


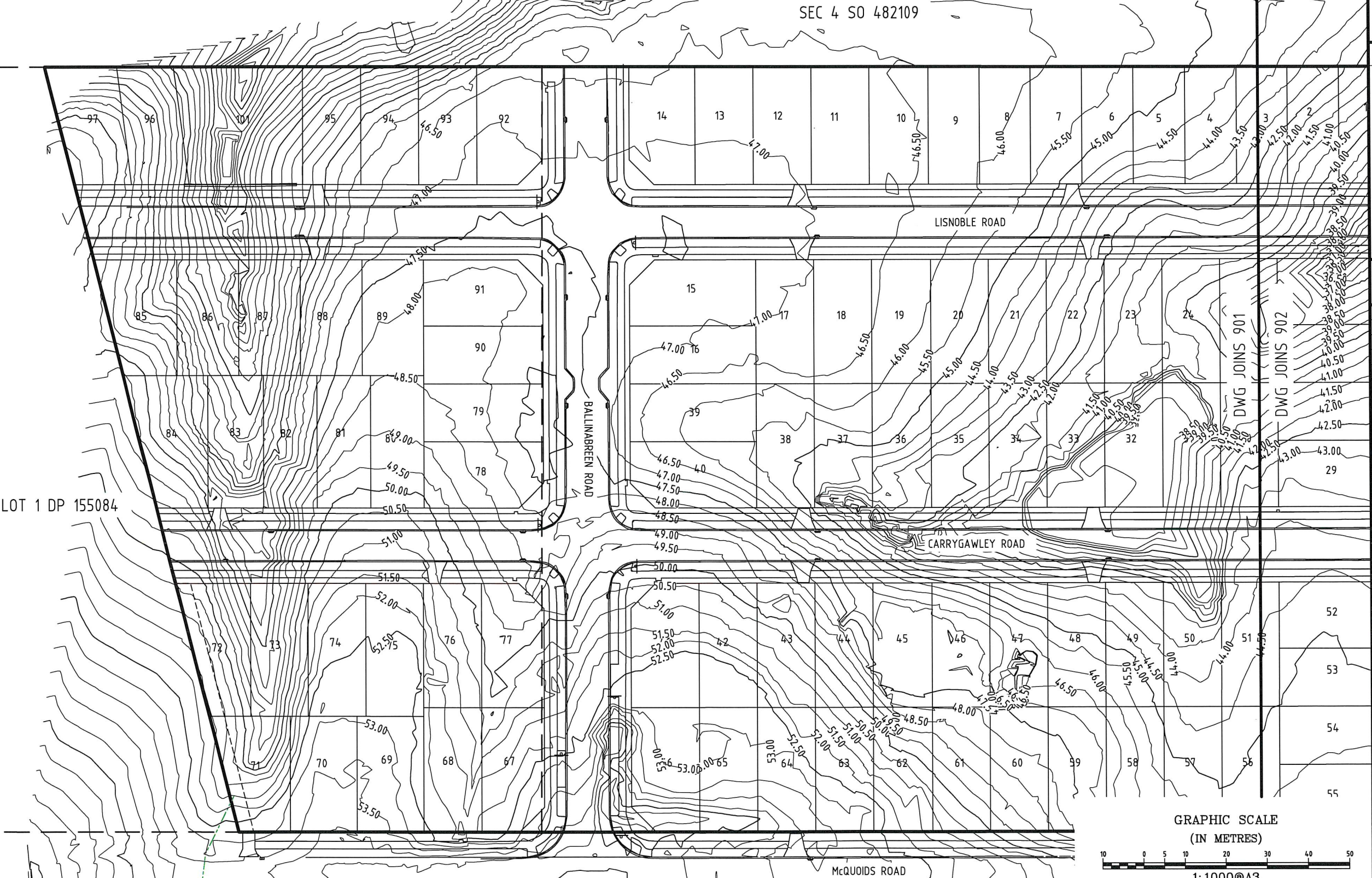
CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN SHOWS THE PRECONSTRUCTION CONTOURS AS SURVEYED BY OTHERS AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 23/11/2016
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ

Notes:
1. Refer to DWG 903 for Finished Ground Level contours
2. Refer to DWG 905 for Earthworks Cut/Fill contours



LEGEND

	Lot Bdy
	Ex Abutting Bdy
	Ex Cont (Major)
	Ex Cont (Minor)

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Rev	Description	By	Date
A	Road names	SK	11/16
-	-	-	-
Rev	Description	By	Date
		SIGNED	DATE
Surveyed	PB		05/15
Designed	WM		05/15
Drawn	SK		10/16
Checked			11/16
Approved			11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

58 Broadway P.O. Box 72-543
Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:
EARTHWORKS
PRECONSTRUCTION

Project Number: **503/02**
Plan No: **901** Rev: **A**

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN SHOWS THE PRECONSTRUCTION CONTOURS AS SURVEYED BY OTHERS AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: Kash
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 23/11/2016
 CONTACT NUMBER : 296-5543
 EMAIL : TRALPH@DODDCIVIL.CO.NZ

1. Refer to DWG 904 for Finished Ground Level contours
2. Refer to DWG 906 for Earthworks Cut/Fill contours



Lot Bdy
Ex Abutting Bdy
Ex Cont (Major)
Ex Cont (Minor)

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-	-	-	-
Rev	Description	By	Date
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Surveyed	PB		05/15
Designed	WM		05/15
Drawn	SK		10/16
Checked			11/16
Approved			11/16



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www.doddcivil.co.nz**

**P.O. Box 72-543
Auckland NZ
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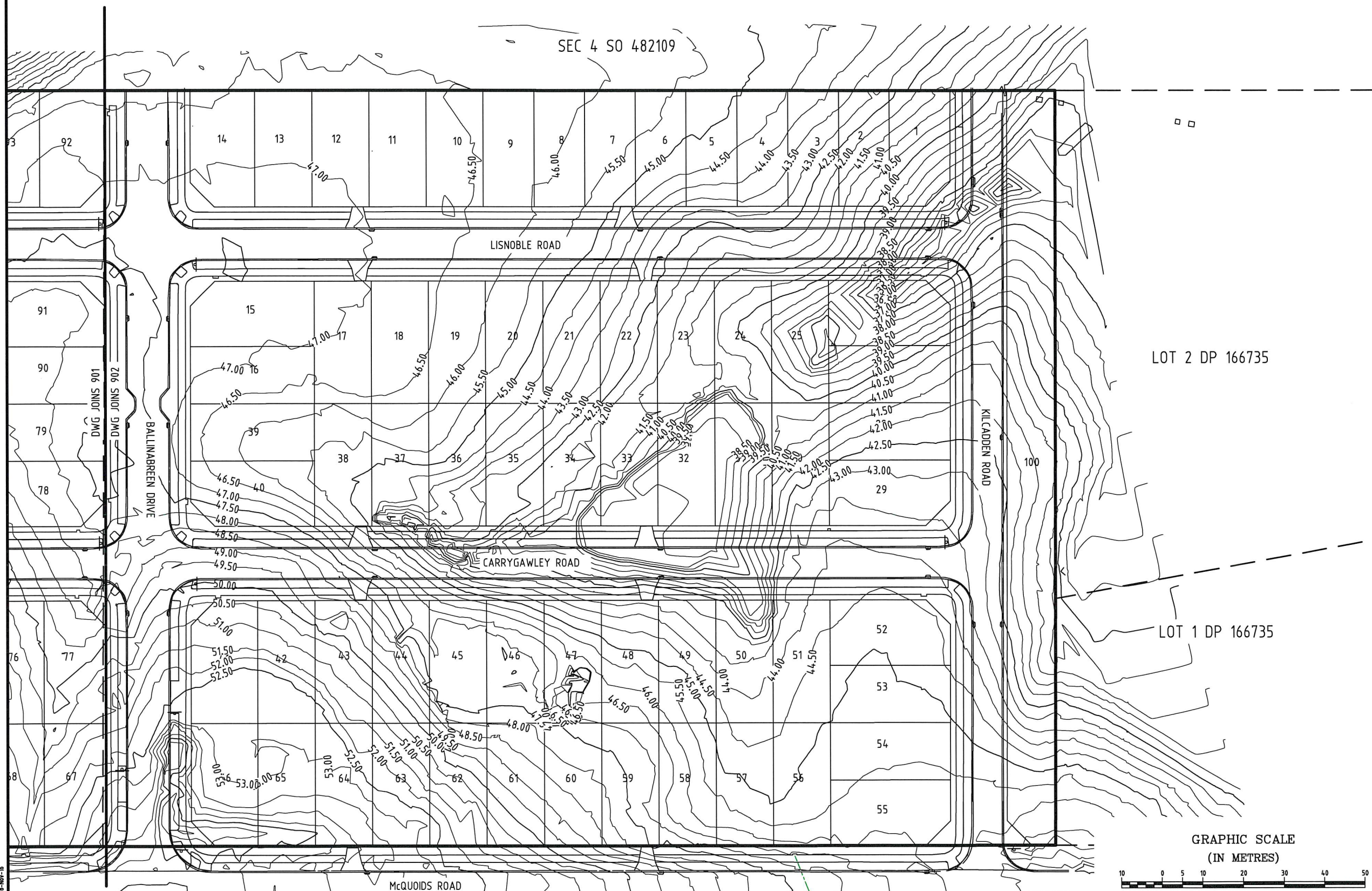
PROJECT NAME:

CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:

EARTHWORKS PRECONSTRUCTION

Project Number:	503/02	
Plan No:	902	Rev: A



DATE: 28-Nov-16


PATH E:\PROJECTS\50302\DWG\ASB\JUL T\50302-900.FW.ASB.DWG

48266 SP 11988

CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN IS AN ACCURATE RECORD OF THE WORKS UNDERTAKEN AND THAT:

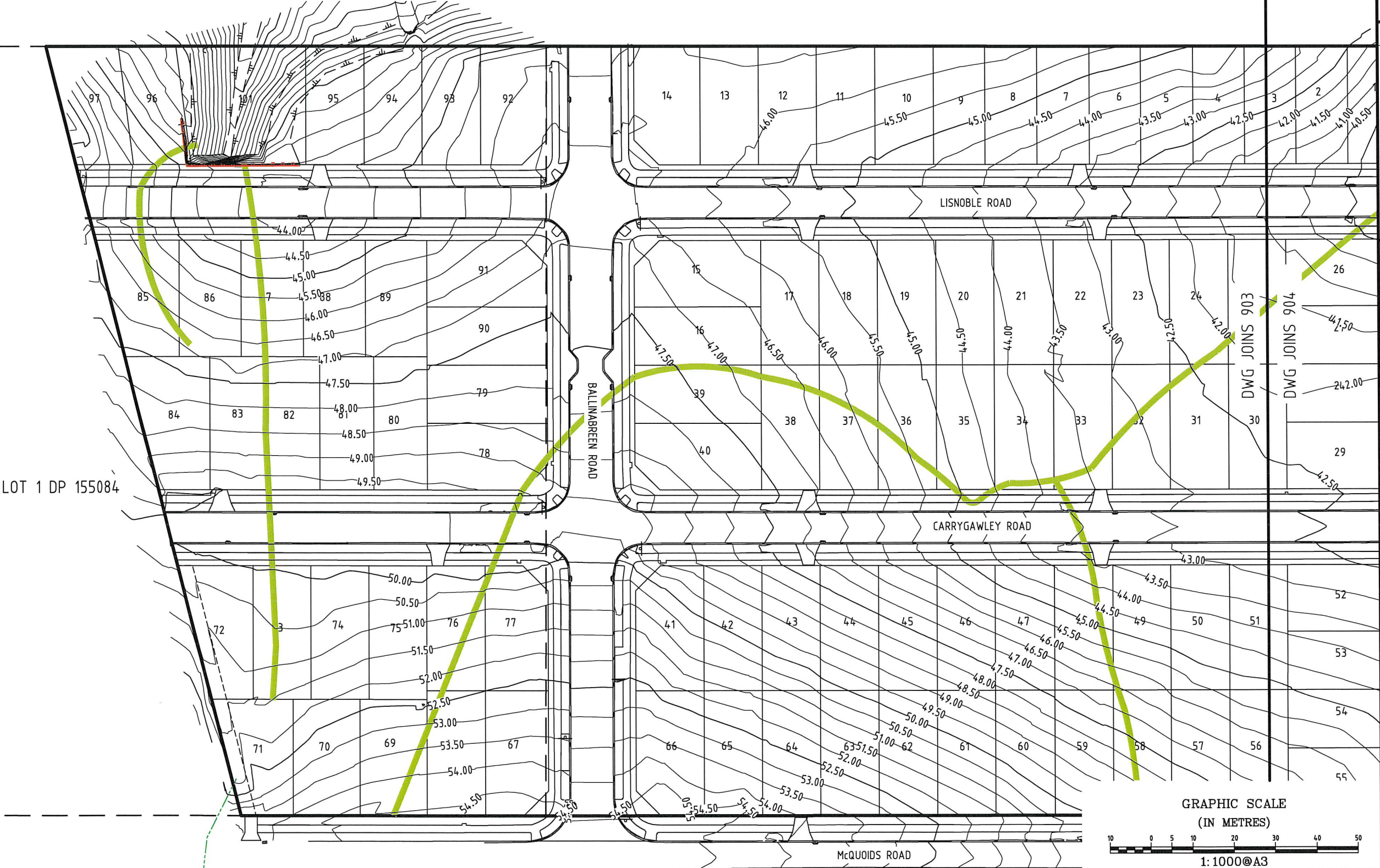
- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 23/11/2016
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ

Notes:
1. Refer to DWG 901 for Preconstruction contours
2. Refer to DWG 905 for Earthworks Cut/Fill contours



SEC 4 SO 482109



LEGEND

	Lot Bdy
	Ex Abutting Bdy
	AB Cont (Major)
	AB Cont (Minor)
	Subsoil drainage
	Retaining Wall

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		SIGNED	DATE
Surveyed	RK		10/16
Designed	WM		05/15
Drawn	SK		10/16
Checked			11/16
Approved			11/16

DODD CIVIL CONSULTANTS
Down To Earth
Personal Service

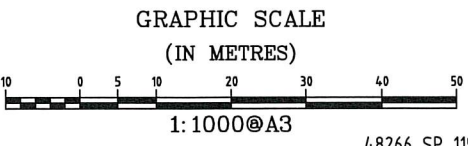
Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

58 Broadway P.O. Box 72-543
Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:
EARTHWORKS
AS-BUILT PLAN

Project Number: **503/02**
Plan No: **903** Rev: **A**



CERTIFICATION

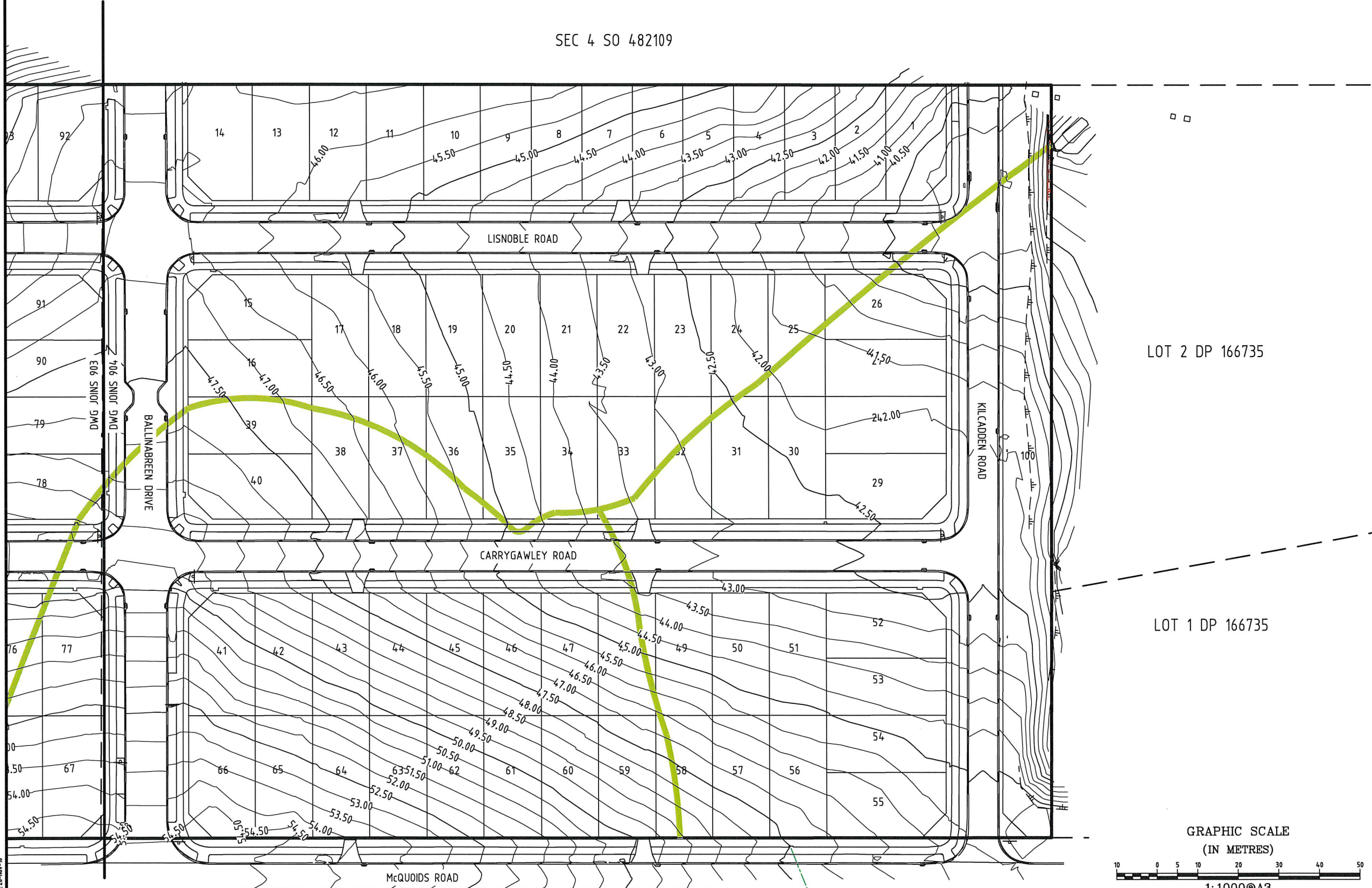
I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN IS AN ACCURATE RECORD OF THE WORKS UNDERTAKEN AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: *[Signature]*
CHARTERED PROFESSIONAL ENGINEER
DATE: 23/11/2016
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ

Notes:

- Refer to DWG 902 for Preconstruction contours
- Refer to DWG 906 for Earthworks Cut/Fill contours



LEGEND

	Lot Bdy
	Ex Abutting Bdy
	AB Cont (Major)
	AB Cont (Minor)
	Subsoil drainage
	Retaining Wall

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		SIGNED	DATE
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Designed	WM		05/15
Drawn	SK		10/16
Checked			11/16
Approved			11/16

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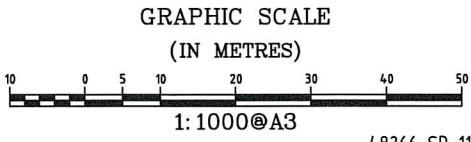
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Papakura Auckland NZ
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www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:
EARTHWORKS
AS-BUILT PLAN

Project Number: **503/02**
Plan No: **904** Rev: **A**



I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT SHOWS THE DEPTHS OF CUT AND FILL WHICH IS BASED ON PRECONSTRUCTION LEVELS SURVEYED BY OTHERS AND AS-BUILT LEVELS SURVEYED BY DODD CIVIL CONSULTANTS LTD AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN $\pm 50\text{MM}$.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN $\pm 20\text{MM}$.

SIGNED: Tralph
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 23/11/2016
 CONTACT NUMBER : 296-5543
 EMAIL : TRALPH@DODDCIVIL.CO.NZ

Notes:

1. Refer to DWG 901 for Preconstruction contours
2. Refer to DWG 903 for Finished Ground Level contours

LEGEND

_____	Lot Bdy
_____	Ex Abutting Bdy
_____	Cut/Fill Cont

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		SIGNED	DATE
Surveyed	RK		10/16
Designed	WM		05/15
Drawn	SK		10/16
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Approved			11/16



Subdivisions Land Development Land Survey
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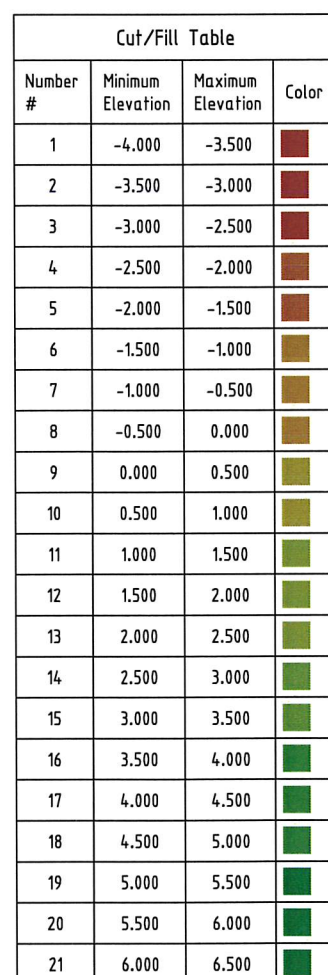
PROJECT NAME:

CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:

**CUT / FILL
AS-BUILT PLAN**

Project Number: 503/02

Plan No: **905** Rev: **-**

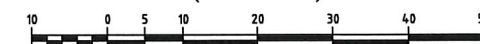
SEC 4 SO 482109

LOT 1 DP 155084

DWG JOINS 905

DWG JOINS 906

GRAPHIC SCALE
(IN METRES)
























1:1000@A3

48266 SP 11988

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT SHOWS THE DEPTHS OF CUT AND FILL WHICH IS BASED ON PRECONSTRUCTION LEVELS SURVEYED BY OTHERS AND AS-BUILT LEVELS SURVEYED BY DODD CIVIL CONSULTANTS LTD AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN $\pm 50\text{MM}$.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN $\pm 20\text{MM}$.



SIGNED: Tralph
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 23/11/2016
 CONTACT NUMBER : 296-5543
 EMAIL : TRALPH@DODDCIVIL.CO.NZ

Cut/Fill Table			
Number #	Minimum Elevation	Maximum Elevation	Color
1	-4.000	-3.500	
2	-3.500	-3.000	
3	-3.000	-2.500	
4	-2.500	-2.000	
5	-2.000	-1.500	
6	-1.500	-1.000	
7	-1.000	-0.500	
8	-0.500	0.000	
9	0.000	0.500	
10	0.500	1.000	
11	1.000	1.500	
12	1.500	2.000	
13	2.000	2.500	
14	2.500	3.000	
15	3.000	3.500	
16	3.500	4.000	
17	4.000	4.500	
18	4.500	5.000	
19	5.000	5.500	
20	5.500	6.000	
21	6.000	6.500	

1. Refer to DWG 902 for Preconstruction contours
2. Refer to DWG 904 for Finished Ground Level contours

_____	Lot Bdy
_____	Ex Abutting Bdy
_____	Cut/Fill Cont

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Rev	Description	By	Date
		SIGNED	DATE
Surveyed	RK		10/16
Designed	WM		05/15
Drawn	SK		10/16
Checked			11/16
Approved			11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

58 Broadway
Papakura
Ph: 64-9-2965543
www.doddcivil.co.nz

P.O. Box 72-543
Auckland NZ
Fax: 64-9-2965534
admin@doddcivil.co.nz

PROJECT NAME:

CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:

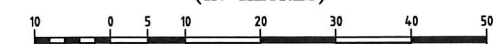
CUT / FILL AS-BUILT PLAN

Project Number: **503/02**Plan No: **906** Rev: **-**

DATE: 23-Nov-16

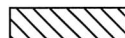

PATH: F:\PROJECTS\50302\DWG\ASBUILT\50302-900_EW_ASB.DWG

GRAPHIC SCALE
(IN METRES)



1:1000@A3

48266 SP 11988







-  - Specific Design Zone - Proximity to land steeper than 1V:4H
-  - Specific Design Zone - Retaining Wall



Notes:

1. Refer to DWG 901 for Preconstruction contours
2. Refer to DWG 903 for Finished Ground Level contours

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	AB Cont (Major)
	AB Cont (Minor)
	Subsoil drainage
	Retaining Wall

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Rev	Description	By	Date
A	Road names	SK	11/16
-	-	-	-
Rev	Description	By	Date
		SIGNED	DATE
Surveyed	RK		10/16
Designed	WM		05/15
Drawn	SK		10/16
Checked			11/16
Approved			11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

58 Broadway P.O. Box 72-543
Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:

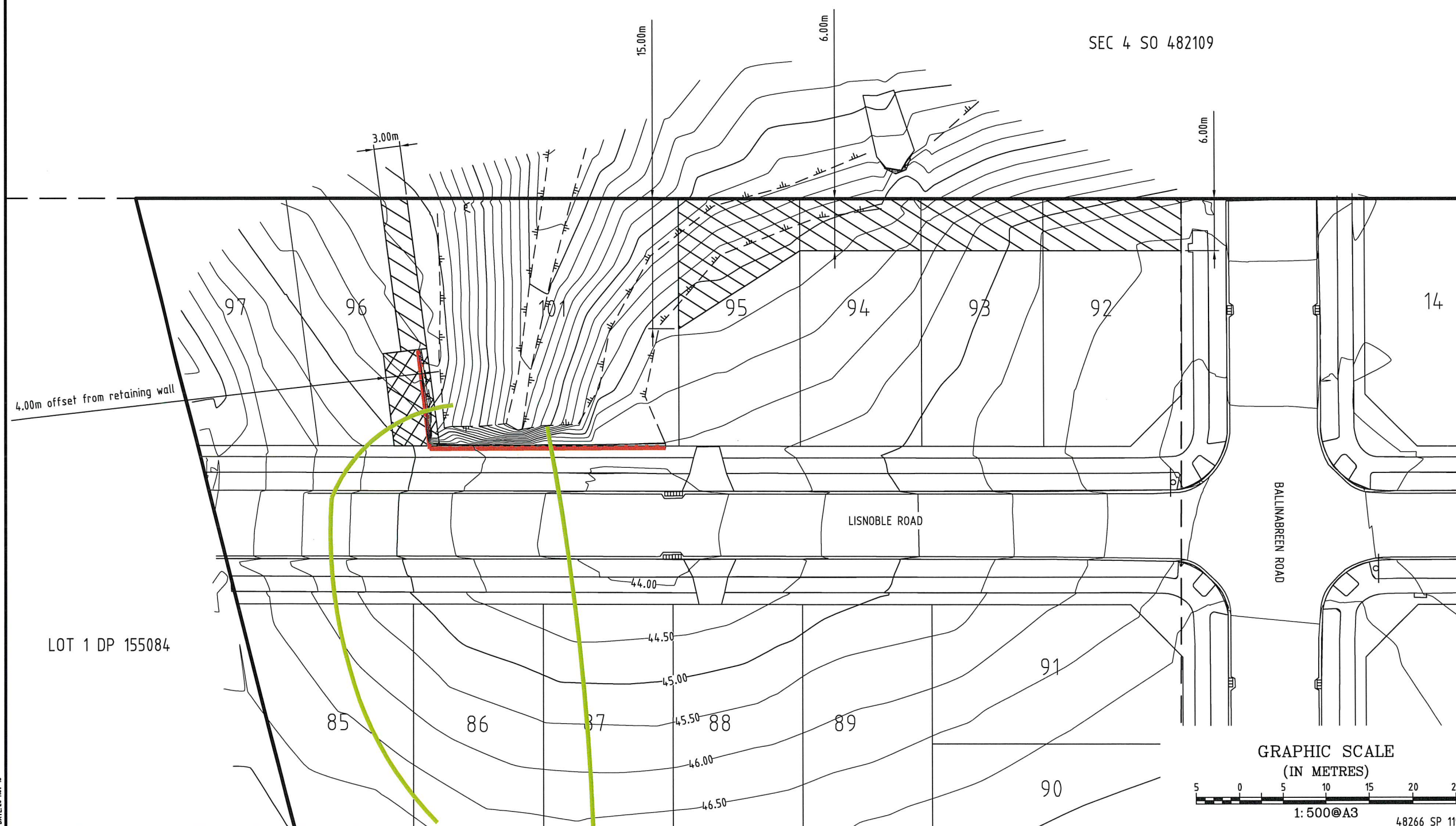
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:

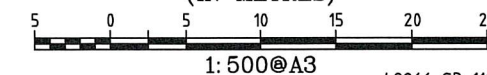
**GEOTECH SPECIFIC
DESIGN ZONE**

Project Number: **503/02**

Plan No: **907** Rev: **A**



GRAPHIC SCALE
(IN METRES)




DATE: 28-Nov-16

CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN IS AN ACCURATE RECORD OF THE WORKS UNDERTAKEN AND THAT:

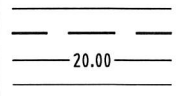
- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.

SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 30/11/2016
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ



Asbuilt Streetlight Setout Table		
Name	Northing	Easting
L21	5905521.49mN	1771686.30mE
L22	5905514.92mN	1771747.93mE
L23	5905504.12mN	1771762.58mE
L24	5905497.02mN	1771819.00mE
L25	5905481.31mN	1771828.99mE
L26	5905467.96mN	1771672.88mE
L27	5905450.03mN	1771749.01mE
L28	5905437.78mN	1771818.07mE
L29	5905420.16mN	1771661.00mE

Asbuilt Streetlight Setout Table		
Name	Northing	Easting
L1	5905736.36mN	1771722.13mE
L2	5905723.59mN	1771772.62mE
L3	5905723.73mN	1771736.82mE
L4	5905708.09mN	1771833.62mE
L5	5905703.59mN	1771812.48mE
L6	5905697.91mN	1771873.86mE
L7	5905687.48mN	1771880.35mE
L8	5905671.11mN	1771723.70mE
L9	5905652.75mN	1771799.78mE
L10	5905649.96mN	1771870.97mE
L11	5905614.89mN	1771709.78mE
L12	5905604.87mN	1771859.63mE
L13	5905596.94mN	1771785.94mE
L14	5905562.03mN	1771849.00mE
L15	5905562.01mN	1771686.90mE
L16	5905544.40mN	1771763.13mE
L17	5905539.03mN	1771701.94mE
L18	5905539.34mN	1771649.32mE
L19	5905519.08mN	1771838.39mE
L20	5905517.79mN	1771786.95mE

Notes:

LEGEND	
	Lot Bdy Ex Abutting Bdy AB Cont (Major) AB Cont (Minor)

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Rev	Description	By	Date
		SIGNED	DATE
1	Surveyed	RK	10/16
2	Designed	TR	5/16
3	Drawn	SK	10/16
4	Checked		8/16
5	Approved		



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

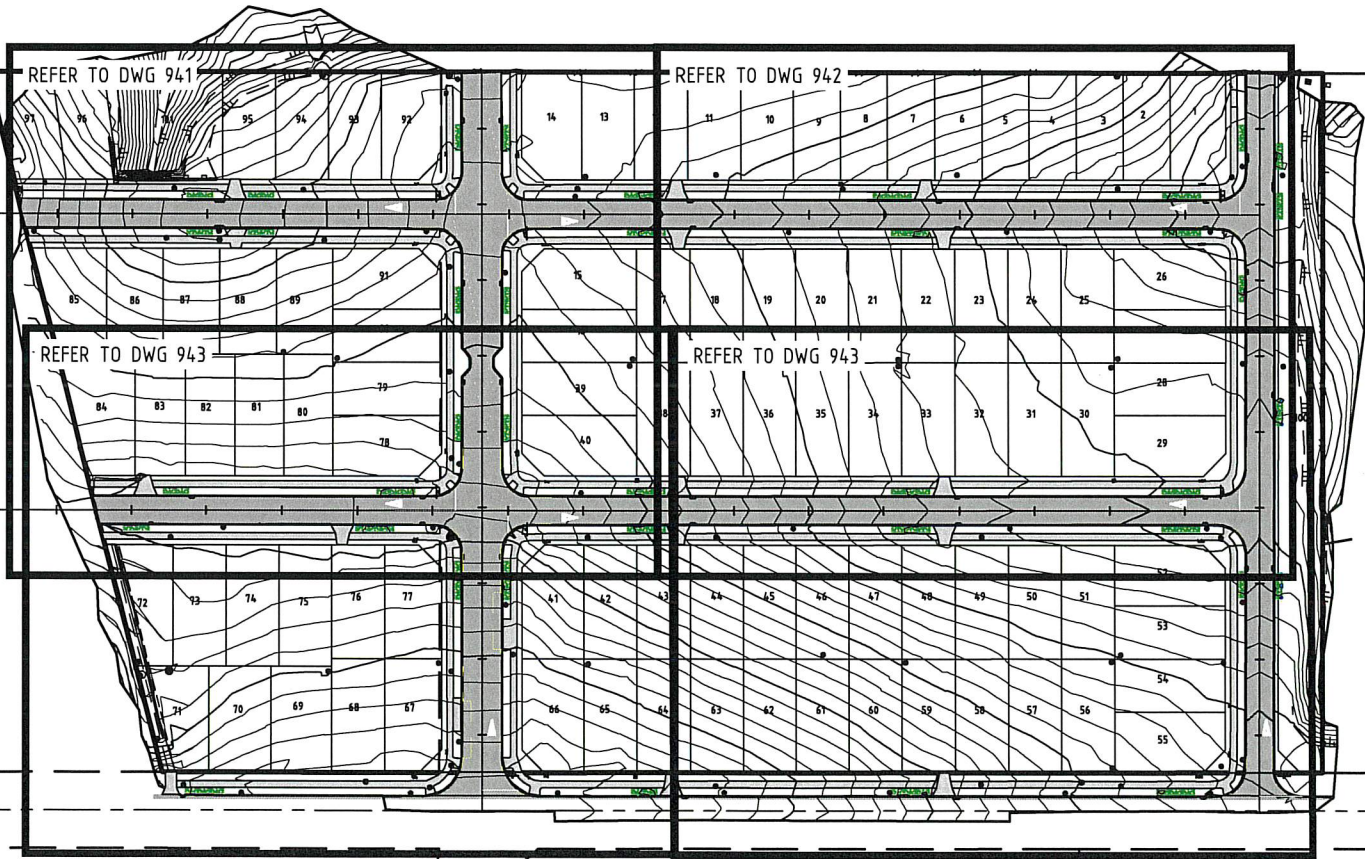
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Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLATBUSH, AUCKLAND
FOR
HUGH GREEN GROUP

SHEET TITLE:
ROADING AS-BUILT
INDEX PLAN

Project Number: **503/02**

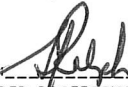
Plan No: **940** Rev: -



CERTIFICATION






I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 28/11/2016
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ

Asbuilt Setout Table		
Name	Northing	Easting
WWMH 1.1	5905752.41mN	1771702.00mE
WWMH 1.2	5905709.71mN	1771690.82mE
WWMH 1.3	5905702.54mN	1771719.80mE
WWMH 1.4	5905631.62mN	1771702.20mE
WWMH 1.5	5905563.09mN	1771685.08mE
WWMH 1.6	5905492.23mN	1771667.68mE
WWMH 1.7	5905459.26mN	1771659.07mE
WWMH 1.8	5905419.14mN	1771649.14mE
WWMH 2.1	5905691.59mN	1771763.30mE
WWMH 2.2	5905634.98mN	1771749.42mE
WWMH 2.3	5905566.44mN	1771732.25mE
WWMH 2.4	5905490.22mN	1771713.02mE
WWMH 2.5	5905419.36mN	1771695.09mE
WWMH 3.1	5905673.16mN	1771839.27mE
WWMH 3.1.1	5905664.71mN	1771872.81mE
WWMH 3.2	5905596.53mN	1771820.05mE
WWMH 3.3	5905516.45mN	1771800.10mE
WWMH 3.4	5905496.87mN	1771797.55mE
WWMH 3.5	5905419.65mN	1771777.94mE
IC 1	5905758.71mN	1771704.69mE
IC 2	5905793.92mN	1771719.71mE
WWMH A/5	5905799.68mN	1771722.01mE

Notes:

LEGEND	
	Ex Bdy
	Ex Abutting Bdy
	Ex Sanitary Sewer
	AB Sanitary Sewer
	Ex/AB Manhole

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		SIGNED	DATE
Surveyed	RK		10/16
Designed	WM		06/15
Drawn	SK		10/16
Checked			11/16
Approved			11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

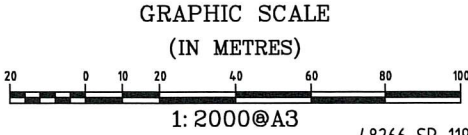
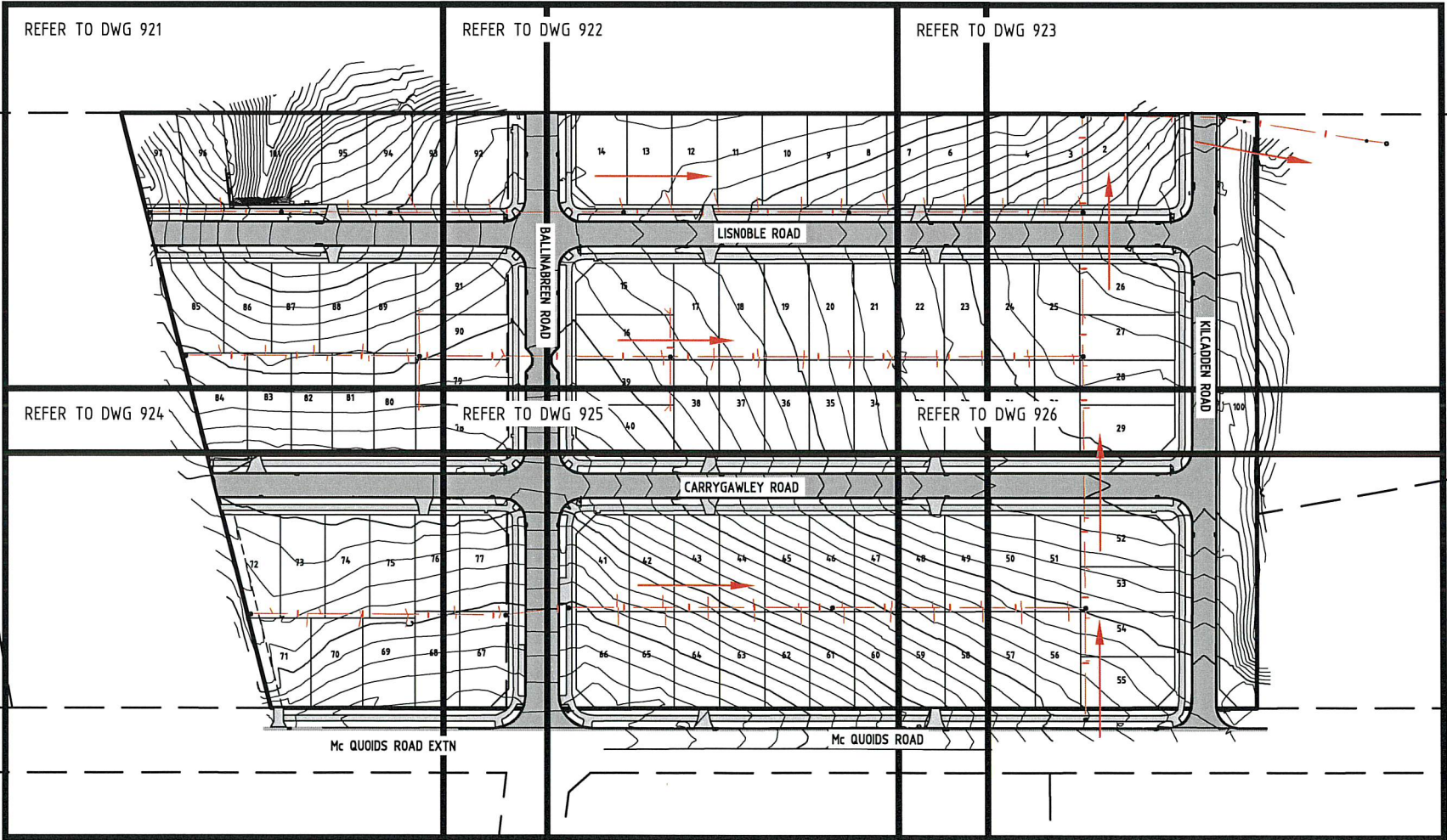
58 Broadway
Papakura
Ph: 64-9-2965543
www.doddcivil.co.nz

P.O. Box 72-543
Auckland NZ
Fax: 64-9-2965534
admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 McQUIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN GROUP

SHEET TITLE:
WASTE WATER
AS-BUILT INDEX PLAN

Project Number: **503/02**
Plan No: **920** Rev: **A**



CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: *Ralph*
CHARTERED PROFESSIONAL ENGINEER
DATE: 28/11/2014
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ

- Notes:
1. All concrete products manufactured by Hynds.
 2. Length of pipes shown in brackets.
 3. All pipes are uPVC SN16 unless noted otherwise.
 4. Works constructed by Twomey Construction.
 5. Works carried out April - August 2016.
 6. All private connections are 1.10m below finished ground level to.
 7. Constructed in accordance with WaterCare standards.
 8. All house connections are 100mmØ uPVC SN16 unless noted otherwise.
 9. All manholes are 1050mmØ unless noted otherwise.
 10. Watercare standard granular bedding under all pipes

LEGEND

	Ex Bdy
	Ex Abutting Bdy
	Ex Sanitary Sewer
	AB Sanitary Sewer
	Ex/AB Manhole

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Surveyed	RK		10/16
Designed	WM		06/15
Drawn	SK		10/16
Checked	<i>VT</i>		4/16
Approved	<i>SK</i>		11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

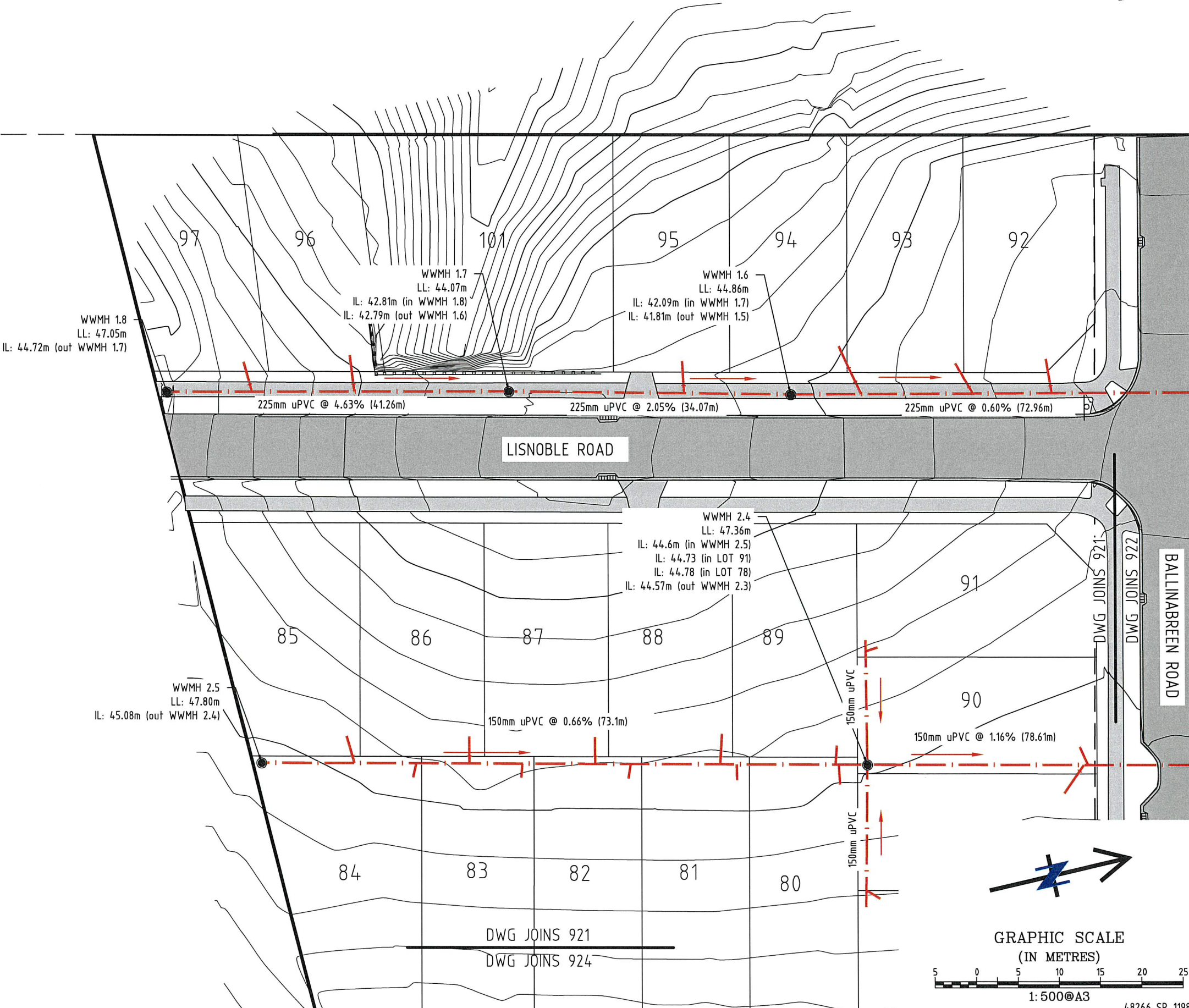
58 Broadway P.O. Box 72-543
Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN GROUP

SHEET TITLE:
WASTE WATER
AS-BUILT PLAN 1 OF 6

Project Number: **503/02**

Plan No: **921** Rev: **A**




DATE: 28-Nov-16

CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.






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- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 28/11/2016
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ

Notes:

- All concrete products manufactured by Hynds.
- Length of pipes shown in brackets.
- All pipes are uPVC SN16 unless noted otherwise.
- Works constructed by Twomey Construction.
- Works carried out April - August 2016.
- All private connections are 1.10m below finished ground level to.
- Constructed in accordance with WaterCare standards.
- All house connections are 100mmØ uPVC SN16 unless noted otherwise.
- All manholes are 1050mmØ unless noted otherwise.
- Watercare standard granular bedding under all pipes

LEGEND

	Ex Bdy
	Ex Abutting Bdy
	Ex Sanitary Sewer
	AB Sanitary Sewer
	Ex/AB Manhole

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Drawn	SK		10/16
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Approved			11/16



Subdivisions Land Development Land Survey
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PROJECT NAME:

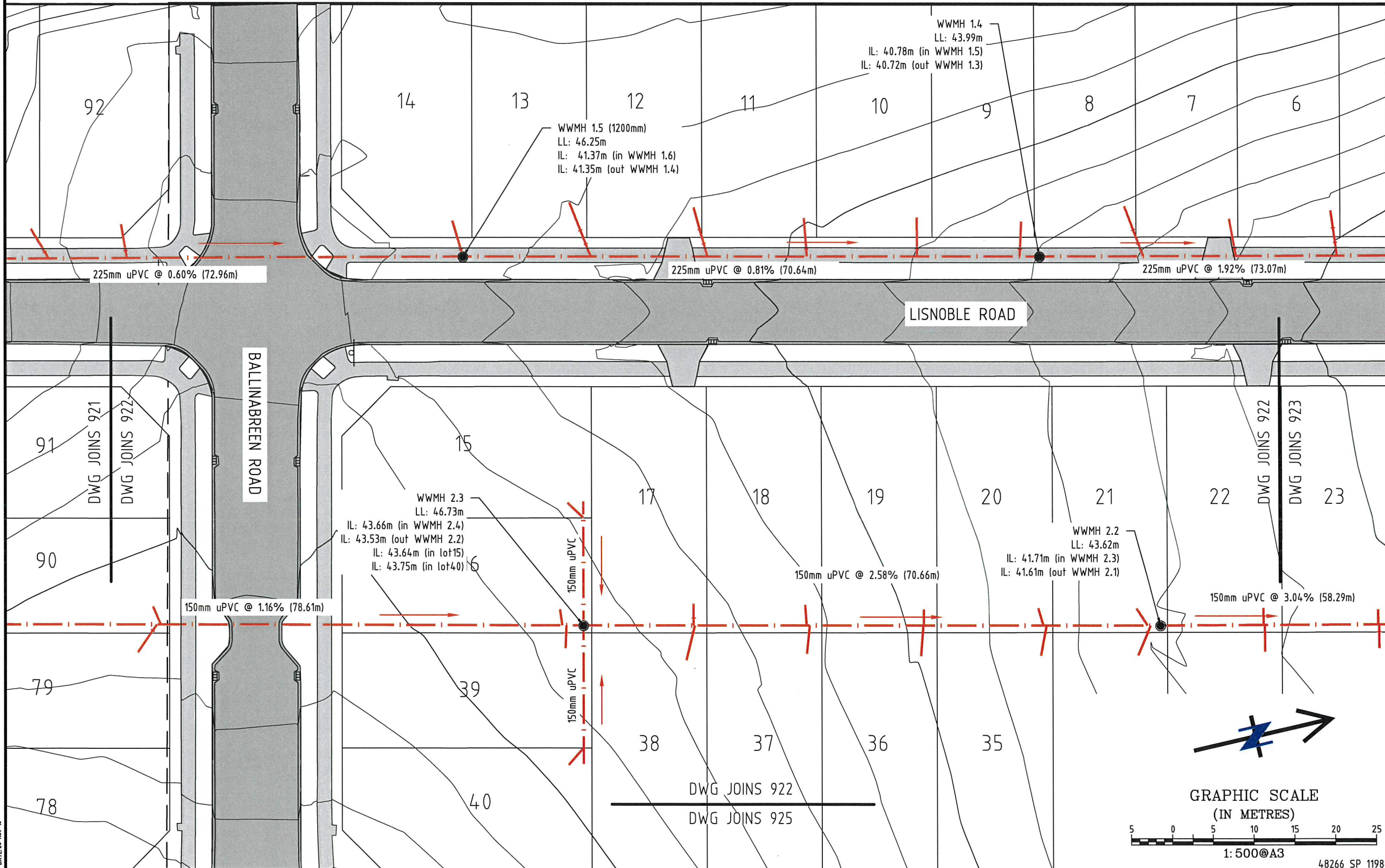
CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN GROUP

SHEET TITLE:

WASTE WATER
AS-BUILT PLAN 2 OF 6

Project Number: **503/02**


Plan No: **922** Rev: **A**

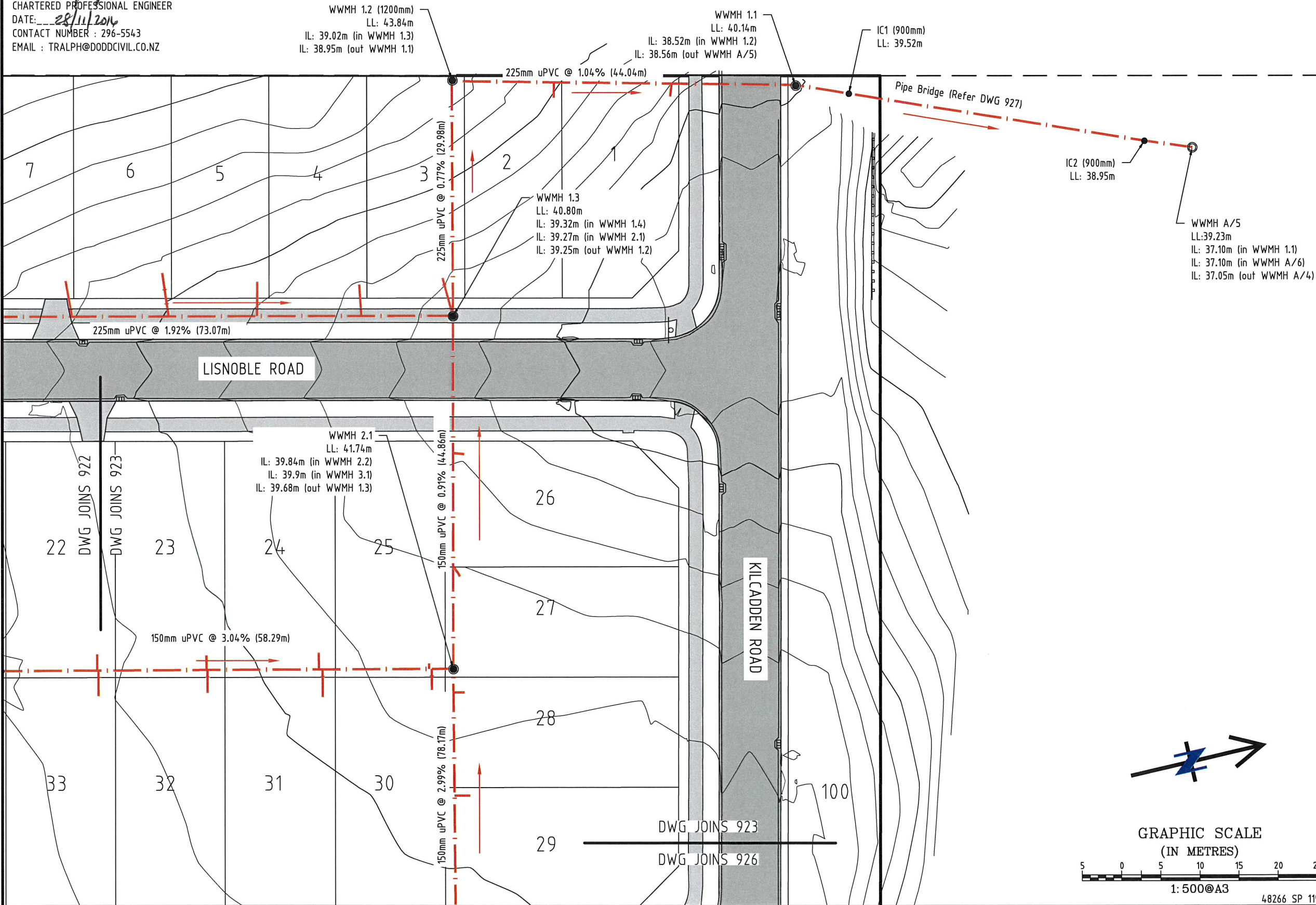


CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

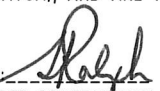
SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 28/11/2014
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ

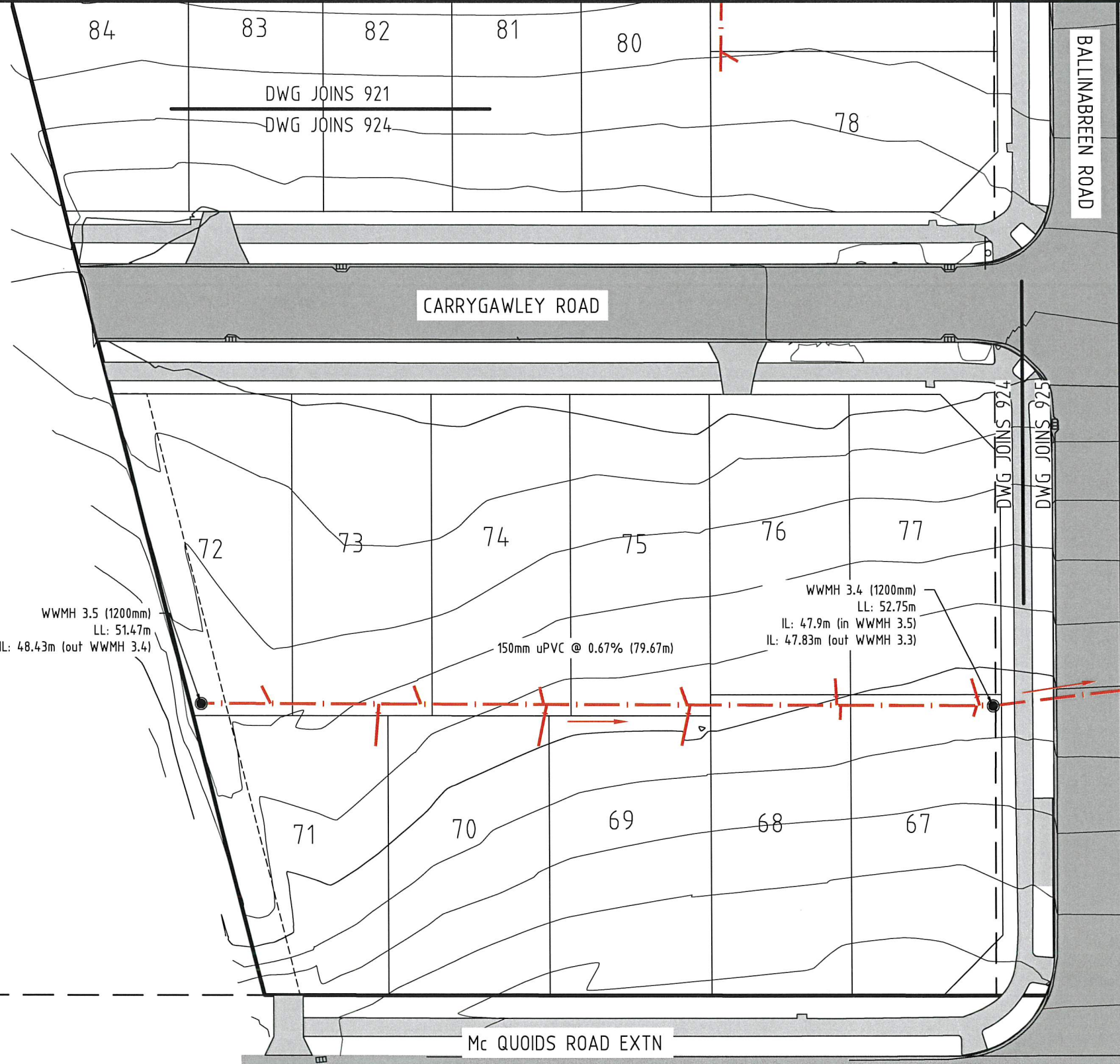


CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

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- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 28/11/2016
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ



- Notes:
1. All concrete products manufactured by Hynds.
 2. Length of pipes shown in brackets.
 3. All pipes are uPVC SN16 unless noted otherwise.
 4. Works constructed by Twomey Construction.
 5. Works carried out April - August 2016.
 6. All private connections are 1.10m below finished ground level to.
 7. Constructed in accordance with WaterCare standards.
 8. All house connections are 100mmØ uPVC SN16 unless noted otherwise.
 9. All manholes are 1050mmØ unless noted otherwise.
 10. Watercare standard granular bedding under all pipes

LEGEND

	Ex Bdy
	Ex Abutting Bdy
	Ex Sanitary Sewer
	AB Sanitary Sewer
	Ex/AB Manhole

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Approved			11/16

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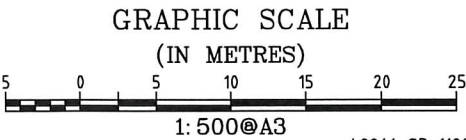
Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

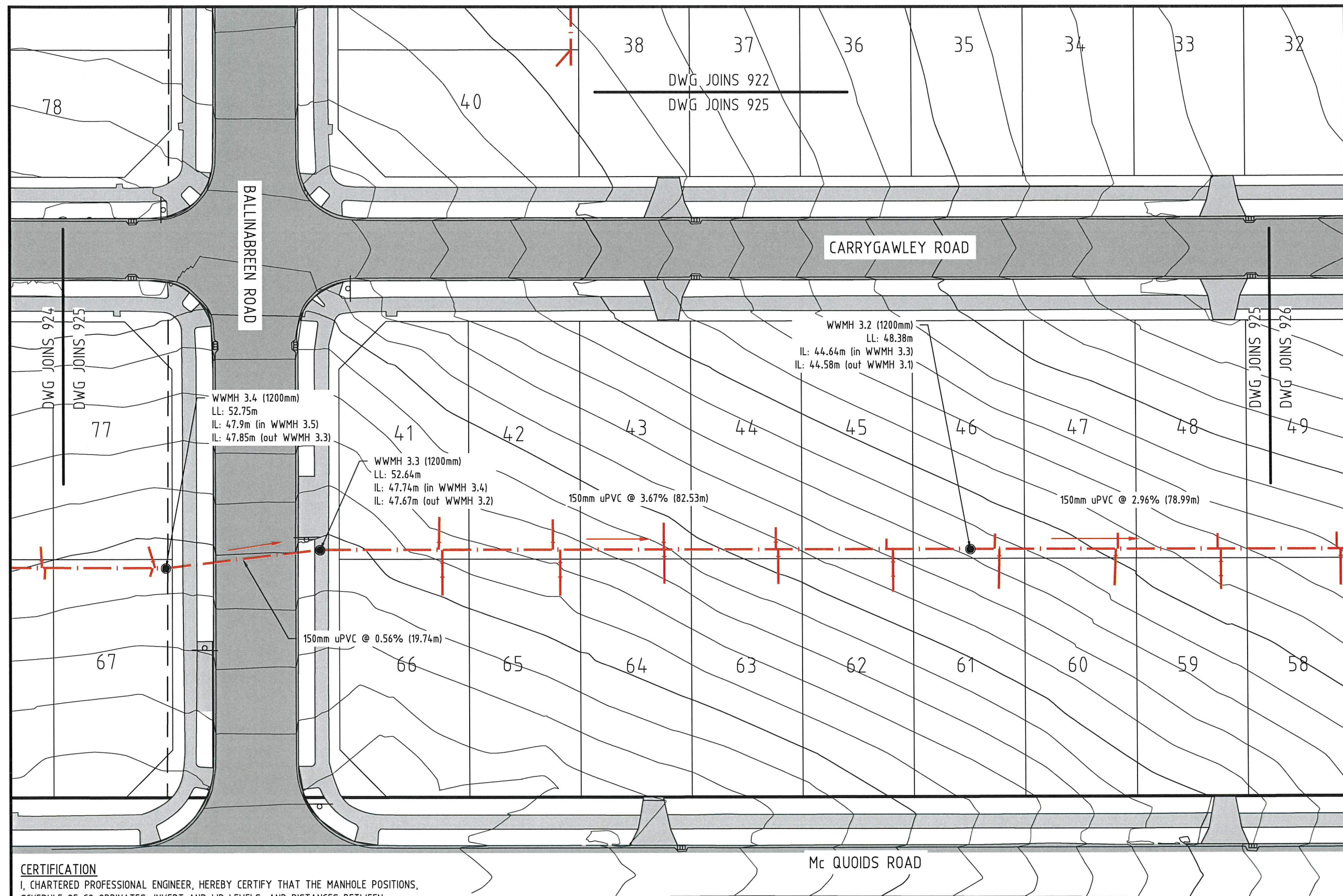
58 Broadway P.O. Box 72-543
Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN GROUP

SHEET TITLE:
WASTE WATER
AS-BUILT PLAN 4 OF 6

Project Number: **503/02**
Plan No: **924** Rev: **A**





- Notes:
1. All concrete products manufactured by Hynds.
 2. Length of pipes shown in brackets.
 3. All pipes are uPVC SN16 unless noted otherwise.
 4. Works constructed by Twomey Construction.
 5. Works carried out April - August 2016.
 6. All private connections are 1.10m below finished ground level to.
 7. Constructed in accordance with WaterCare standards.
 8. All house connections are 100mmØ uPVC SN16 unless noted otherwise.
 9. All manholes are 1050mmØ unless noted otherwise.
 10. Watercare standard granular bedding under all pipes

LEGEND	
	Ex Bdy
	Ex Abutting Bdy
	Ex Sanitary Sewer
	AB Sanitary Sewer
	Ex/AB Manhole

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Drawn	SK		10/16
Checked			11/16
Approved			11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
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www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN GROUP

SHEET TITLE:
WASTE WATER
AS-BUILT PLAN 5 OF 6

Project Number: **503/02**
Plan No: **925** Rev: **A**

CERTIFICATION

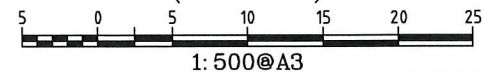
I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

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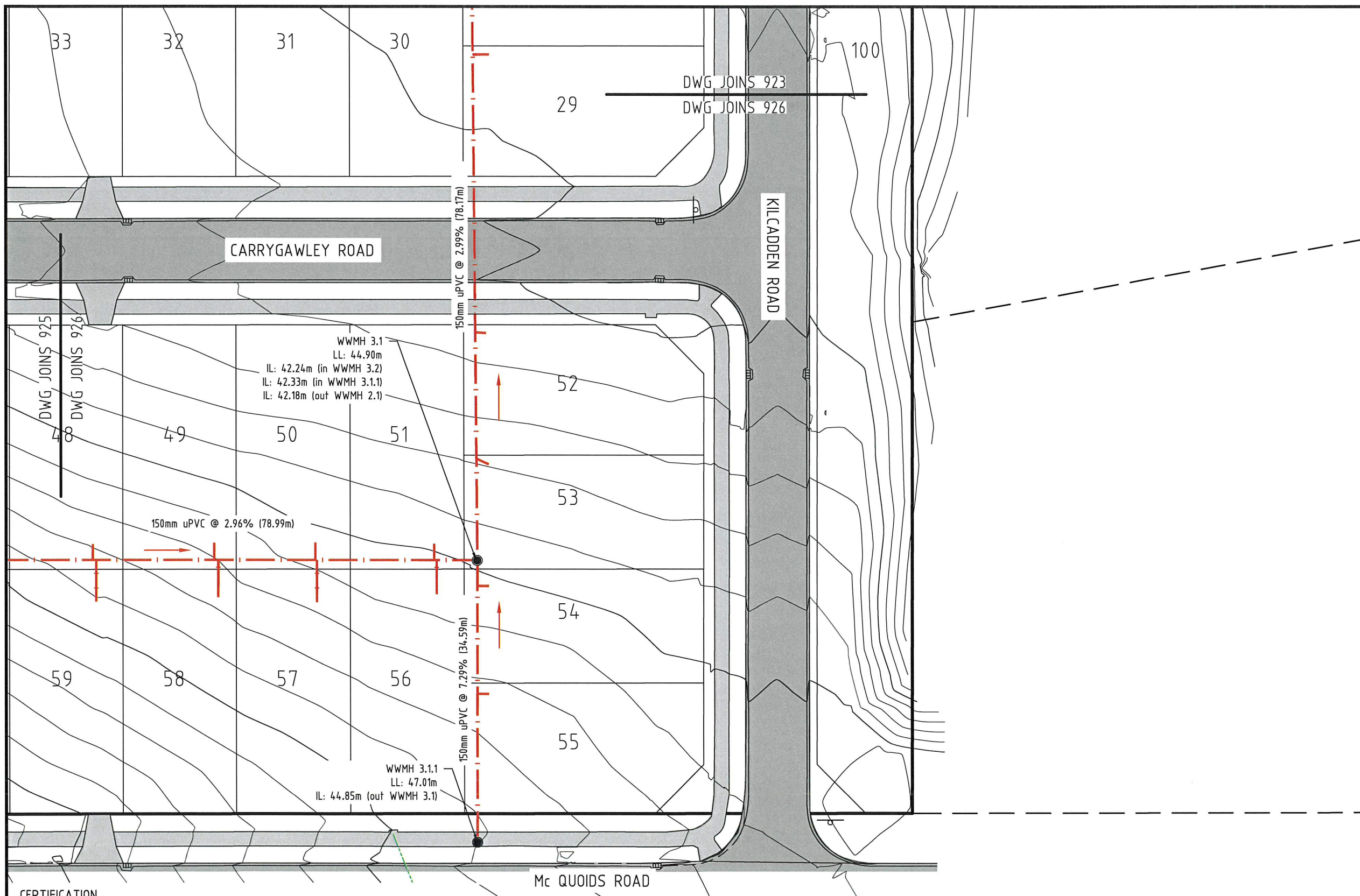
SIGNED:
CHARTERED PROFESSIONAL ENGINEER
DATE: 28/11/2016
CONTACT NUMBER: 296-5543
EMAIL: TRALPH@DODDCIVIL.CO.NZ



GRAPHIC SCALE
(IN METRES)



48266 SP 11988



- Notes:
1. All concrete products manufactured by Hynds.
 2. Length of pipes shown in brackets.
 3. All pipes are uPVC SN16 unless noted otherwise.
 4. Works constructed by Twomey Construction.
 5. Works carried out April - August 2016.
 6. All private connections are 1.10m below finished ground level to.
 7. Constructed in accordance with WaterCare standards.
 8. All house connections are 100mmØ uPVC SN16 unless noted otherwise.
 9. All manholes are 1050mmØ unless noted otherwise.
 10. Watercare standard granular bedding under all pipes.

LEGEND	
	Ex Bdy
	Ex Abutting Bdy
	Ex Sanitary Sewer
	AB Sanitary Sewer
	Ex/AB Manhole

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A	Road names	SK	11/16
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Rev	Description	By	Date
		SIGNED	DATE
Surveyed	RK		10/16
Designed	WM		06/15
Drawn	SK		10/16
Checked			11/16
Approved			11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

58 Broadway P.O. Box 72-543
Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN GROUP

SHEET TITLE:
WASTE WATER
AS-BUILT PLAN 6 OF 6

Project Number: **503/02**
Plan No: **926** Rev: **A**

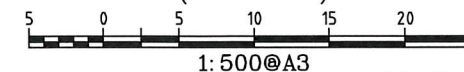
CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED:
CHARTERED PROFESSIONAL ENGINEER
DATE: 28/11/2016
CONTACT NUMBER: 296-5543
EMAIL: TRALPH@DODDCIVIL.CO.NZ

GRAPHIC SCALE
(IN METRES)

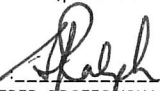


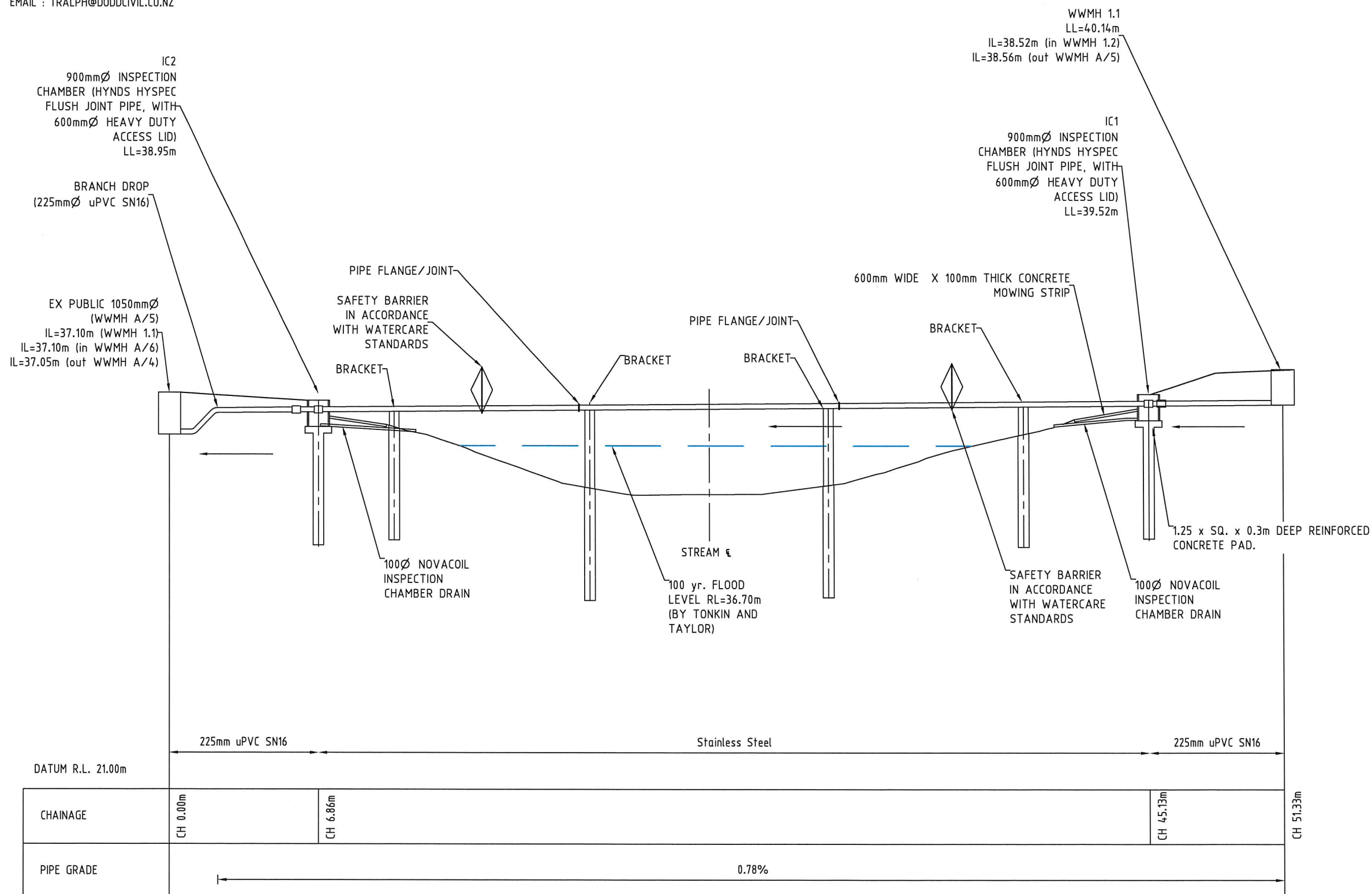
48266 SP 11988

CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

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- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 23/11/2016
CONTACT NUMBER : 296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ



PIPE BRIDGE AS-BUILT
SCALE 1:200@A3

Notes:

1. All concrete products manufactured by Hynds.
2. Length of pipes shown in brackets.
3. All uPVC pipes are uPVC SN16 unless noted otherwise.
4. All Stainless Steel Pipes are 219.18mm \varnothing O.D.
5. Works carried out by Twomey Construction.
6. Works conducted in June 2016.
7. Constructed in accordance with WaterCare standards.
8. All manholes are 1050mm \varnothing unless noted otherwise.
9. Refer to As-built Plan 923 for location details.
10. Watercare standard granular bedding under all pipes

LEGEND

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1	Surveyed	SK	10/11
2	Designed	WM	08/15
3	Drawn	SK	10/16
4	Checked		11/16
5	Approved		11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
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58 Broadway P.O. Box 72-543
Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:

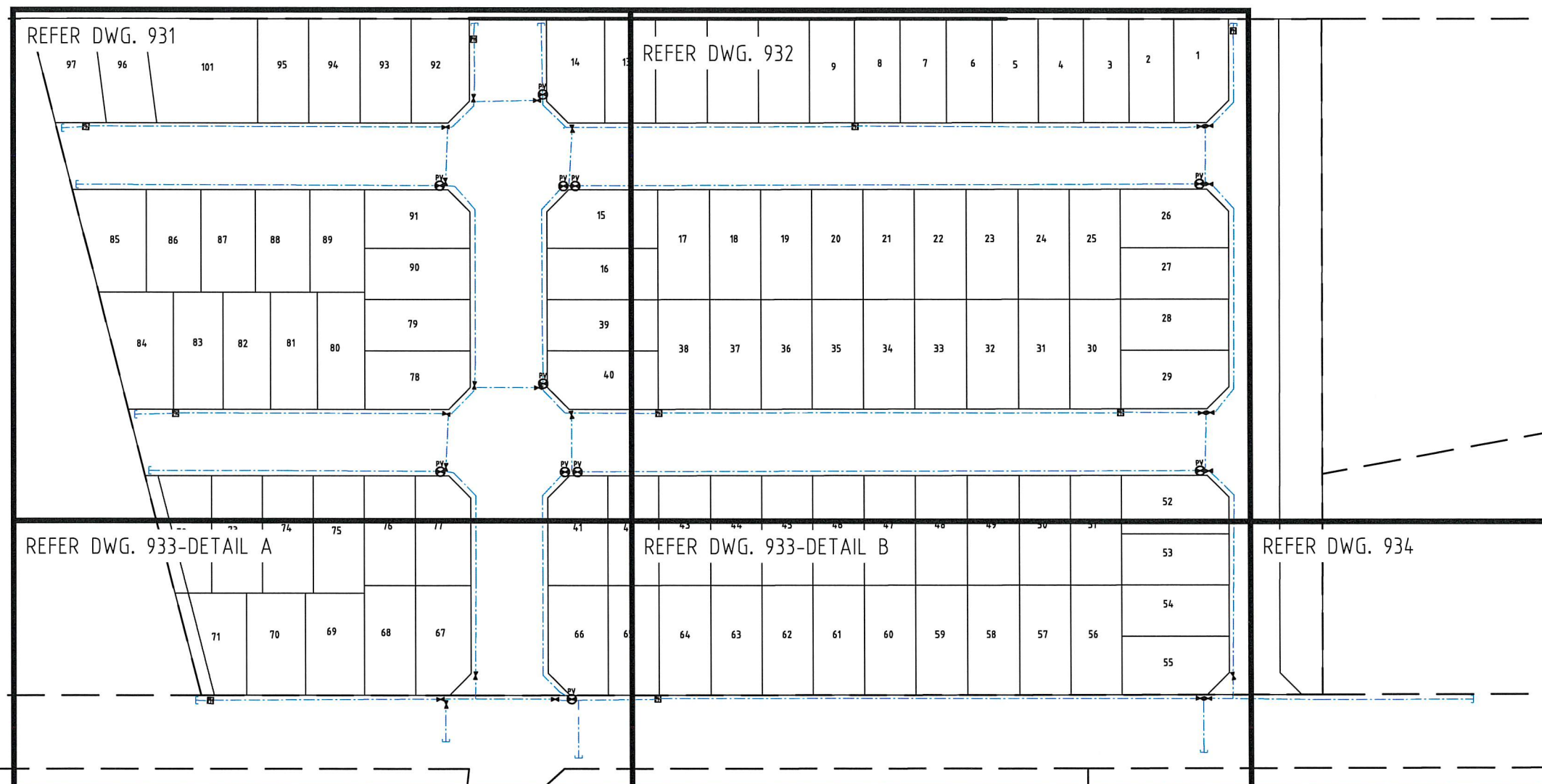
CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN GROUP

SHEET TITLE:
SANITARY SEWER
PIPE BRIDGE AS-BUILT PLAN

File Name: 503-02

Plan No: **927** Rev: -

AUCKLAND COUNCIL REFERENCE #48266
WATERCARE REFERENCE #45453



Notes:

1. PE watermain joined using Fusion Butt Welding (FBW).
2. Except private services leads all pipe diameters stated are outside diameters.
3. The Nominal Diameter (ND) of the pipes are as follows:
63mm (OD) = 50mm (ND)
125mm (OD) = 100mm (ND)
180mm (OD) = 150mm (ND)
250mm (OD) = 200mm (ND)
4. All 63mm (OD) pipes are PE80B PN 12.5, all other pipes are PE 100 uPVC PN16.
5. All PE pipes manufactured by Iplex.
6. All lines have minimum 600mm cover.
7. Constructed in accordance with Watercare standards
8. Refer to Plan 934 for As-built coordinates.
9. Works conducted April - August 2016

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	Ex Watermain
	AB Watermain
	Sluice Valve
	Peat Valve
	Fire Hydrant

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2	Designed	TR	02/16
3	Drawn	BM	11/16
4	Checked	WJ	11/16
5	Approved	SR	11/16



Subdivisions Land Development Land Survey
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www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:

CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH
FOR
HUGH GREEN GROUP

SHEET TITLE:

**WATERMAIN AS-BUILT
OVERVIEW PLAN**

File Name: 503-02

Plan No: **930**

Rev: -

CERTIFICATION

I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE
FOLLOWING INFORMATION IS CORRECT:

WATER SUPPLY VALVES, HYDRANTS, BRANCH PIPES, SPECIAL
FITTINGS POSITIONS AND PIPE SIZE AND MATERIALS

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000),
AND ARE WITHIN ±50MM.

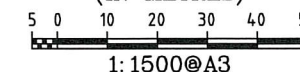
SIGNED:
CHARTERED PROFESSIONAL ENGINEER

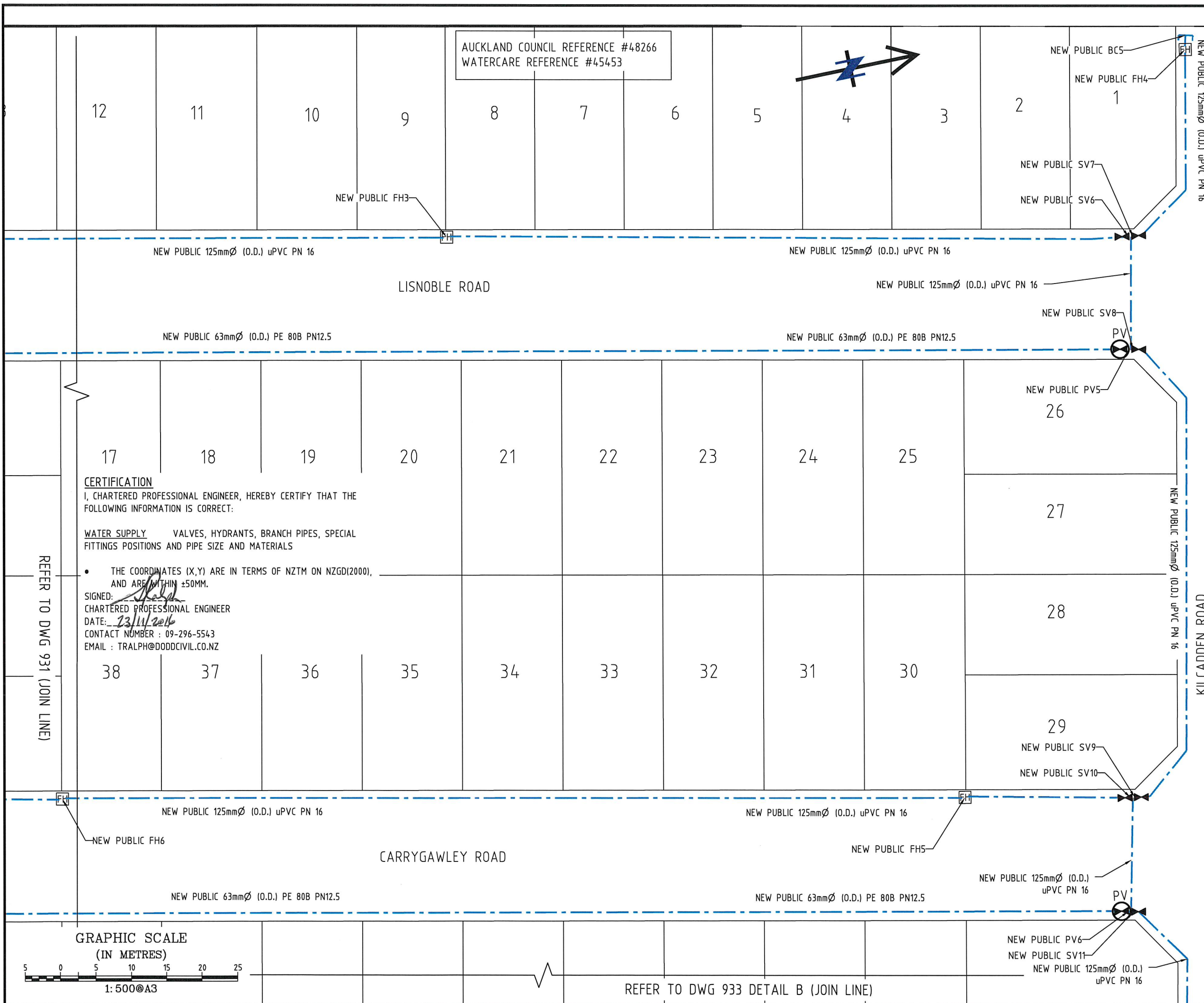
DATE: 23/11/2016

CONTACT NUMBER : 09-296-5543

EMAIL : TRALPH@DODDCIVIL.CO.NZ

GRAPHIC SCALE
(IN METRES)





- Notes:
1. PE watermain joined using Fusion Butt Welding (FBW).
 2. Except private services leads all pipe diameters stated are outside diameters.
 3. The Nominal Diameter (ND) of the pipes are as follows:
63mm (ND) = 50mm (ID)
125mm (ND) = 100mm (ID)
180mm (ND) = 150mm (ID)
250mm (ND) = 200mm (ID)
 4. All 63mm (ND) pipes are PE80B PN 12.5, all other pipes are PE 100 uPVC PN16.
 5. All PE pipes manufactured by DPVC.
 6. All lines have minimum 600mm cover.
 7. Constructed in accordance with Watercare standards
 8. Refer to Plan 934 for As-built coordinates.
 9. Works conducted April - August 2016

LEGEND	
	Lot Bdy
	Ex Abutting Bdy
	Ex Watermain
	AB Watermain
	Sluice Valve
	Peat Valve
	Fire Hydrant

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Checked			11/16
Approved			11/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

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Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:

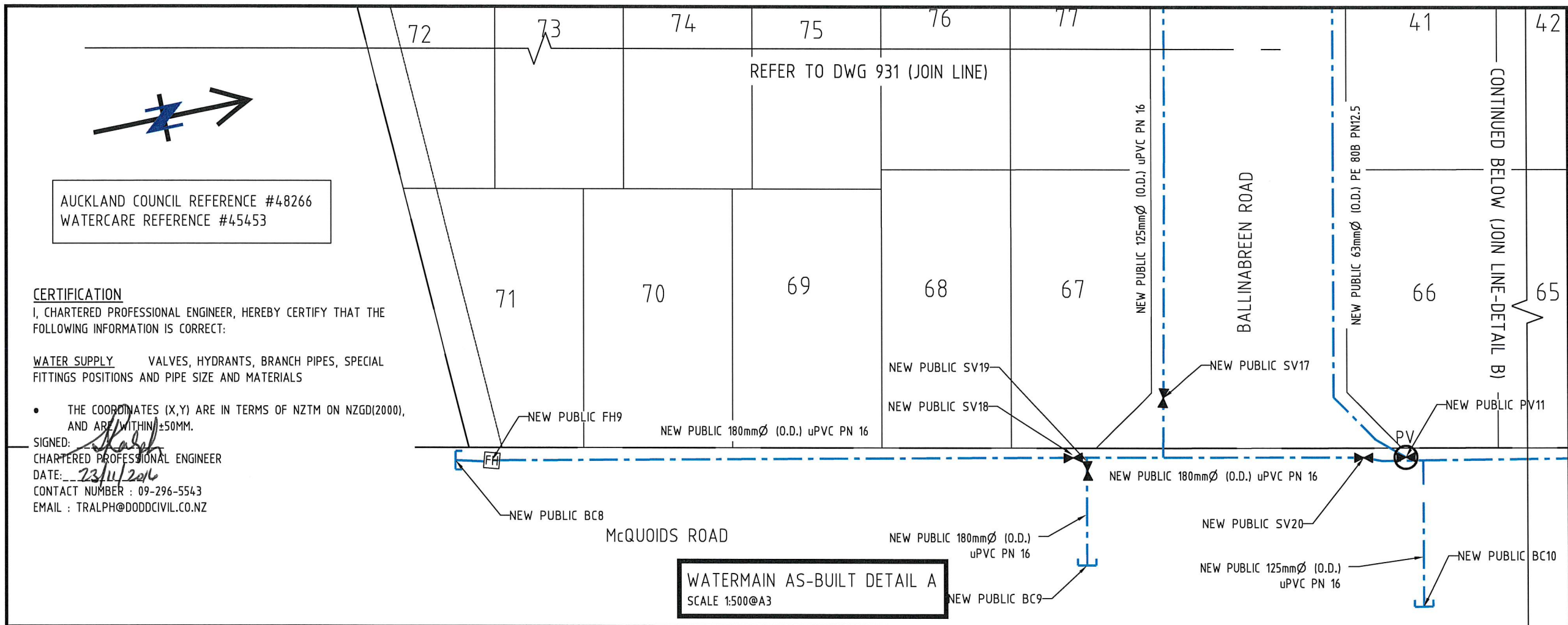
CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH
FOR
HUGH GREEN GROUP

SHEET TITLE:

WATERMAIN
ASBUILT PLAN-SHEET 2

File Name: 503-02

Plan No: **932** Rev: -



- Notes:**
1. PE watermain joined using Fusion Butt Welding (FBW).
 2. Except private services leads all pipe diameters stated are outside diameters.
 3. The Nominal Diameter (ND) of the pipes are as follows:
 63mm (ND) = 50mm (ID)
 125mm (ND) = 100mm (ID)
 180mm (ND) = 150mm (ID)
 250mm (ND) = 200mm (ID)
 4. All 63mm (ND) pipes are PE80B PN 12.5, all other pipes are PE 100 uPVC PN16.
 5. All PE pipes manufactured by DPVC.
 6. All lines have minimum 600mm cover.
 7. Constructed in accordance with Watercare standards
 8. Refer to Plan 934 for As-built coordinates.
 9. Works conducted April - August 2016

AUCKLAND COUNCIL REFERENCE #48266
WATERCARE REFERENCE #45453

CERTIFICATION
I, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE FOLLOWING INFORMATION IS CORRECT:

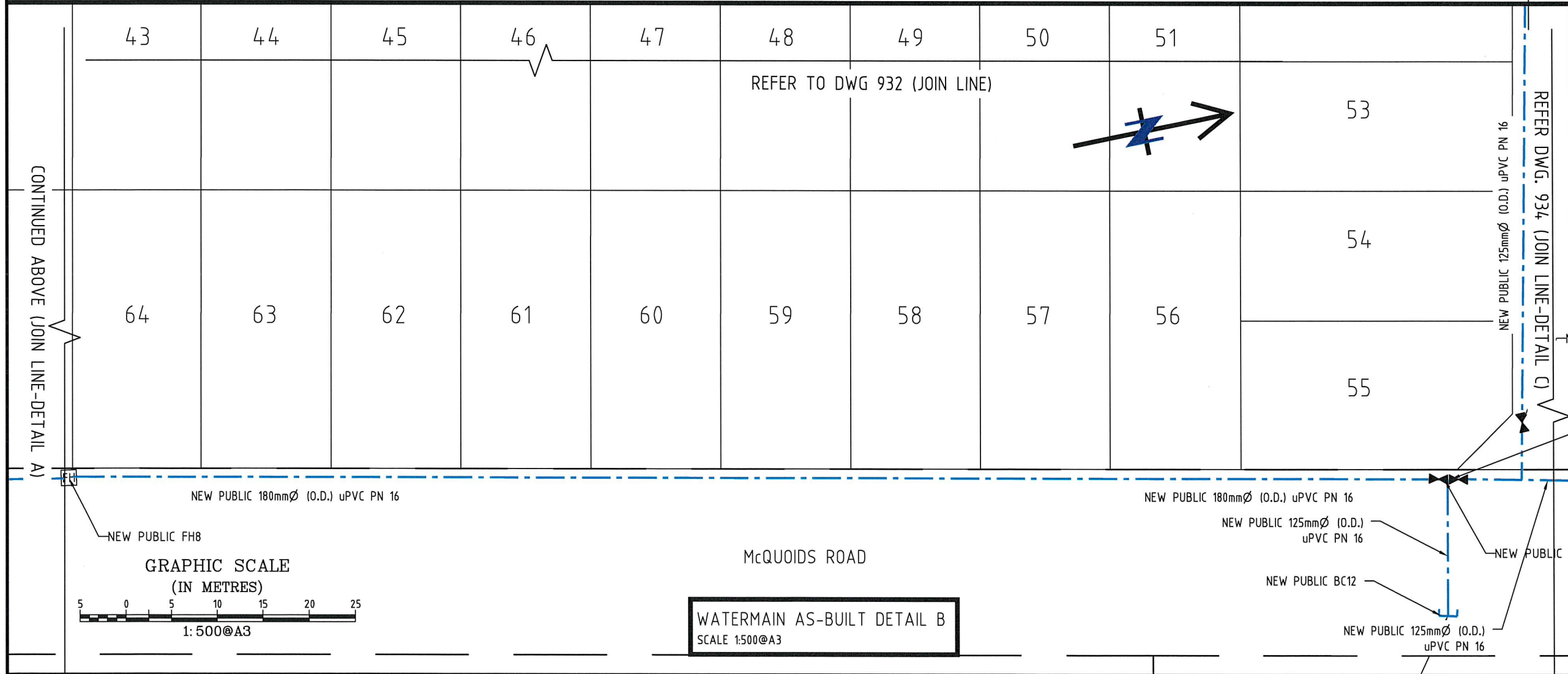
WATER SUPPLY VALVES, HYDRANTS, BRANCH PIPES, SPECIAL FITTINGS POSITIONS AND PIPE SIZE AND MATERIALS

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.

SIGNED: *[Signature]*
CHARTERED PROFESSIONAL ENGINEER
DATE: 23/11/2016
CONTACT NUMBER : 09-296-5543
EMAIL : TRALPH@DODDCIVIL.CO.NZ

LEGEND	
	Lot Bdy
	Ex Abutting Bdy
	Ex Watermain
	AB Watermain
	Sluice Valve
	Peat Valve
	Fire Hydrant

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Rev	Description	By	Date
		SIGNED	DATE
1	Surveyed	DCC	11/16
2	Designed	TR	02/16
3	Drawn	BM	11/16
4	Checked		11/16
5	Approved		11/16

DODD CIVIL CONSULTANTS
Down To Earth Personal Service

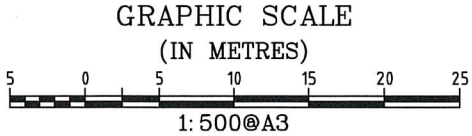
Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

58 Broadway Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 McQUOIDS ROAD
FLAT BUSH
FOR
HUGH GREEN GROUP

SHEET TITLE:
WATERMAIN
ASBUILT PLAN-SHEET 3


File Name: 503-02
Plan No: **933** Rev: -

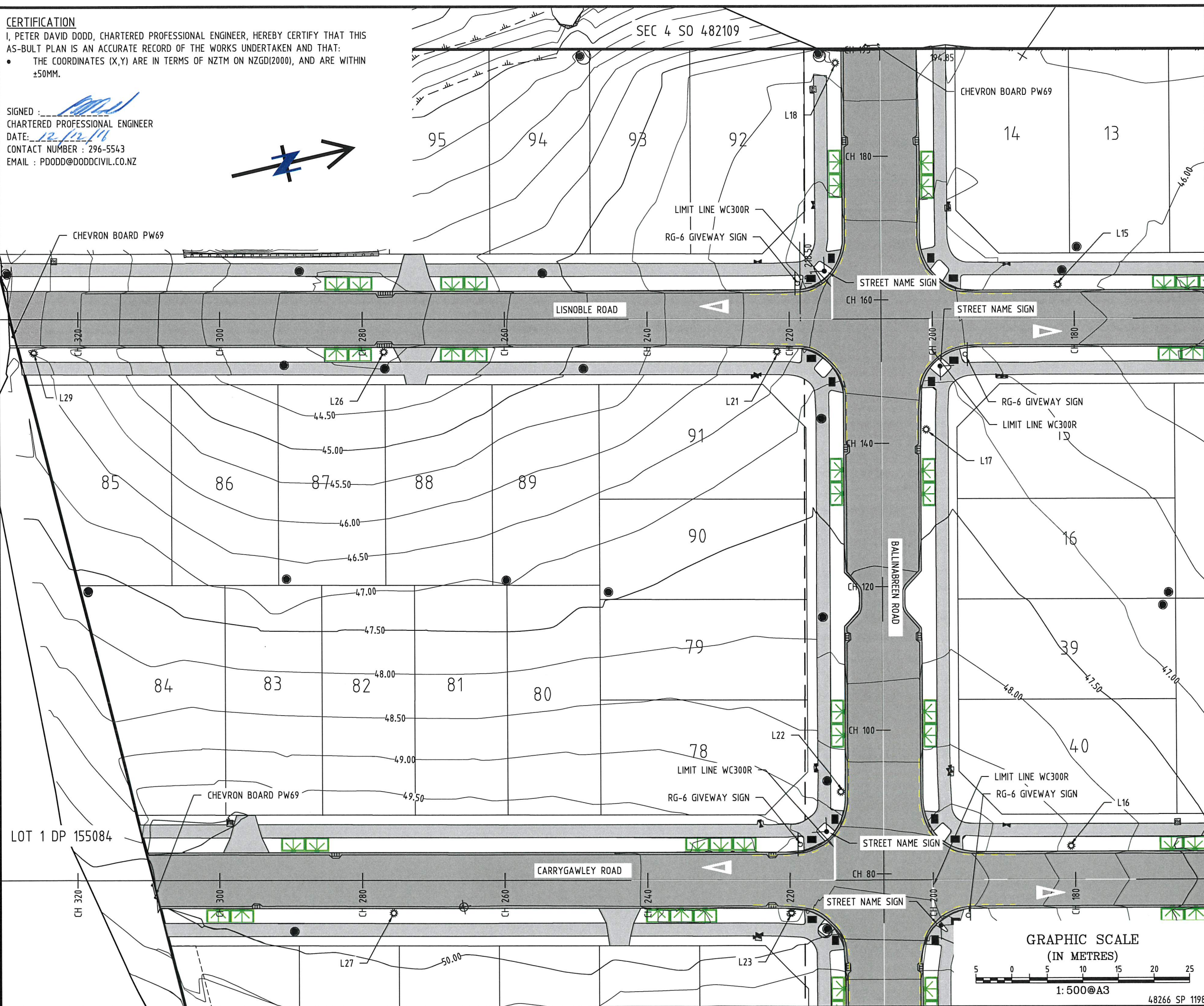


CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN IS AN ACCURATE RECORD OF THE WORKS UNDERTAKEN AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.

SIGNED: 
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 12/12/16
 CONTACT NUMBER: 296-5543
 EMAIL: PDODD@DODDCIVIL.CO.NZ



Notes:

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	AB Cont (Major)
	AB Cont (Minor)
	Rain Garden
	NSAAT
	Street Lights
	Cesspits
	Asbuilt Manhole
	Water Valve
	Fire Hydrant
	Sign
	Tactile pavers

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Rev	Description	By	Date
A	Chainage markers	SK	12/16
-	-	-	-
Rev	Description	By	Date
Surveyed	RK	SIGNED	DATE
Designed	TR		10/16
Drawn	SK		5/16
Checked			10/16
Approved			12/16



Subdivisions Land Development Land Survey
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 Environmental Engineering Structural Engineering

58 Broadway P.O. Box 72-543
 Papakura Auckland NZ
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 www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
 FOR
HUGH GREEN LIMITED

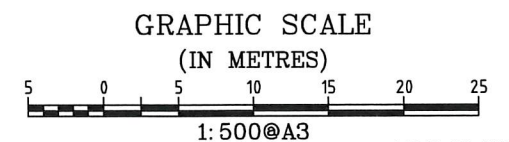
SHEET TITLE:
ROADING AS-BUILT
1 OF 4

Project Number: **503/02**

Plan No: **941** Rev: **A**

DATE: 12-Dec-16


PATH: F:\PROJECTS\50302\DWG\ASBUILT\50302-900 RD ASB.DWG

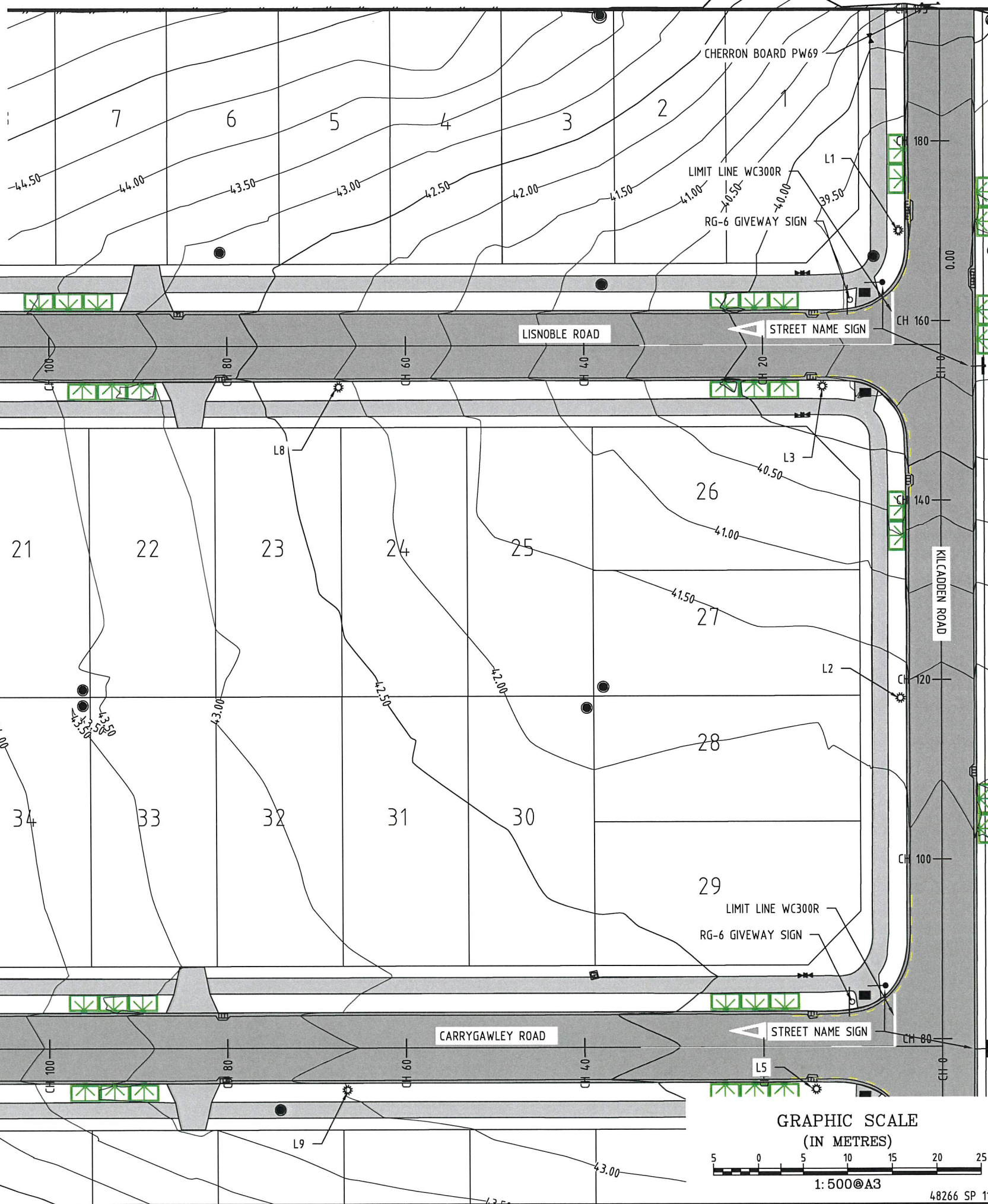


CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN IS AN ACCURATE RECORD OF THE WORKS UNDERTAKEN AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN $\pm 50\text{MM}$.

SIGNED: 
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 12/12/16
 CONTACT NUMBER: 296-5543
 EMAIL: PDODD@DODDCIVIL.CO.NZ



Notes:

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	AB Cont (Major)
	AB Cont (Minor)
	Rain Garden
	NSAAT
	Street Lights
	Cesspits
	Asbuilt Manhole
	Water Valve
	Fire Hydrant
	Sign
	Tactile pavers

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Rev	Description	By	Date
A	Chainage markers	SK	12/16
-	-	-	-
Rev	Description	By	Date
Surveyed	RK	SIGNED	DATE
Designed	TR		10/16
Drawn	SK		5/16
Checked			10/16
Approved			12/16



Subdivisions Land Development Land Survey
 Resource Consents Project Management
 Environmental Engineering Structural Engineering

58 Broadway P.O. Box 72-543
 Papakura Auckland NZ
 Ph: 64-9-2965543 Fax: 64-9-2965534
 www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:

CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
 FOR
HUGH GREEN LIMITED

SHEET TITLE:

ROADING AS-BUILT
2 OF 4

Project Number: **503/02**

Plan No: **942** Rev: **A**

DATE: 12-Dec-16


PATH: F:\PROJECTS\50302\DWG\ASBUILT\50302-900 RD ASB.DWG

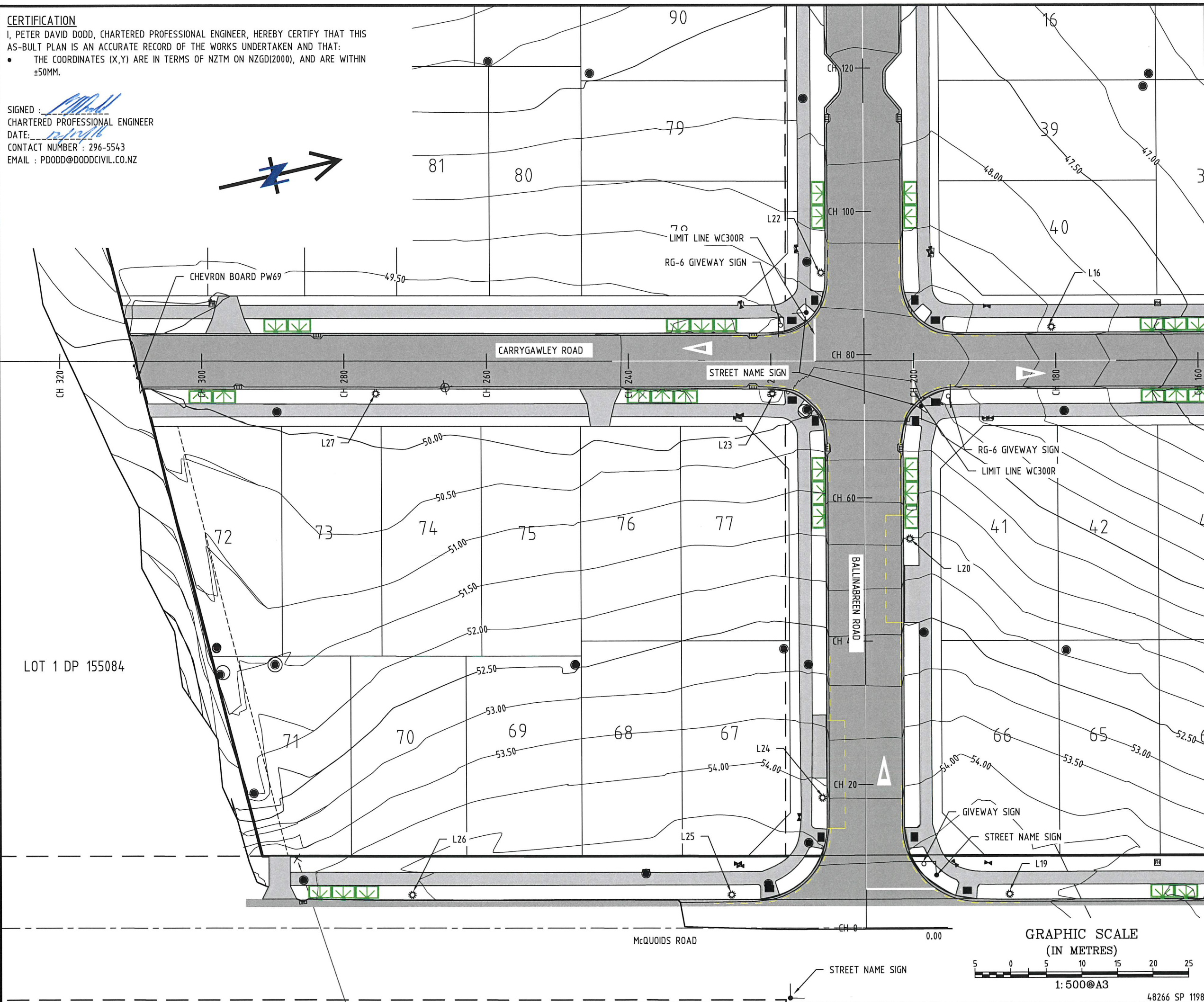
48266 SP 11988

CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN IS AN ACCURATE RECORD OF THE WORKS UNDERTAKEN AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.

SIGNED: 
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 12/12/16
 CONTACT NUMBER: 296-5543
 EMAIL: PDODD@DODDCIVIL.CO.NZ



Notes:

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	AB Cont (Major)
	AB Cont (Minor)
	Rain Garden
	NSAAT
	Street Lights
	Cesspits
	Asbuilt Manhole
	Water Valve
	Fire Hydrant
	Sign
	Tactile pavers

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Rev	Description	By	Date
A	Chainage markers	SK	12/16
-	-	-	-
Rev	Description	By	Date
Surveyed	RK		10/16
Designed	TR		5/16
Drawn	SK		10/16
Checked			12/16
Approved			12/16



Subdivisions Land Development Land Survey
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 Papakura Auckland NZ
 Ph: 64-9-2965543 Fax: 64-9-2965534
 www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:

CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
 FOR
HUGH GREEN LIMITED

SHEET TITLE:

ROADING AS-BUILT
3 OF 4

Project Number: **503/02**

Plan No: **943** Rev: **A**

DATE: 12-Dec-16


PATH: F:\PROJECTS\50302\DWG\ASBUILT\50302-900 RD ASB.DWG

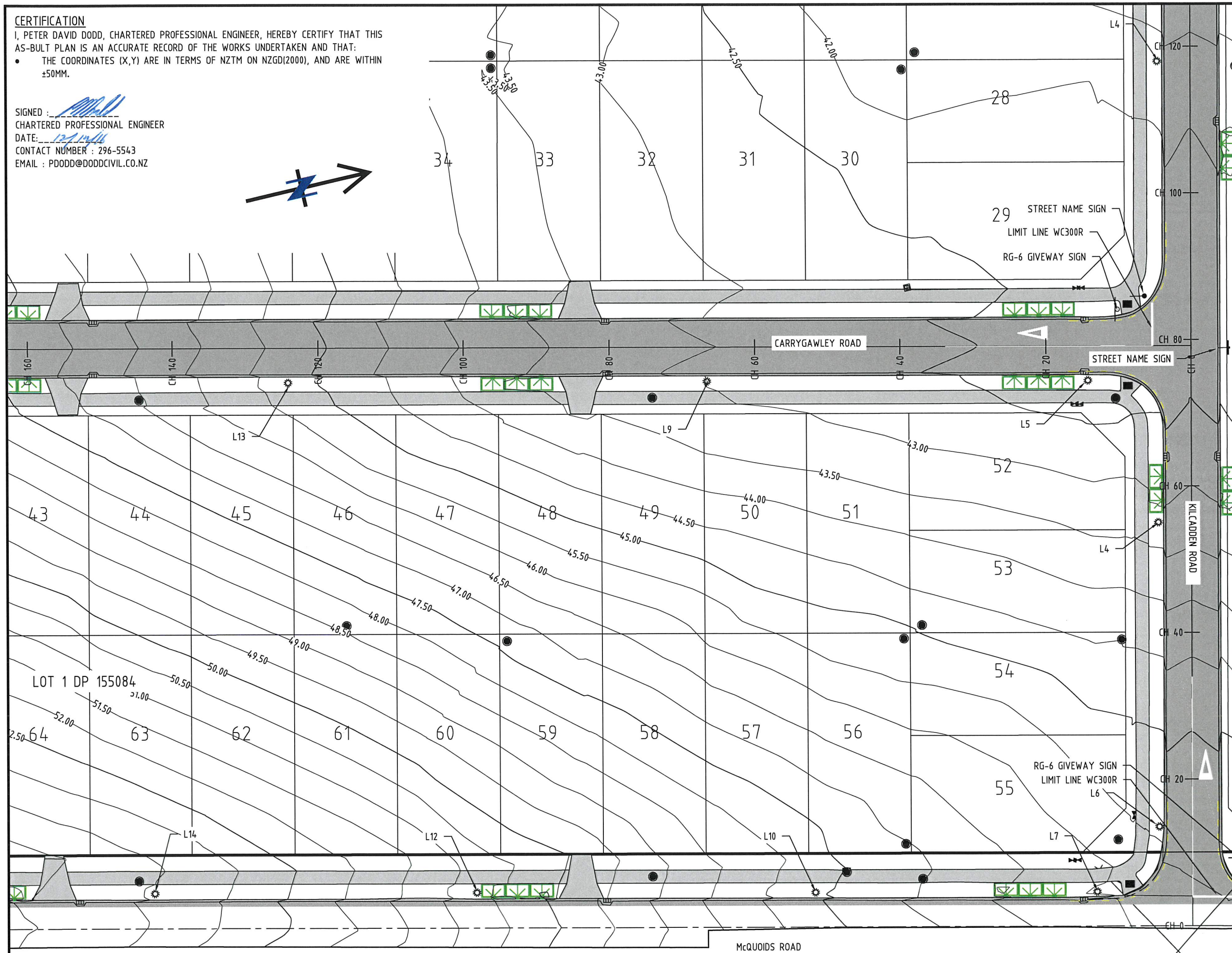
48266 SP 11988

CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN IS AN ACCURATE RECORD OF THE WORKS UNDERTAKEN AND THAT:

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.

SIGNED: 
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 12/12/16
 CONTACT NUMBER: 296-5543
 EMAIL: PDODD@DODDCIVIL.CO.NZ



Notes:

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	AB Cont (Major)
	AB Cont (Minor)
	Rain Garden
	NSAAT
	Street Lights
	Cesspits
	Asbuilt Manhole
	Water Valve
	Fire Hydrant
	Sign
	Tactile pavers

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Rev	Description	By	Date
A	Chainage markers	SK	12/16
-	-	-	-
SIGNED		DATE	
Surveyed	RK		10/16
Designed	TR		5/16
Drawn	SK		10/16
Checked			12/16
Approved			12/16



Subdivisions Land Development Land Survey
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58 Broadway P.O. Box 72-543
 Papakura Auckland NZ
 Ph: 64-9-2965543 Fax: 64-9-2965534
 www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:

CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
 FOR
HUGH GREEN LIMITED

SHEET TITLE:

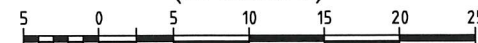
ROADING AS-BUILT
4 OF 4

Project Number: **503/02**

Plan No: **944** Rev: **A**

McQUOIDS ROAD

GRAPHIC SCALE
 (IN METRES)



1:500@A3

48266 SP 11988

DATE: 12-Dec-16

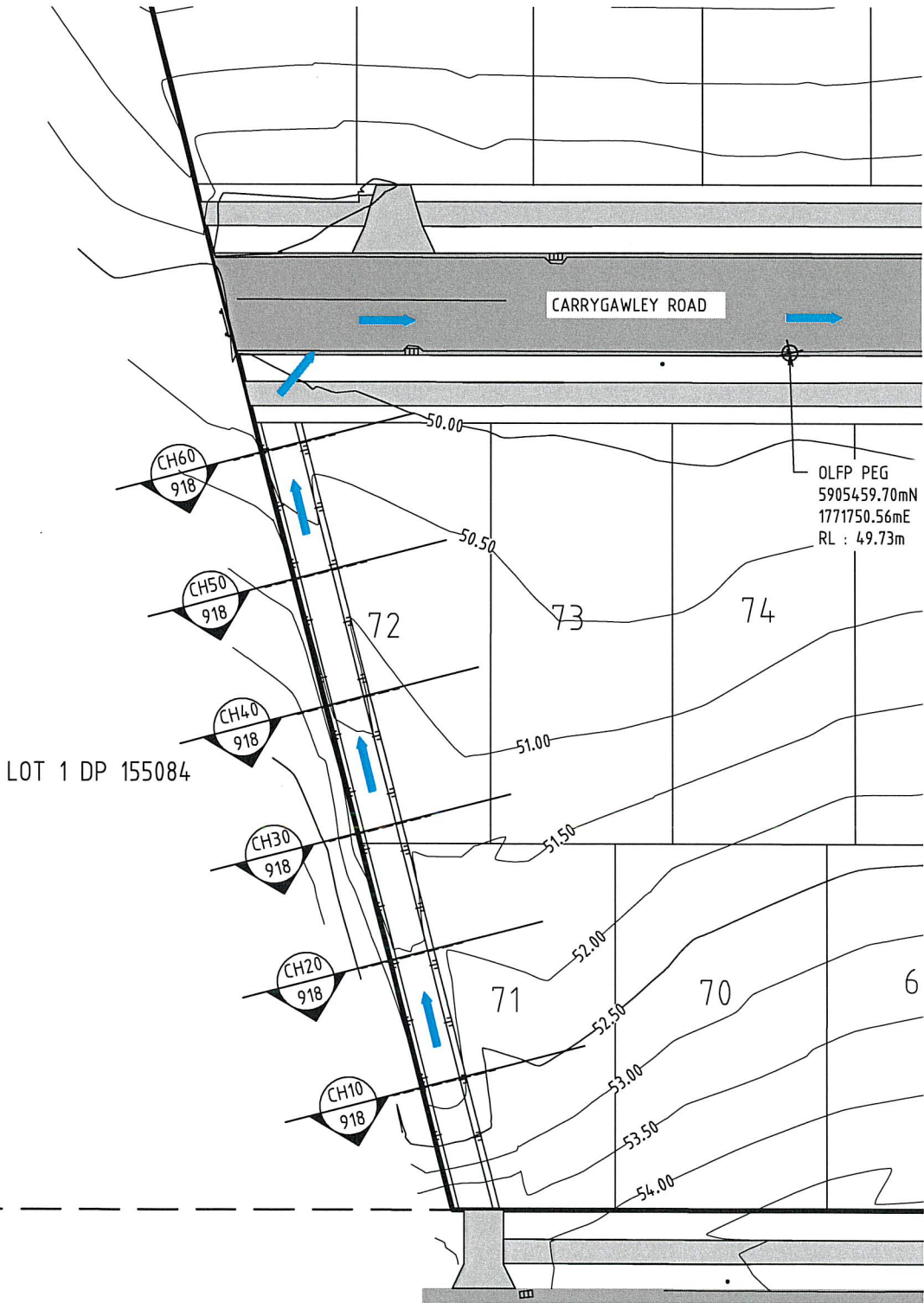
PATH: F:\PROJECTS\50302\DWG\ASBUILT\50302-900 RD ASB.DWG

CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THIS AS-BUILT PLAN IS AN ACCURATE RECORD OF THE WORKS UNDERTAKEN AND THAT:

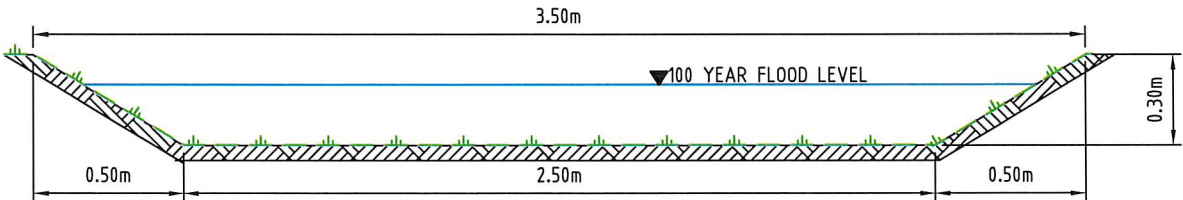
- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED : 
CHARTERED PROFESSIONAL ENGINEER
DATE: 14/12/16
CONTACT NUMBER : 296-5543
EMAIL : PDODD@DODDCIVIL.CO.NZ

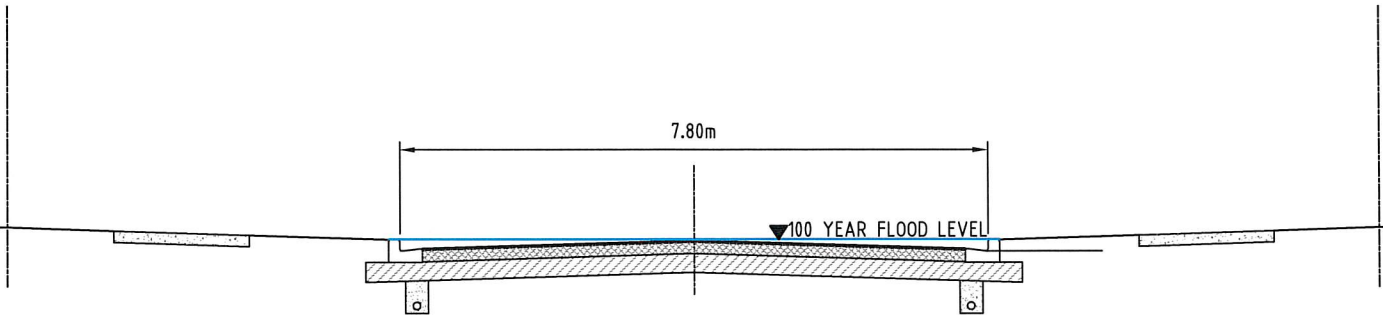


DATUM 48.00m				
EXISTING LEVELS	53.82	51.51	50.93	50.23
CHAINAGE	0.00	20.00	40.00	60.00
VERICAL GEOMETRY	8.53 23.30%	46.27 3.04%	7.57 5.28%	62.37 50.09

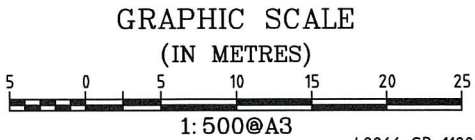
OVERLAND FLOW PATH LONGSECTION
SCALE 1:500 @ A3



TYPICAL SWALE CROSS SECTION
SCALE 1:25 @ A3



TYPICAL ROADING CROSS SECTION
SCALE 1:100 @ A3



Notes:

- Lot 71 Minimum Floor Level: 52.55m.
- Lot 72 Minimum Floor Level: 51.88m.
- OLFP follows Carrygawley Road into Ballinabreen Road and hence into Lisnoble Road where it discharges into Lot 101

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	AB Cont (Major)
	AB Cont (Minor)
	OLFP flow direction

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B	Minimum Floor Level	SK	12/16
A	Road names	SK	11/16
-	-	-	-
Rev	Description	By	Date
SIGNED			
Surveyed	SK		10/16
Designed	WM		05/16
Drawn	SK		10/16
Checked			12/16
Approved			12/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

58 Broadway P.O. Box 72-543
Papakura Auckland NZ
Ph: 64-9-2965543 Fax: 64-9-2965534
www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED


SHEET TITLE:
OVERLAND FLOW PATH
AS-BUILT PLAN

Project Number: **503/02**
Plan No: **917** Rev: **B**

CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.








- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 16/12/16
 CONTACT NUMBER : 296-5543
 EMAIL : PDODD@DODDCIVIL.CO.NZ



Notes:

- All concrete products manufactured by Hynds.
- Length of pipes shown in brackets.
- All pipes are Class 2 RCRRJ unless noted otherwise.
- Works constructed by Twomey Construction.
- Works carried out April - August 2016.
- All private connections are 1.10m below finished ground level to and are 100mmØ uPVC
- Constructed in accordance with Auckland Council standards.
- All cesspit leads are RCRRJ Class 3.
- Double cesspit leads are 300mmØ and single cesspit leads are 225mmØ.
- All manholes are 1050mmØ unless noted otherwise

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	Ex Stormwater
	AB Stormwater
	Ex/AB Manhole
	Cesspit/Double Cesspit
	3.00 x 1.75m Rain Garden Unit

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Rev	Description	By	Date
B	Road Chainage	SK	12/16
A	Road names	SK	11/16
-	-	-	-
SIGNED	DATE		
Surveyed	RK		10/16
Designed	WM		05/16
Drawn	SK		10/16
Checked			12/16
Approved			12/16



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 www.doddcivil.co.nz admin@doddcivil.co.nz

PROJECT NAME:

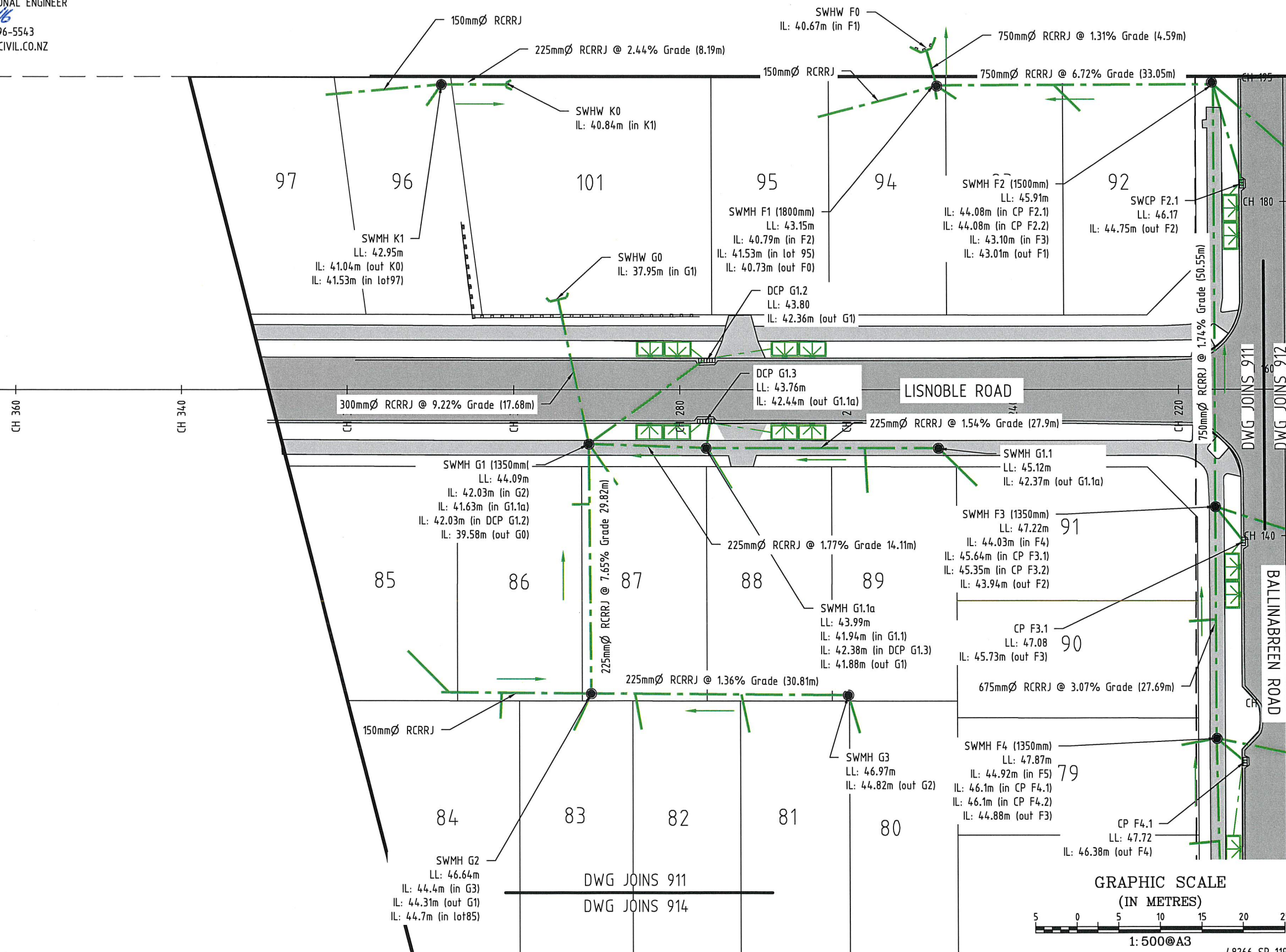
CONVOY PARK
23 & 45 MCQUIDS ROAD
FLAT BUSH, AUCKLAND
 FOR
HUGH GREEN LIMITED

SHEET TITLE:

STORMWATER
AS-BUILT PLAN 1 OF 6

Project Number: **503/02**


Plan No: **911** Rev: **B**

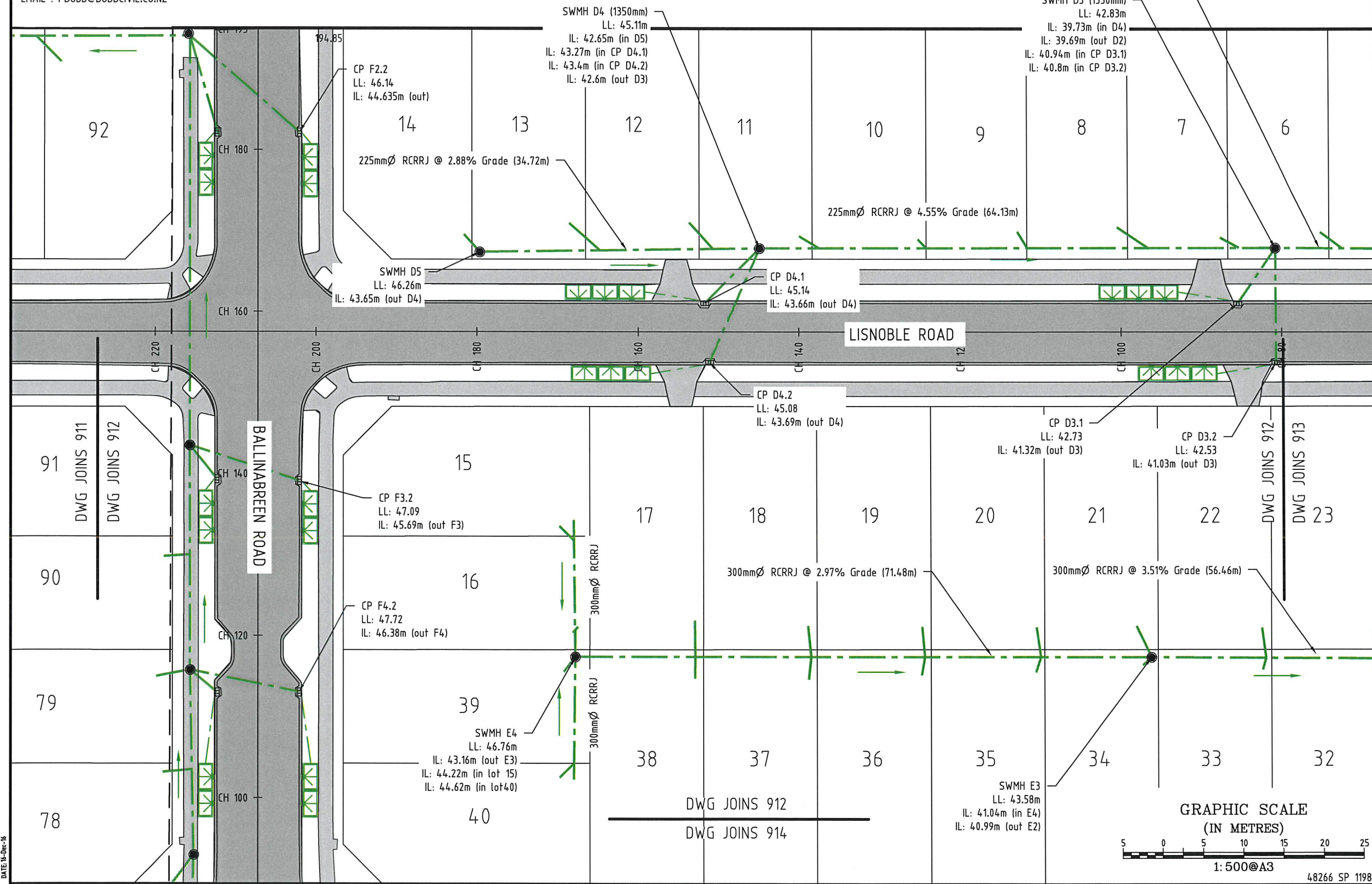


CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

- THE COORDINATES (X,Y) ARE IN TERMS OF NZTM ON NZGD(2000), AND ARE WITHIN ±50MM.
- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
CHARTERED PROFESSIONAL ENGINEER
DATE: 16/12/16
CONTACT NUMBER: 296-5543
EMAIL: PDODD@DODDCIVIL.CO.NZ



Notes:

- All concrete products manufactured by Hynds.
- Length of pipes shown in brackets.
- All pipes are Class 2 RCRRJ unless noted otherwise.
- Works constructed by Twomey Construction.
- Works carried out April - August 2016.
- All private connections are 1.10m below finished ground level to and are 100mmØ uPVC
- Constructed in accordance with Auckland Council standards.
- All cesspit leads are RCRRJ Class 3. Double cesspit leads are 300mmØ and single cesspit leads are 225mmØ.
- All manholes are 1050mmØ unless noted otherwise

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	Ex Stormwater
	AB Stormwater
	Ex/AB Manhole
	Cesspit/Double Cesspit
	3.00 x 1.75m Rain Garden Unit

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B	Road Chainage	SK	12/16
A	Road names	SK	11/16
-	-	-	-
Rev	Description	By	Date
		SIGNED	DATE
Surveyed	RK		10/16
Designed	WM		05/15
Drawn	SK		10/16
Checked			12/16
Approved			12/16



Subdivisions Land Development Land Survey
Resource Consents Project Management
Environmental Engineering Structural Engineering

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Ph: 64-9-2965543 Auckland NZ
www.doddcivil.co.nz Fax: 64-9-2965534
admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 MCQUIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:
STORMWATER
AS-BUILT PLAN 2 OF 6

Project Number: **503/02**

Plan No: **912** Rev: **B**

DATE: 16-Dec-16

PATH: F:\PROJECTS\50302\DWG\ASBUILT\50302-900 SW ASB.DWG

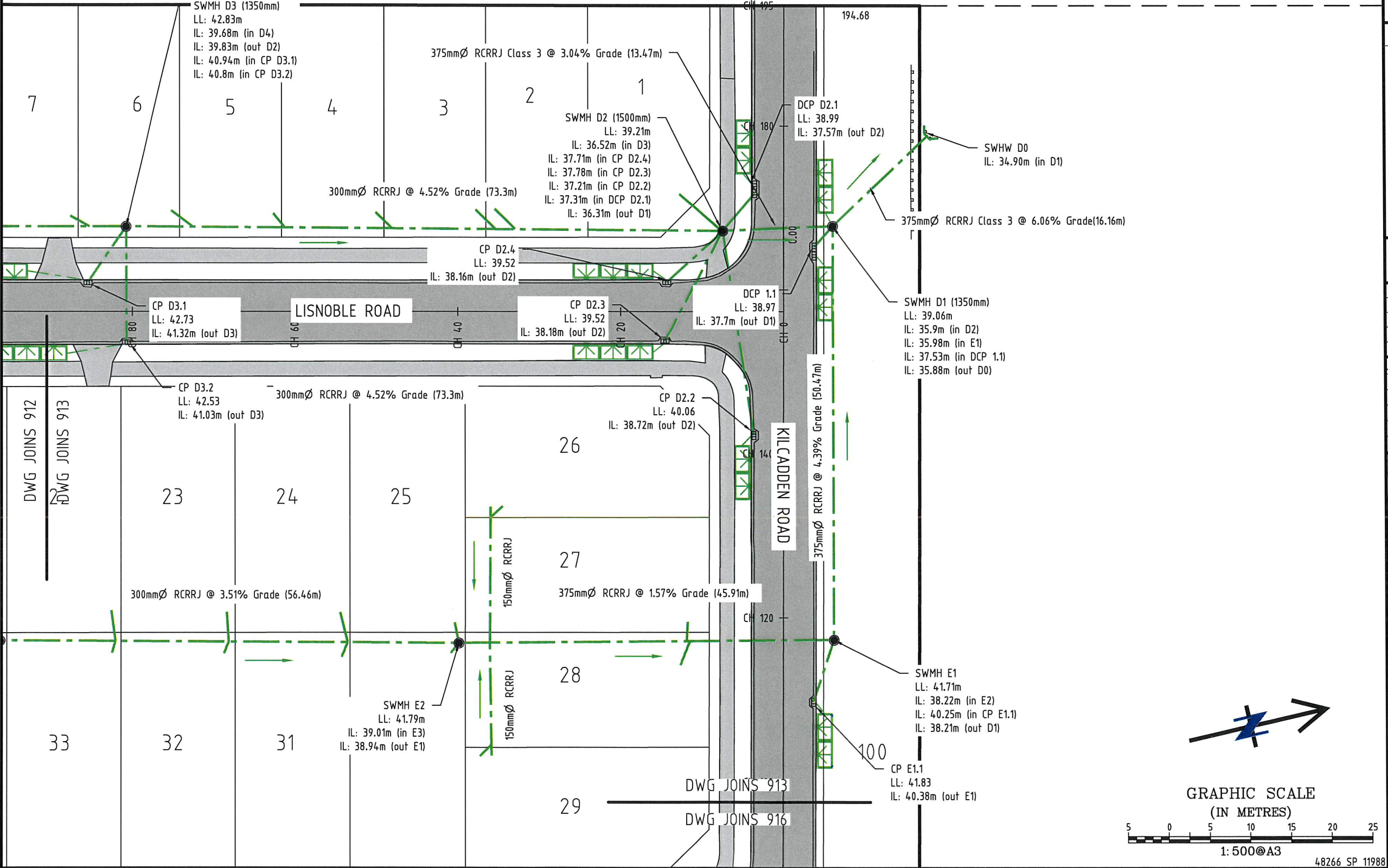
CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

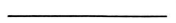
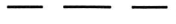


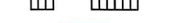


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- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED : 
CHARTERED PROFESSIONAL ENGINEER
DATE: 16/12/16
CONTACT NUMBER : 296-5543
EMAIL : PDODD@DODDCIVIL.CO.NZ

- Notes:
- All concrete products manufactured by Hynds.
 - Length of pipes shown in brackets.
 - All pipes are Class 2 RCRRJ unless noted otherwise.
 - Works constructed by Twomey Construction.
 - Works carried out April - August 2016.
 - All private connections are 1.10m below finished ground level to and are 100mmØ uPVC
 - Constructed in accordance with Auckland Council standards.
 - All cesspit leads are RCRRJ Class 3. Double cesspit leads are 300mmØ and single cesspit leads are 225mmØ.
 - All manholes are 1050mmØ unless noted otherwise



LEGEND

	Lot Bdy
	Ex Abutting Bdy
	Ex Stormwater
	AB Stormwater
	Ex/AB Manhole
	Cesspit/Double Cesspit
	3.00 x 1.75m Rain Garden Unit

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B	Road Chainage	SK	12/16
A	Road names	SK	11/16
-	-	-	-
Rev	Description	By	Date
		SIGNED	DATE
Surveyed	RK		10/16
Designed	WM		06/15
Drawn	SK		10/16
Checked			12/16
Approved			12/16

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Ph: 64-9-2965543
www.doddcivil.co.nz

P.O. Box 72-543
Auckland NZ
Fax: 64-9-2965534
admin@doddcivil.co.nz

PROJECT NAME:
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:
STORMWATER
AS-BUILT PLAN 3 OF 6


Project Number: **503/02**
Plan No: **913** Rev: **B**

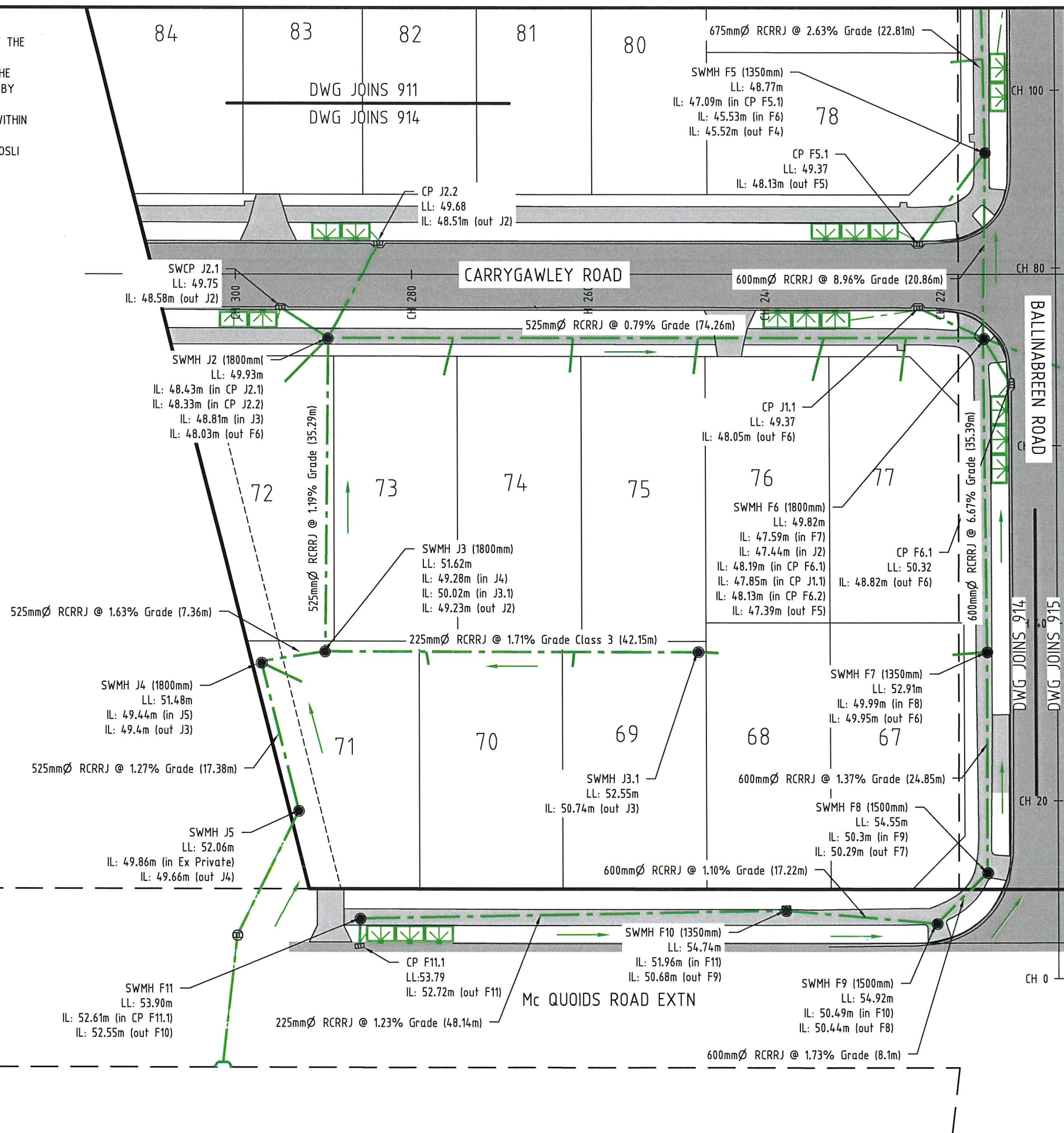
DATE: 16-Dec-16

CERTIFICATION

I, PETER DAVID DODD, CHARTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE MANHOLE POSITIONS, SCHEDULE OF CO-ORDINATES, INVERT AND LID LEVELS, AND DISTANCES BETWEEN MANHOLES AND PIPE SIZES ARE CORRECT. CONNECTIONS TO THE LINES HAVE BEEN PLOTTED AND DIMENSIONED FROM INFORMATION SUPPLIED TO US BY THE CONTRACTOR FOR THE WORK.

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- THE LEVELS (Z) ARE IN TERMS OF THE AUCKLAND 1946(MSL) LINZ DATUM (DOSLI DATUM), AND ARE WITHIN ±20MM.

SIGNED: 
 CHARTERED PROFESSIONAL ENGINEER
 DATE: 16/12/16
 CONTACT NUMBER: 296-5543
 EMAIL: PDODD@DODDCIVIL.CO.NZ



Notes:

- All concrete products manufactured by Hynds.
- Length of pipes shown in brackets.
- All pipes are Class 2 RCRRJ unless noted otherwise.
- Works constructed by Twomey Construction.
- Works carried out April - August 2016.
- All private connections are 1.10m below finished ground level to and are 100mm Ø uPVC.
- Constructed in accordance with Auckland Council standards.
- All cesspit leads are RCRRJ Class 3. Double cesspit leads are 300mm Ø and single cesspit leads are 225mm Ø.
- All manholes are 1050mm Ø unless noted otherwise.

LEGEND

	Lot Bdy
	Ex Abutting Bdy
	Ex Stormwater
	AB Stormwater
	Ex/AB Manhole
	Cesspit/Double Cesspit
	3.00 x 1.75m Rain Garden Unit

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 WRITTEN PERMISSION FROM DODD CIVIL CONSULTANTS LIMITED

Rev	Description	By	Date
B	Road Chainage	SK	12/16
A	Road names	SK	11/16
-	-	-	-
SIGNED	DATE		
Surveyed	RK		10/16
Designed	WM		06/15
Drawn	SK		10/16
Checked			12/16
Approved			12/16



Subdivisions Land Development Land Survey
 Resource Consents Project Management
 Environmental Engineering Structural Engineering

58 Broadway
 Papakura
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 Ph: 64-9-2965543
 www.doddcivil.co.nz
 P.O. Box 72-543
 Auckland NZ
 Fax: 64-9-2965534
 admin@doddcivil.co.nz

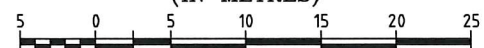
PROJECT NAME:
CONVOY PARK
23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
 FOR
HUGH GREEN LIMITED

SHEET TITLE:
STORMWATER
AS-BUILT PLAN 4 OF 6

Project Number: **503/02**

Plan No: **914** Rev: **B**

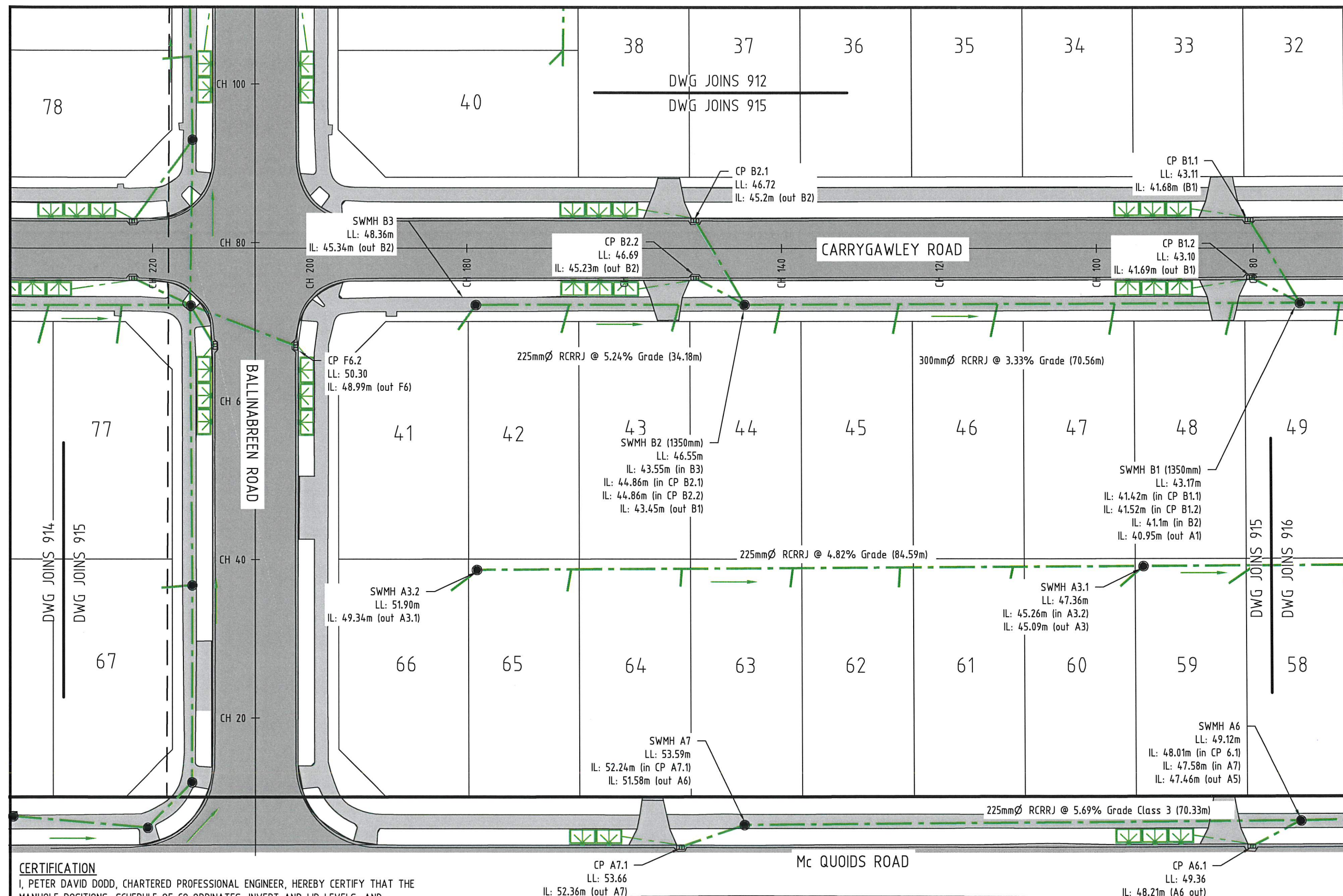
GRAPHIC SCALE
 (IN METRES)



1: 500@A3

48266 SP 11988

DATE: 16-Dec-16



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	Ex Stormwater
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Subdivisions Land Development Land Survey
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PROJECT NAME:
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23 & 45 MCQUOIDS ROAD
FLAT BUSH, AUCKLAND
FOR
HUGH GREEN LIMITED

SHEET TITLE:
STORMWATER
AS-BUILT PLAN 5 OF 6

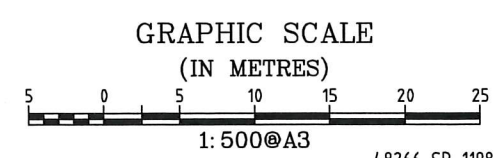
Project Number: 503/02
Plan No: 915 **Rev:** B

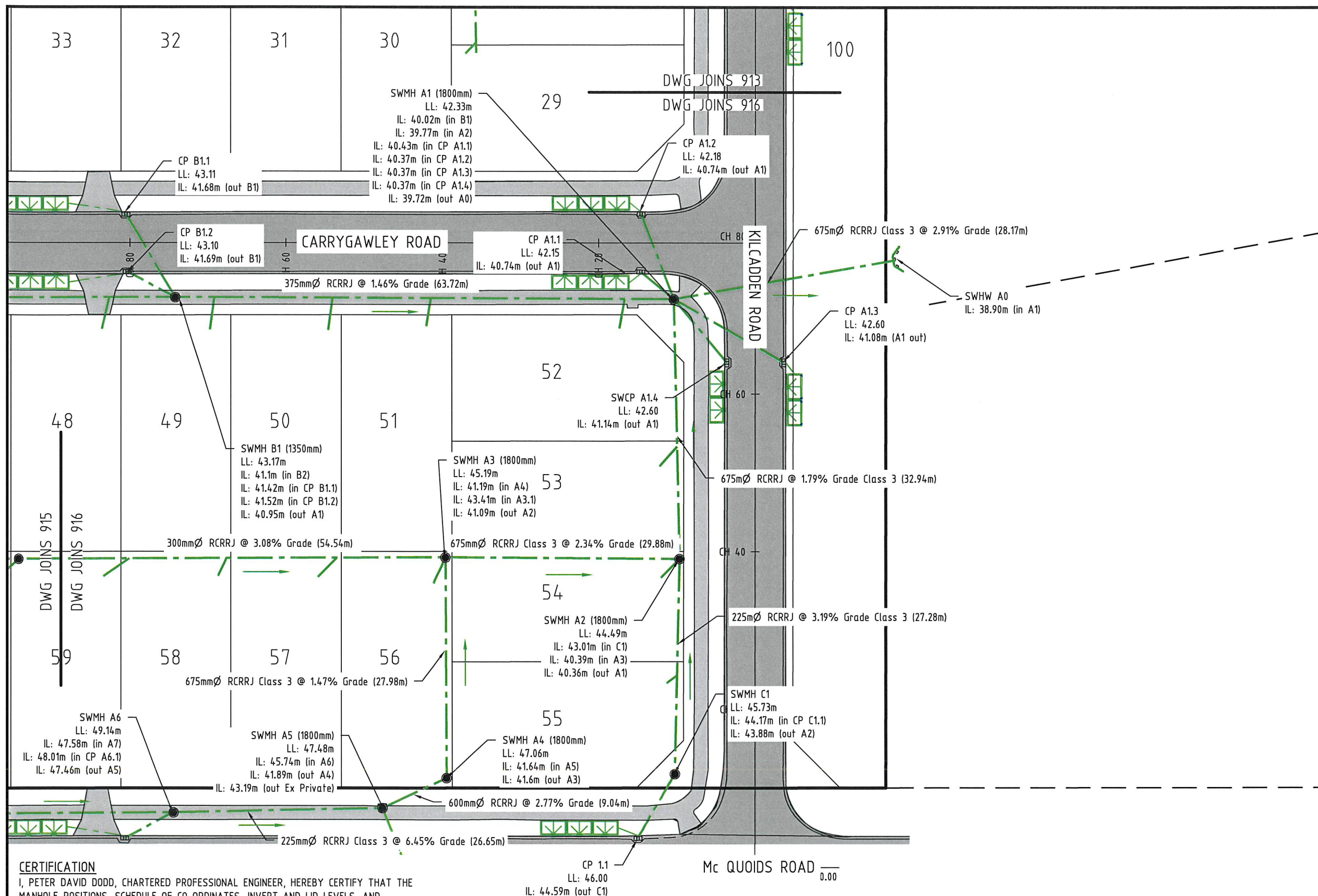
CERTIFICATION

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SIGNED: *[Signature]*
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CONTACT NUMBER: 296-5543
EMAIL: PDODD@DODDCIVIL.CO.NZ

DATE: 16-Dec-16
PATH: F:\PROJECTS\50302\DWG\ASBUILT\50302-900 SW ASB.DWG

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PROJECT NAME:

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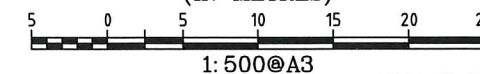
SHEET TITLE:

STORMWATER
AS-BUILT PLAN 6 OF 6

Project Number: **503/02**

Plan No: **916** Rev: **B**

GRAPHIC SCALE
(IN METRES)



48266 SP 11988