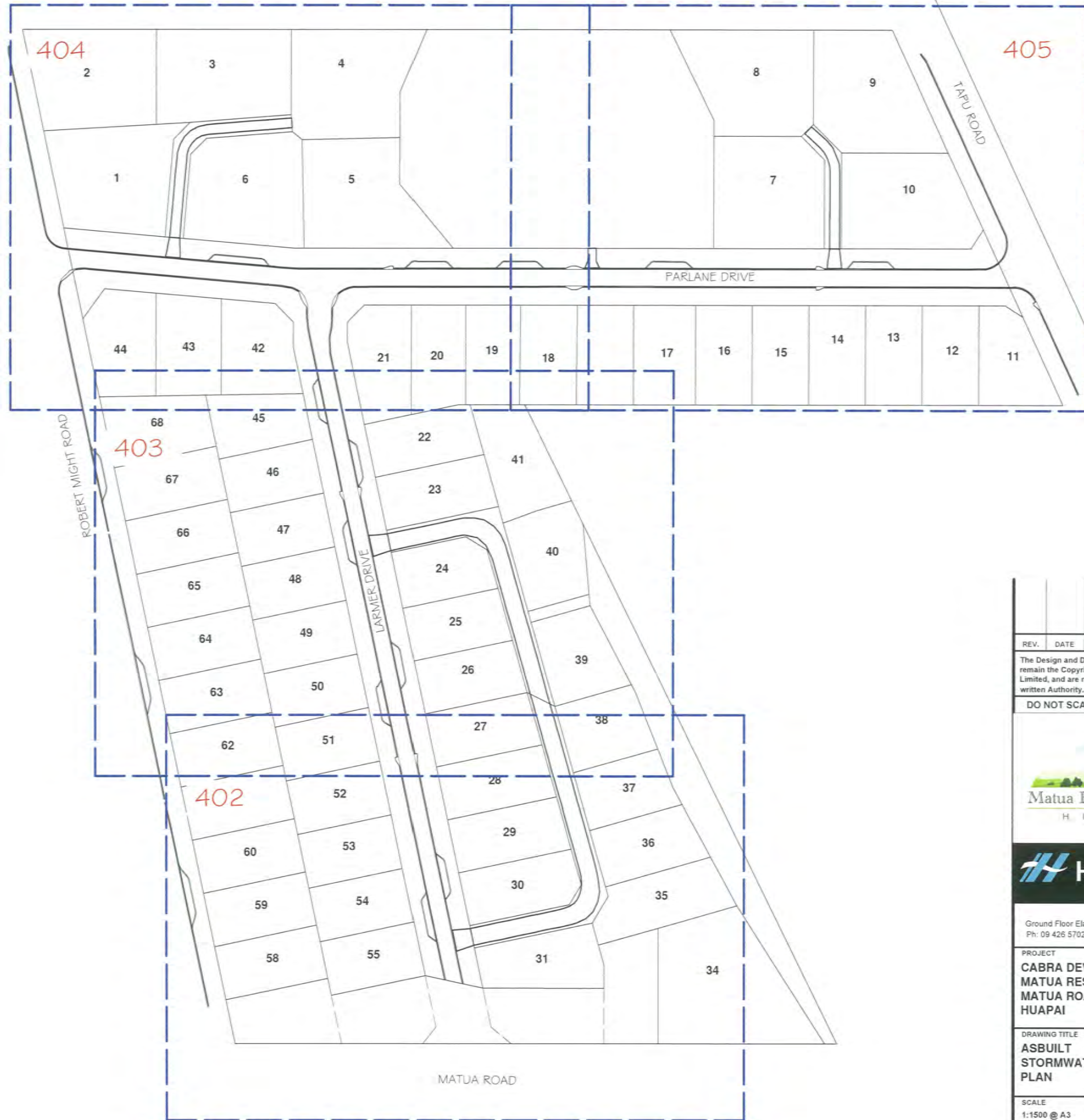
R59597

SCALE 1:1500 @ A3	DATE JULY 2014
DRAWN ND	DRG No.
REV	16640AB/EW-105

KEY	
	INTERSECTION DETAIL
	ASBUILT ASPHALTIC CONCRETE HOTMIX ROAD
	ASBUILT CONCRETE ROW
	ASBUILT STREET LIGHT
	ASBUILT SPECIMEN TREE



A	15/08/14	STREETLAMPS & ROAD MARKING
REV.	DATE	ITEM
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DRAWING TITLE ASBUILT ROADING PLAN		
R59597		
SCALE	DATE	
1:1500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV		16640AB/RD-201
A		



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DRAWING TITLE ASBUILT STORMWATER PLAN		
		R59597
SCALE	DATE	
1:1500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV		16640AB/SW-301



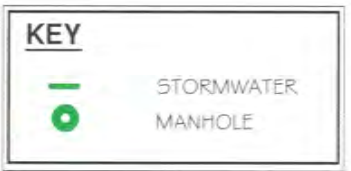
NOTE
ALL CONNECTIONS EXCEPT WHERE NOTED ARE 100mmØ uPVC 5N16 BACKFILLED WITH COMPACTED CLAY.
ALL CESSPIT LEADS EXCEPT WHERE NOTED ARE 225mm DIA. RCRRJ.
ALL PIPES ARE CLASS 2 RCRRJ UNLESS OTHERWISE NOTED. ALL PIPES HAVE H2 BEDDING WITH COMPACTED CLAY BACKFILL EXCEPT THOSE CROSSING ROADS OR ROWS WHICH ARE BACKFILLED WITH COMPACTED HARDFILL.



B	14/08/14	ASBUILT LEVELS
A	08/08/14	MANHOLE A6, A7, C3
REV.	DATE	ITEM
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PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI		
DRAWING TITLE ASBUILT STORMWATER PLAN 302		
R59597		
SCALE	DATE	
1:500 @ A3	AUGUST 2014	
DRAWN	DRG No.	
ND		
REV	16640AB/SW-302	
B		



NOTE
 ALL CONNECTIONS EXCEPT WHERE NOTED ARE 100mmØ uPVC 5N16 BACKFILLED WITH COMPACTED CLAY.
 ALL CESSPIT LEADS EXCEPT WHERE NOTED ARE 225mm DIA. RCRRJ.
 ALL PIPES ARE CLASS 2 RCRRJ UNLESS OTHERWISE NOTED. ALL PIPES HAVE H2 BEDDING WITH COMPACTED CLAY BACKFILL EXCEPT THOSE CROSSING ROADS OR ROWS WHICH ARE BACKFILLED WITH COMPACTED HARDFILL.



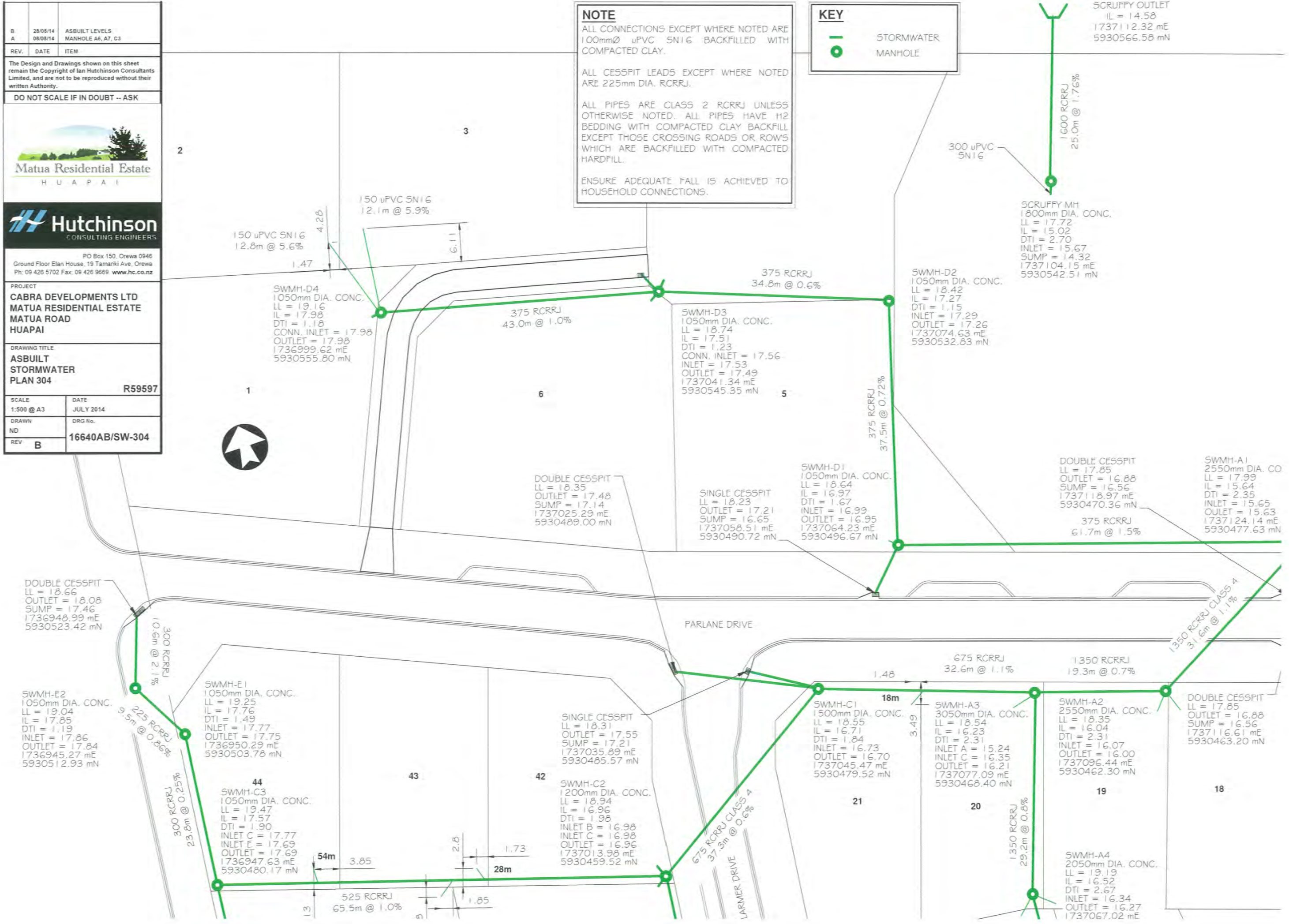
B	14/08/14	ASBUILT LEVELS
A	08/08/14	MANHOLE A6, A7, C3
REV.	DATE	ITEM
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PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI		
DRAWING TITLE ASBUILT STORMWATER PLAN 303		
		R59597
SCALE	DATE	
1:500 @ A3	AUGUST 2014	
DRAWN	DRG No.	
ND		
REV		16640AB/SW-303
B		

B	28/08/14	ASBUILT LEVELS
A	08/08/14	MANHOLE A6, A7, C3
REV.	DATE	ITEM
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DRAWING TITLE ASBUILT STORMWATER PLAN 304		
R59597		
SCALE	DATE	
1:500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND	16640AB/SW-304	
REV	B	

NOTE
 ALL CONNECTIONS EXCEPT WHERE NOTED ARE 100mmØ uPVC SNI 6 BACKFILLED WITH COMPACTED CLAY.
 ALL CESSPIT LEADS EXCEPT WHERE NOTED ARE 225mm DIA. RCRRJ.
 ALL PIPES ARE CLASS 2 RCRRJ UNLESS OTHERWISE NOTED. ALL PIPES HAVE H2 BEDDING WITH COMPACTED CLAY BACKFILL EXCEPT THOSE CROSSING ROADS OR ROWS WHICH ARE BACKFILLED WITH COMPACTED HARDFILL.
 ENSURE ADEQUATE FALL IS ACHIEVED TO HOUSEHOLD CONNECTIONS.

KEY
 STORMWATER
 MANHOLE

SCRUFFY OUTLET
 IL = 14.58
 1737112.32 mE
 5930566.58 mN



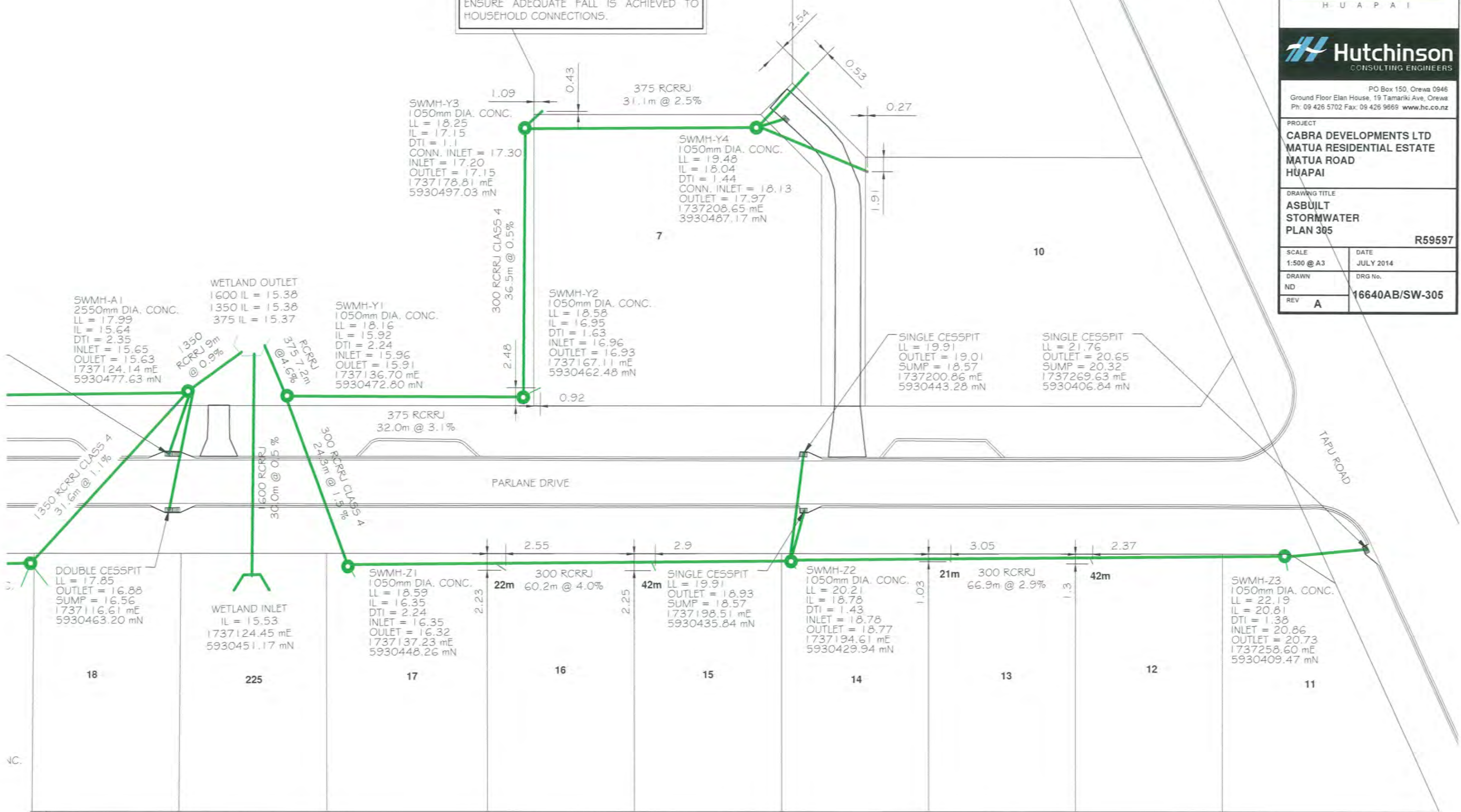
2 mE
8 mN

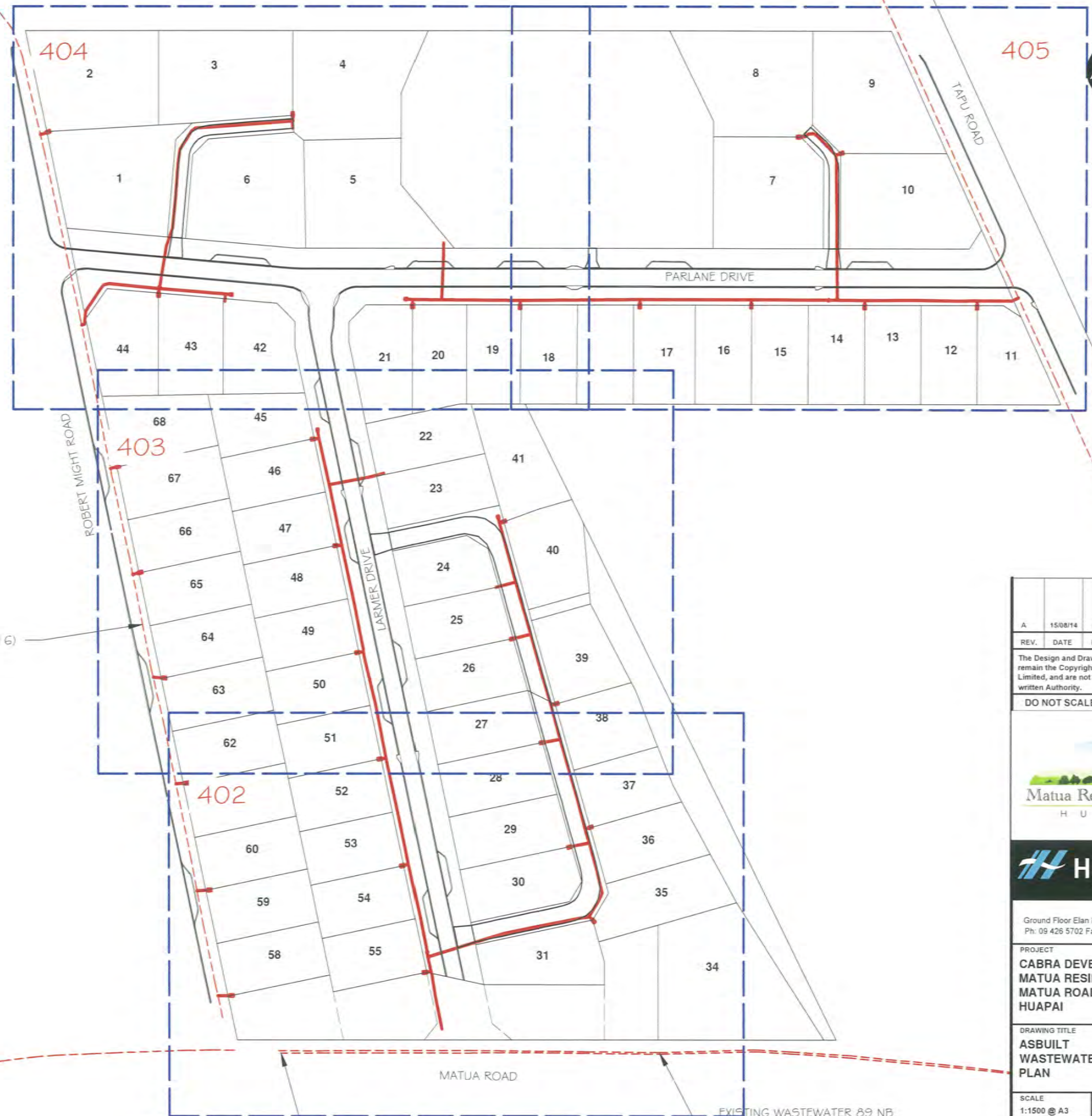
NOTE
 ALL CONNECTIONS EXCEPT WHERE NOTED ARE 100mmØ uPVC SNI6 BACKFILLED WITH COMPACTED CLAY.
 ALL CESSPIT LEADS EXCEPT WHERE NOTED ARE 225mm DIA. RCRRJ.
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 ENSURE ADEQUATE FALL IS ACHIEVED TO HOUSEHOLD CONNECTIONS.

KEY
 STORMWATER
 MANHOLE



REV.	DATE	ITEM
A	14/08/14	ASBUILT LEVELS
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DRAWING TITLE ASBUILT STORMWATER PLAN 305		
		R59597
SCALE	DATE	
1:500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND	16640AB/SW-305	
REV	A	





EXISTING WASTEWATER
61 NB (75 OD PE 100 PN 16)

EXISTING WASTEWATER 73 NB (90
OD PE 100 PN 16)

EXISTING WASTEWATER 89 NB
(110 OD PE 100 PN 16)

A	15/08/14	CONNECTION TO EXISTING
REV.	DATE	ITEM
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<p>DRAWING TITLE ASBUILT WASTEWATER PLAN</p>		
		R59597
SCALE 1:1500 @ A3	DATE AUGUST 2014	
DRAWN ND	DRG No. 16640AB/WW-401	
REV A		

KEY

-  EXISTING SEWER
-  SEWER
-  REDUCER
-  FLUSH POINT
-  BOUNDARY KIT
-  ISOLATING VALVE









A	05/08/14	SEWER LINE
REV.	DATE	ITEM
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<p>PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI</p>		
<p>DRAWING TITLE ASBUILT WASTEWATER PLAN 402</p>		
		R59597
SCALE	DATE	
1:500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV		16640AB/WW-402
A		

EXISTING 110mm OD SS LINE

EXISTING 90mm OD SS LINE

MATUA ROAD

KEY

-  EXISTING SEWER
-  SEWER
-  REDUCER
-  FLUSH POINT
-  BOUNDARY KIT
-  ISOLATING VALVE









B	18/08/14	LOT CONNECTIONS
A	05/08/14	SEWER LINE
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DRAWING TITLE ASBUILT WASTEWATER PLAN 403		
		R59597
SCALE	DATE	
1:500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV	16640AB/WW-403	
B		

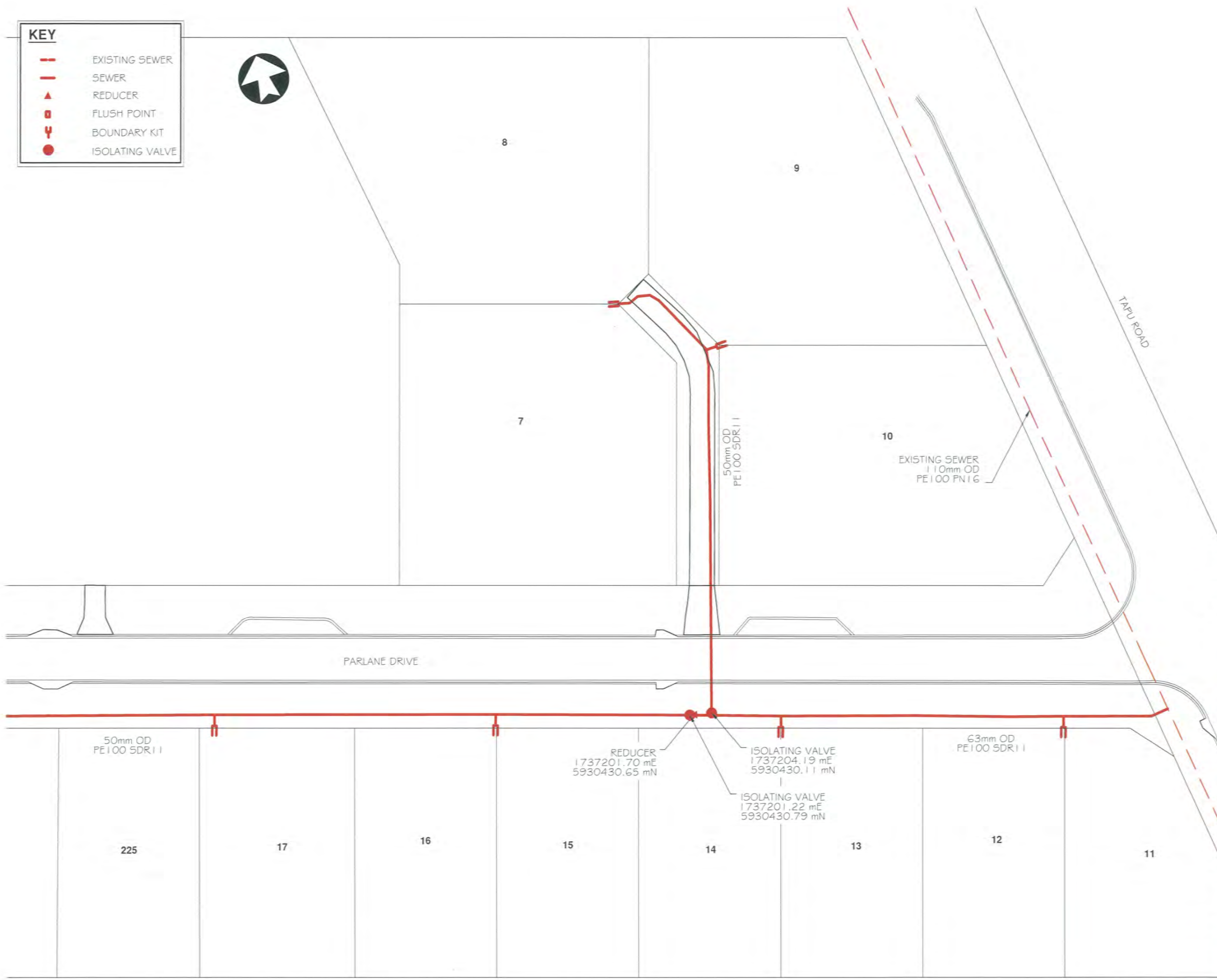
KEY

-  EXISTING SEWER
-  SEWER
-  REDUCER
-  FLUSH POINT
-  BOUNDARY KIT
-  ISOLATING VALVE



REV.	DATE	ITEM
A	15/06/14	CONNECTION TO EXISTING
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DRAWING TITLE ASBUILT WASTEWATER PLAN 404		
		R59597
SCALE	DATE	
1:500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV	16640AB/WW-404	
A		

KEY	
	EXISTING SEWER
	SEWER
	REDUCER
	FLUSH POINT
	BOUNDARY KIT
	ISOLATING VALVE



B	15/08/14	CONNECTION TO EXISTING SEWER REDUCER
A	05/08/14	SEWER REDUCER
REV.	DATE	ITEM
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PROJECT		
CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI		
DRAWING TITLE		
ASBUILT WASTEWATER PLAN 405		
R59597		
SCALE	DATE	
1:500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND	16640AB/WW-405	
REV	B	



EXISTING WATER SUPPLY 150 NB
(180 OD PE100 PN12.5)





EXISTING WATER SUPPLY 150 NB
(180 OD PE100 PN12.5)

REV.	DATE	ITEM
A	15/08/14	CONNECTION TO EXISTING
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<p>PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI</p>		
<p>DRAWING TITLE ASBUILT WATER SUPPLY PLAN</p>		
		R59597
SCALE	DATE	
1:1500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV		16640AB/WS-501
A		

NOTE

*MINIMUM COVER TO ASBUILT WATER-MAIN IS 900mm UNDER THE CARRIAGEWAY WITH NUMBER 3 SAND BEDDING AND BACKFILLED WITH COMPACTED GAP 65 BASECOURSE.
 *MINIMUM COVER TO ASBUILT WATER-MAIN IS 600mm UNDER ALL GRASSED AREAS WITH NUMBER 3 SAND BEDDING AND BACKFILLED WITH COMPACTED ORIGINAL CLAY.

KEY

-  WATER
-  SLUICE VALVE
-  PEET VALVE
-  HYDRANT



REV.	DATE	ITEM
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DRAWING TITLE ASBUILT WATER SUPPLY PLAN 502		
		R59597
SCALE	DATE	
1:500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV		16640AB/WS-502





MATUA ROAD



NOTE

*MINIMUM COVER TO ASBUILT WATER-MAIN IS 900mm UNDER THE CARRIAGEWAY WITH NUMBER 3 SAND BEDDING AND BACKFILLED WITH COMPACTED GAP 65 BASECOURSE.
*MINIMUM COVER TO ASBUILT WATER-MAIN IS 600mm UNDER ALL GRASSED AREAS WITH NUMBER 3 SAND BEDDING AND BACKFILLED WITH COMPACTED ORIGINAL CLAY.

KEY

-  WATER
-  SLUICE VALVE
-  PEET VALVE
-  HYDRANT

PEET VALVE
1737017.50 mE
5930472.74 mN

SLUICE VALVE
1737034.23 mE
5930469.90 mN

125mm OD
PE80B PN12

63mm OD
PE80B PN12

63mm OD
PE80B PN12

SLUICE VALVE
1737026.45 mE
5930402.14 mN

PEET VALVE
1737026.78 mE
5930402.43 mN

DETAIL 2

SLUICE VALVE
1737026.48 mE
5930402.79 mN

FIRE HYDRANT
1737024.84 mE
5930387.73 mN

EXISTING
FIRE HYDRANT

LARIMER DRIVE

REV.	DATE	ITEM
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PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI		
DRAWING TITLE ASBUILT WATER SUPPLY PLAN 503		
		R59597
SCALE 1:500 @ A3	DATE JULY 2014	
DRAWN ND	DRG No.	
REV -	16640AB/WS-503	



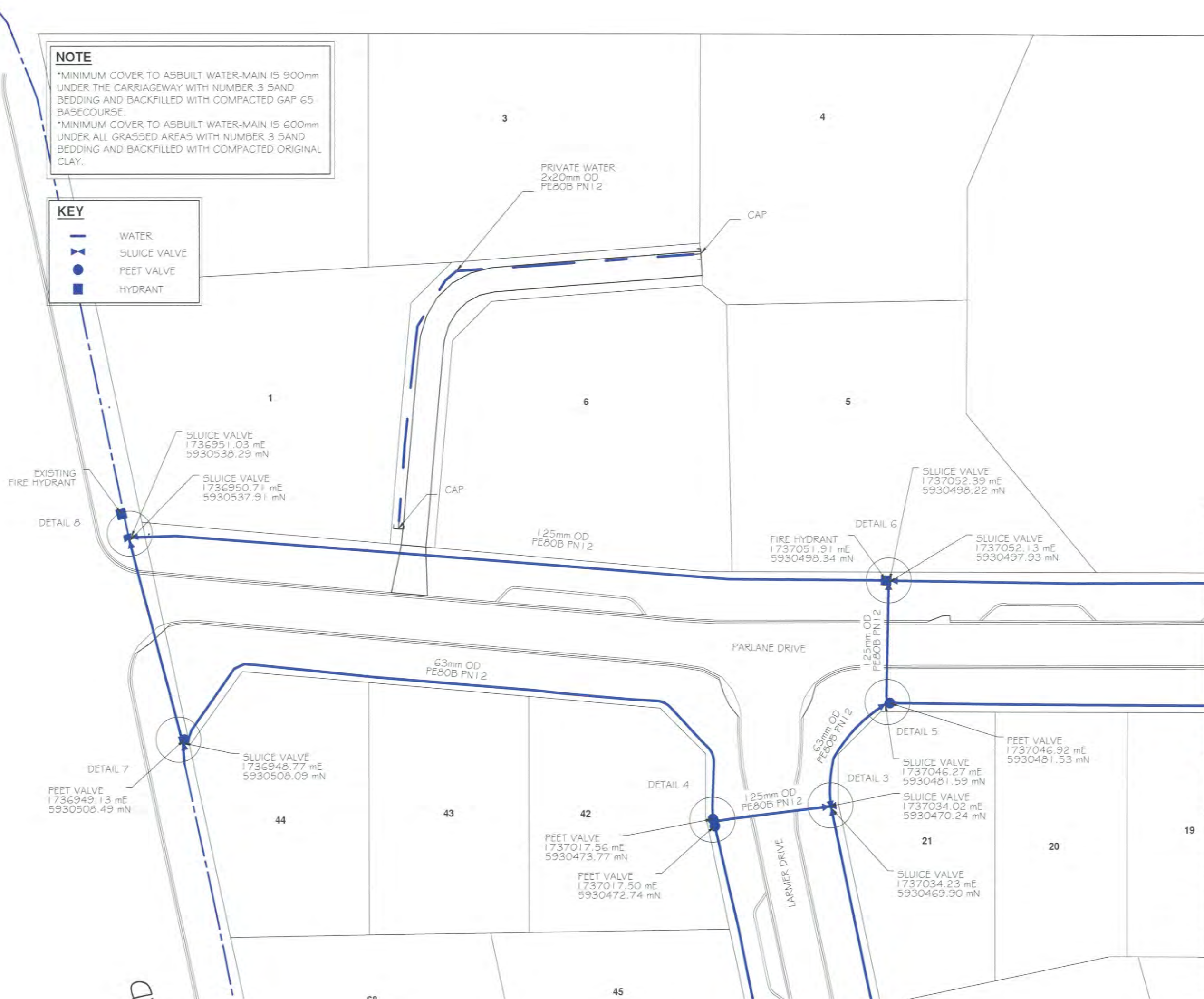


NOTE

*MINIMUM COVER TO ASBUILT WATER-MAIN IS 900mm UNDER THE CARRIAGEWAY WITH NUMBER 3 SAND BEDDING AND BACKFILLED WITH COMPACTED GAP 65 BASECOURSE.
 *MINIMUM COVER TO ASBUILT WATER-MAIN IS 600mm UNDER ALL GRASSED AREAS WITH NUMBER 3 SAND BEDDING AND BACKFILLED WITH COMPACTED ORIGINAL CLAY.

KEY

- WATER
- ⊗ SLUICE VALVE
- PEET VALVE
- HYDRANT



REV.	DATE	ITEM
B	15/08/14	CONNECTION TO EXISTING WATER LINE
A	05/08/14	

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PROJECT
**CABRA DEVELOPMENTS LTD
 MATUA RESIDENTIAL ESTATE
 MATUA ROAD
 HUAPAI**

DRAWING TITLE
**ASBUILT
 WATER SUPPLY
 PLAN 504**





R59597

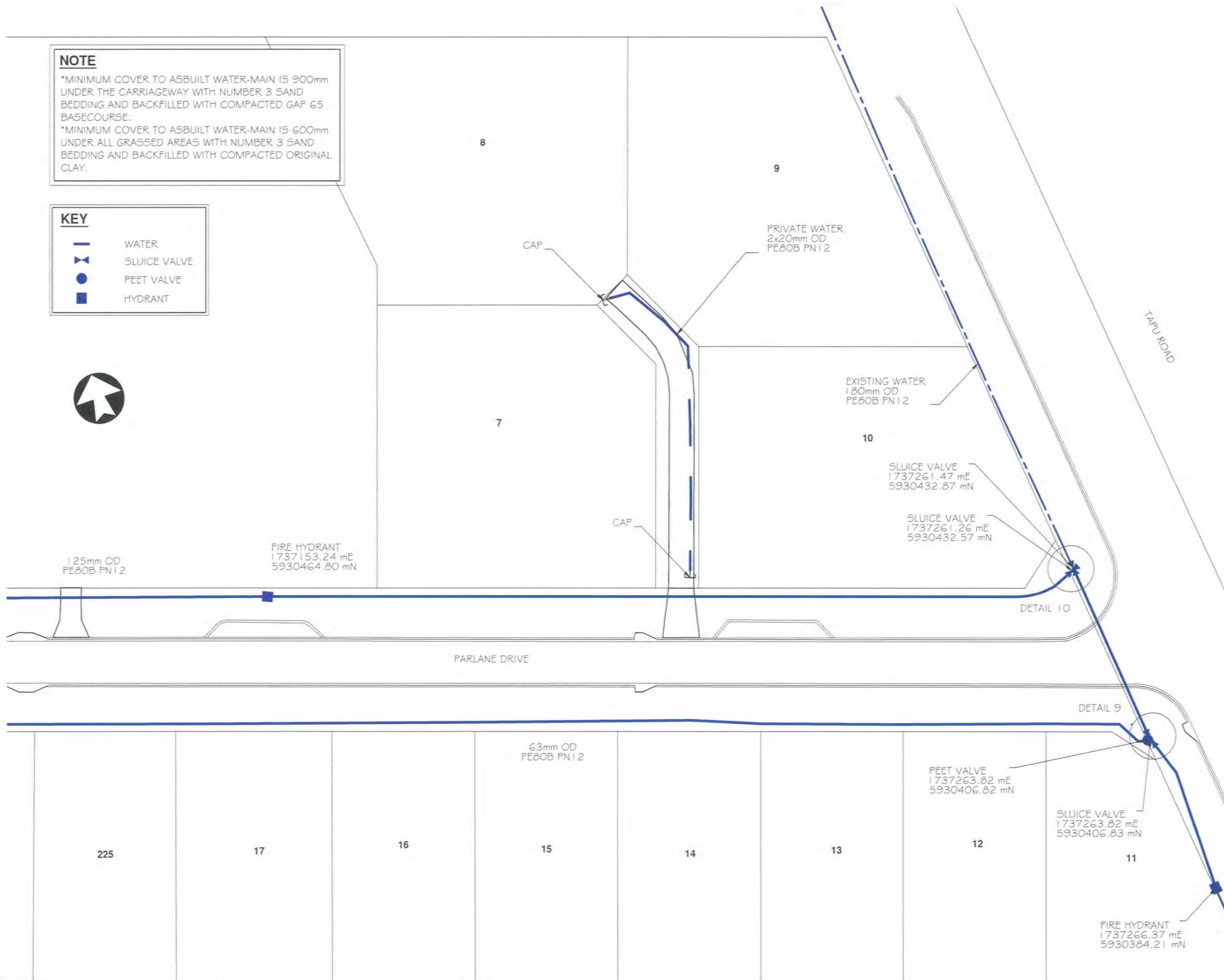
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1:500 @ A3	JULY 2014
DRAWN	DRG No.
ND	16640AB/WS-504
REV	
B	

NOTE

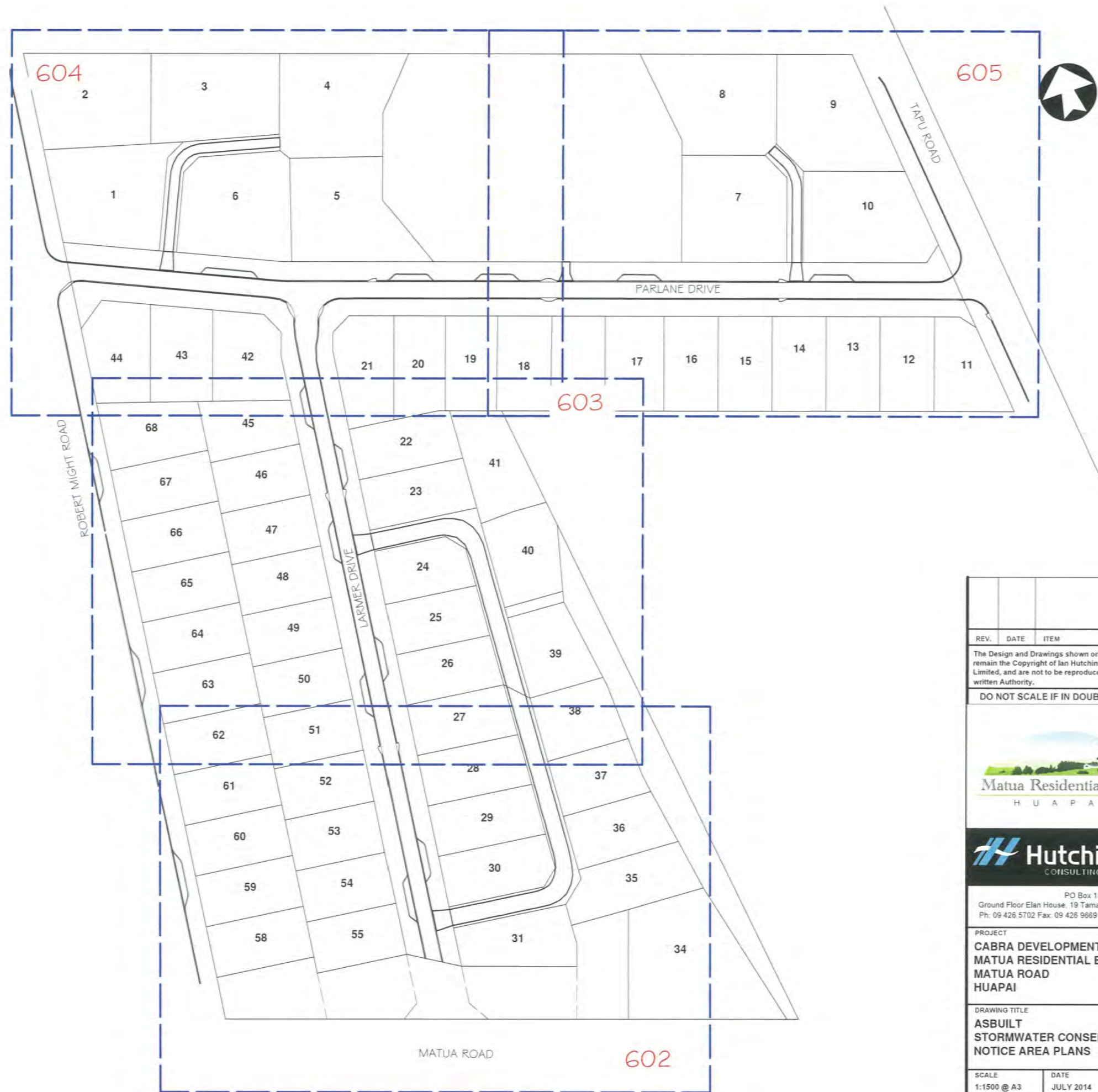
*MINIMUM COVER TO ASBUILT WATER-MAIN IS 900mm UNDER THE CARRIAGEWAY WITH NUMBER 3 SAND BEDDING AND BACKFILLED WITH COMPACTED GAP 65 BASECOURSE.
 *MINIMUM COVER TO ASBUILT WATER-MAIN IS 600mm UNDER ALL GRASSED AREAS WITH NUMBER 3 SAND BEDDING AND BACKFILLED WITH COMPACTED ORIGINAL CLAY.

KEY

-  WATER
-  SLUICE VALVE
-  PEET VALVE
-  HYDRANT




B	15/08/14	CONNECTION TO EXISTING WATER LINE
A	05/08/14	
REV.	DATE	ITEM
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DRAWING TITLE ASBUILT WATER SUPPLY PLAN 505		
R59597		
SCALE	DATE	
1:500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV	16640AB/WS-505	
B		



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PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI		
DRAWING TITLE ASBUILT STORMWATER CONSENT NOTICE AREA PLANS		
		R59597
SCALE	DATE	
1:1500 @ A3	JULY 2014	
DRAWN	DRG No.	
ND		
REV		16640AB/CN-601



KEY

 CONSENT NOTICE AREA

NOTE

THE CONSENT NOTICE AREA INDICATES THE LOCATION AND EXTENT OF ZONES OF INFLUENCE OF SW SERVICES. BUILDING WITHIN THIS ZONE WILL REQUIRE SPECIFIC ENGINEERING DESIGN



REV.	DATE	ITEM
A	18/08/14	CONSENT NOTICE AREA

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PROJECT
**CABRA DEVELOPMENTS LTD
MATUA RESIDENTIAL ESTATE
MATUA ROAD
HUAPAI**

DRAWING TITLE
**ASBUILT
CONSENT NOTICE AREA
PLAN 602**


R59597

SCALE 1:500 @ A3	DATE AUGUST 2014
DRAWN ND	DRG No.
REV A	16640AB/CN-602

MATUA ROAD



KEY

 CONSENT NOTICE AREA

NOTE

THE CONSENT NOTICE AREA INDICATES THE LOCATION AND EXTENT OF ZONES OF INFLUENCE OF SW SERVICES. BUILDING WITHIN THIS ZONE WILL REQUIRE SPECIFIC ENGINEERING DESIGN

A	18/08/14	CONSENT NOTICE AREA
REV.	DATE	ITEM
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PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI		
DRAWING TITLE ASBUILT CONSENT NOTICE AREA PLAN 603		
R59597		
SCALE	DATE	
1:500 @ A3	AUGUST 2014	
DRAWN	DRG No.	
ND		
REV	16640AB/CN-603	
A		

KEY

 CONSENT NOTICE AREA

NOTE

THE CONSENT NOTICE AREA INDICATES THE LOCATION AND EXTENT OF ZONES OF INFLUENCE OF SW SERVICES. BUILDING WITHIN THIS ZONE WILL REQUIRE SPECIFIC ENGINEERING DESIGN

B	28/08/14	CONSENT NOTICE AREA
A	18/08/14	CONSENT NOTICE AREA

REV.	DATE	ITEM

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PROJECT
**CABRA DEVELOPMENTS LTD
MATUA RESIDENTIAL ESTATE
MATUA ROAD
HUAPAI**

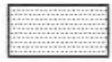
DRAWING TITLE
**ASBUILT
CONSENT NOTICE AREA
PLAN 604** **R59597**

SCALE	DATE
1:500 @ A3	AUGUST 2014

DRAWN	DRG No.
ND	16640AB/CN-604
REV	B



KEY



CONSENT NOTICE AREA

NOTE

THE CONSENT NOTICE AREA INDICATES THE LOCATION AND EXTENT OF ZONES OF INFLUENCE OF SW SERVICES. BUILDING WITHIN THIS ZONE WILL REQUIRE SPECIFIC ENGINEERING DESIGN

REV.	DATE	ITEM
A	18/08/14	CONSENT NOTICE AREA

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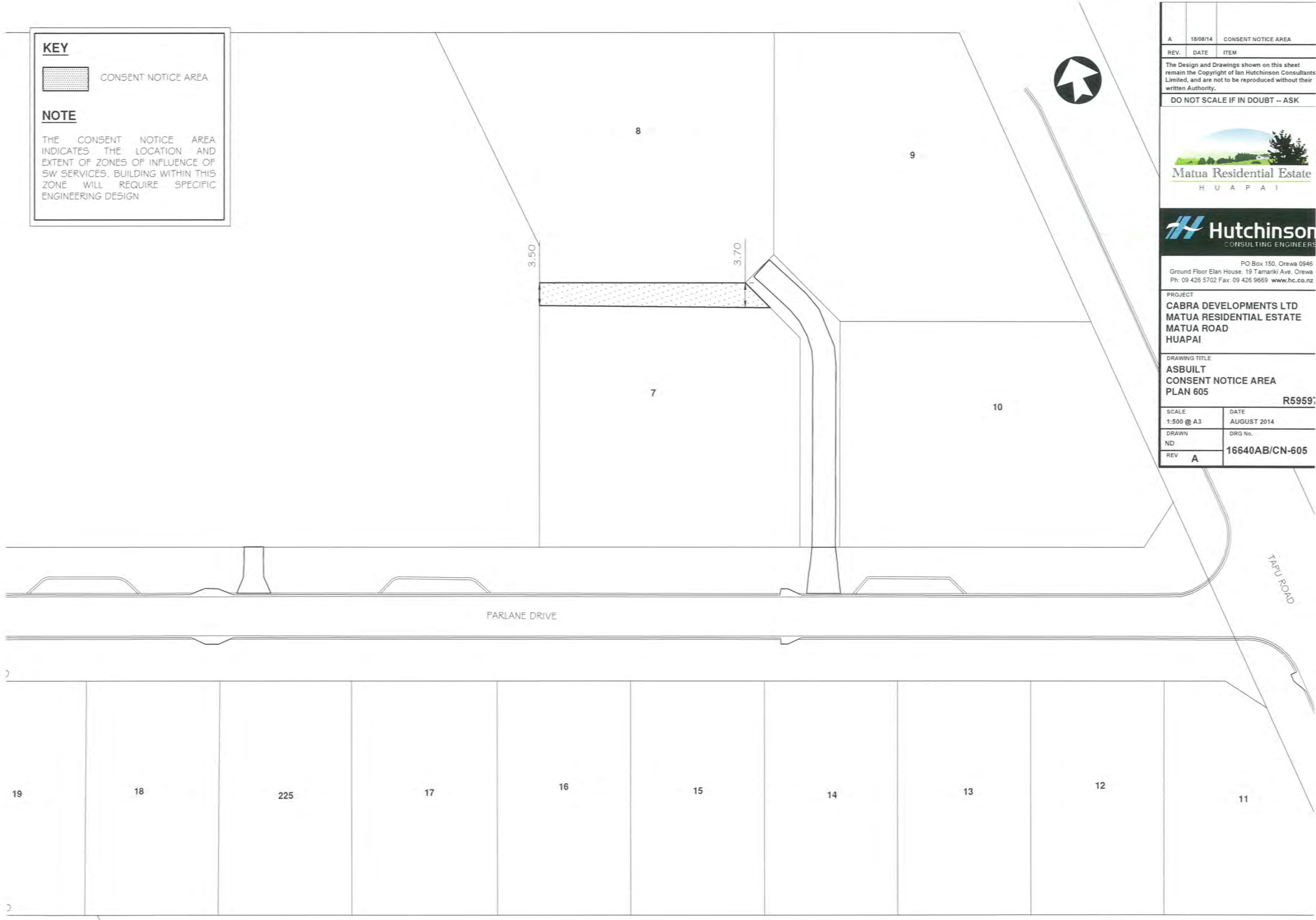
PROJECT
**CABRA DEVELOPMENTS LTD
MATUA RESIDENTIAL ESTATE
MATUA ROAD
HUAPAI**

DRAWING TITLE
**ASBUILT
CONSENT NOTICE AREA
PLAN 605**

SCALE: 1:500 @ A3 DATE: AUGUST 2014

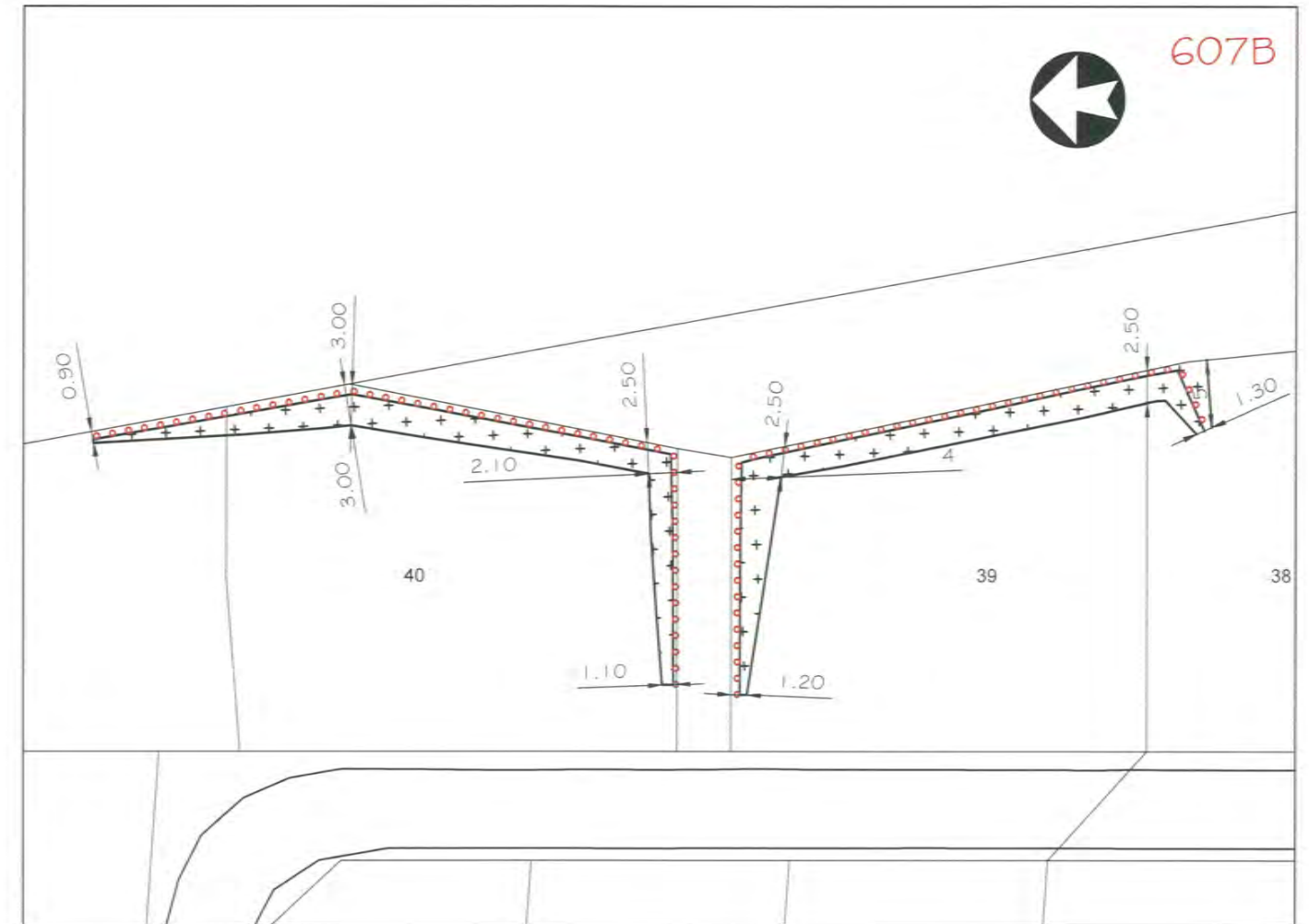
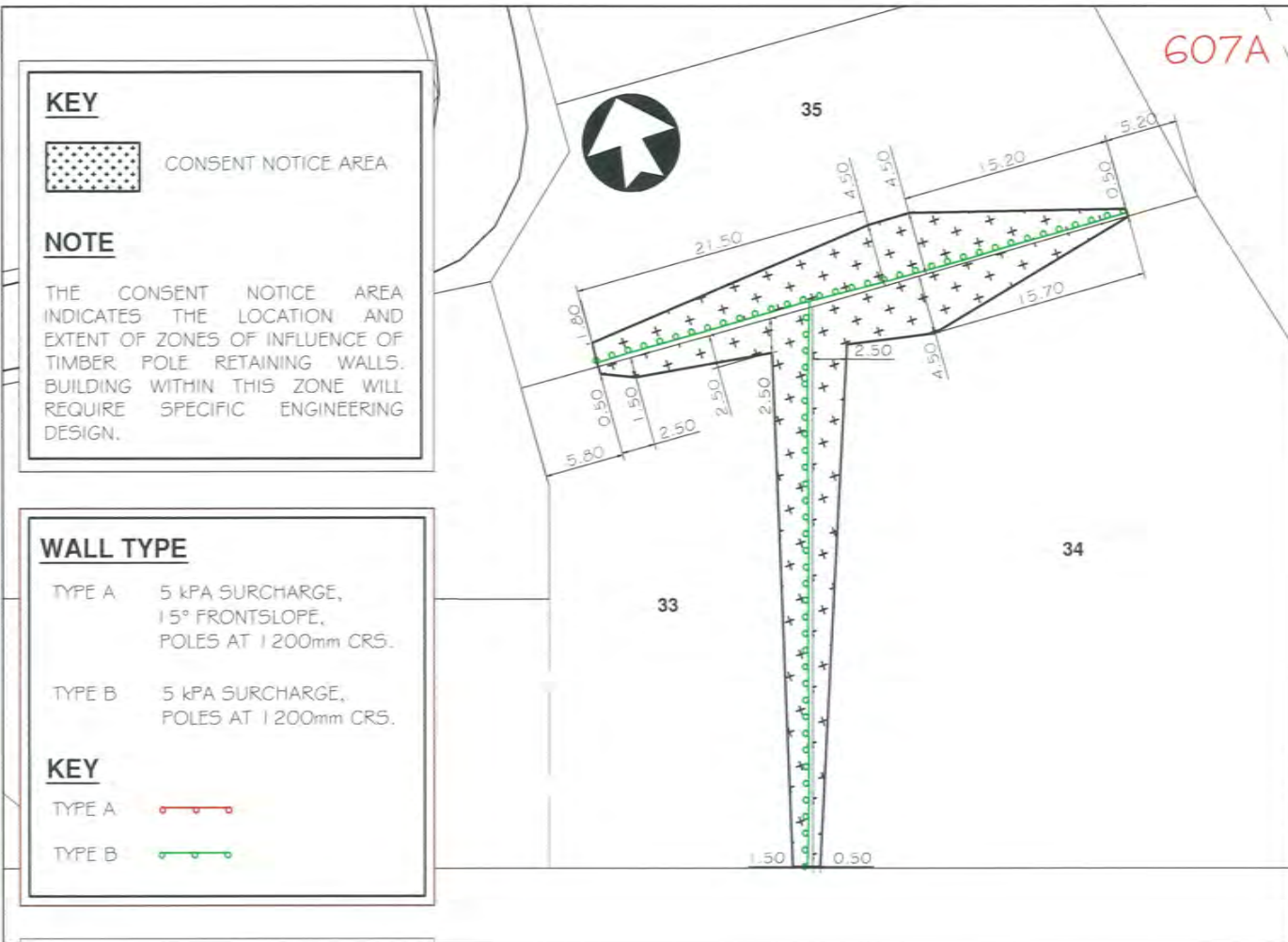
DRAWN: ND DRG No.:

REV: A **16640AB/CN-605** R5959





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PROJECT CABRA DEVELOPMENTS LTD MATUA RESIDENTIAL ESTATE MATUA ROAD HUAPAI		
DRAWING TITLE ASBUILT RETAINING WALL CONSENT NOTICE AREA PLAN		
R59597		
SCALE 1:20 @ A3	DATE JULY 2014	
DRAWN ND	DRG No.	
REV -	16640AB/CN-606	



KEY

CONSENT NOTICE AREA

NOTE

THE CONSENT NOTICE AREA INDICATES THE LOCATION AND EXTENT OF ZONES OF INFLUENCE OF TIMBER POLE RETAINING WALLS. BUILDING WITHIN THIS ZONE WILL REQUIRE SPECIFIC ENGINEERING DESIGN.

WALL TYPE

TYPE A 5 kPa SURCHARGE, 15° FRONTSLOPE, POLES AT 1200mm CRS.

TYPE B 5 kPa SURCHARGE, POLES AT 1200mm CRS.

KEY

TYPE A

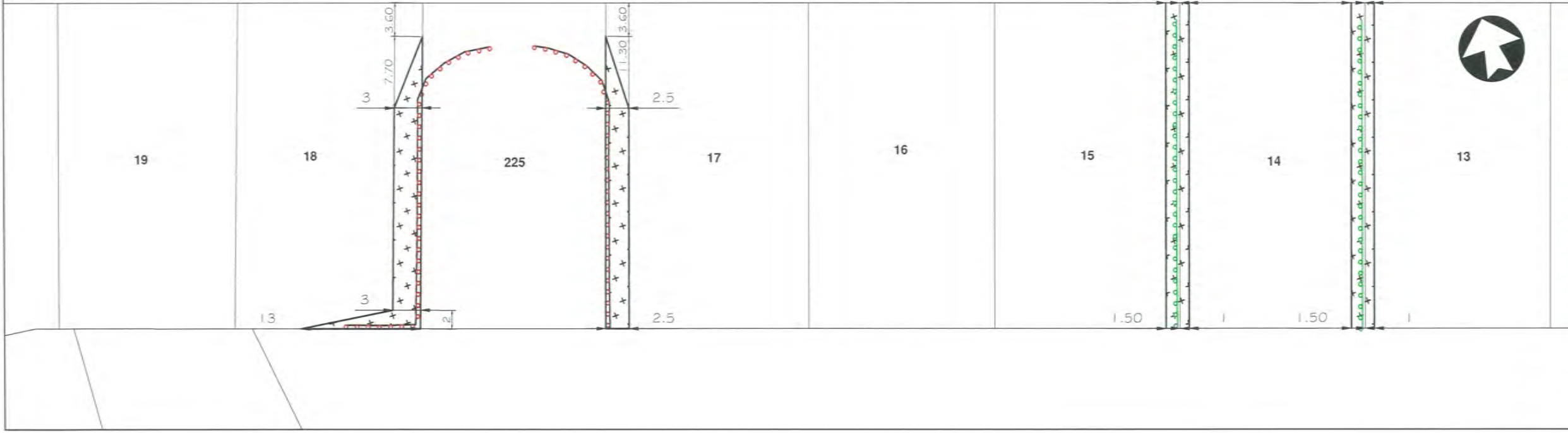
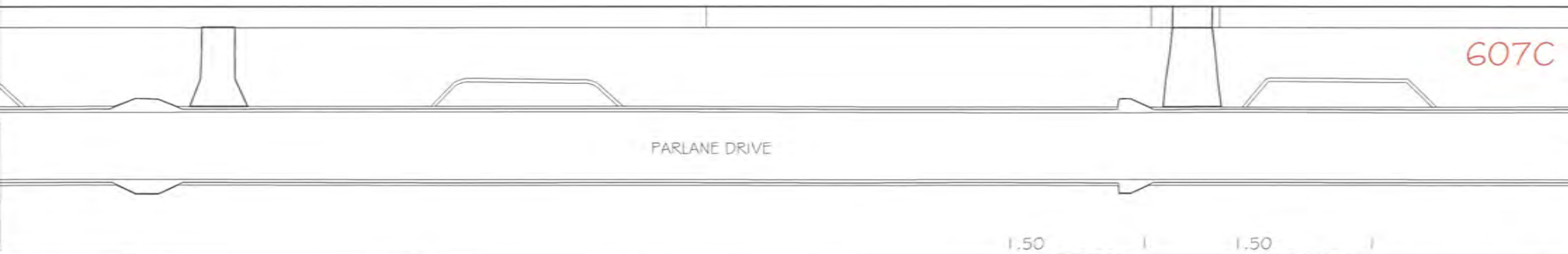
TYPE B

NOTE

TIMBER POLE RETAINING WALLS HAVE A 1.2m HIGH POWDER COATED FENCE INSTALLED AT TOP OF WALL

NOTE

RETAINING WALL POLES ARE NOT SHOWN TO SCALE. DO NOT SCALE POLE DIAMETER AND SPACING SHOWN.



REV.	DATE	ITEM
A	18/08/14	CONSENT NOTICE AREA

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PROJECT
CABRA DEVELOPMENTS LTD
MATUA RESIDENTIAL ESTATE
MATUA ROAD
HUAPAI

DRAWING TITLE
ASBUILT
CONSENT NOTICE AREA
PLANS A, B & C

R59597

SCALE	DATE
1:20 @ A3	AUGUST 2014
DRAWN	DRG No.
ND	
REV	16640AB/CN-607
A	